

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

Open Tender Notification

For

2 Years RC for SITC of FRTU & Accessories for TPSODL, TPCODL, TPWODL & TPNODL.

**Tender Enquiry No.: TPCODL/CCG/25-26/1000008710,
Due Date for Bid Submission: 24th April'2026 [18:00 Hrs.]**

**Centralized Contracts Group
Tata Power Odisha DISCOMs
1st Floor, Anuj Building, Plot No. 29, Satya Nagar,
Bhubaneswar – 751007**

**TPCODL TPNODL TPSODL TPWODL
(TATA Power and Odisha Government Joint Venture)**

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

Contents

1.0	Event Information	4
1.1	Scope of work	4
1.2	Availability of Tender Documents	5
1.3	Calendar of Events	6
2.0	Pre- Qualification Criteria	7
3.0	Evaluation Criteria	8
3.1	Price Basis	9
4.0	Contact Information	9
5.0	Submission of Bid Documents	9
5.1	Bid Submission	9
5.1.1	First Part : EMD	9
5.1.2	Second Part : Techno-Commercial Bid	10
5.1.3	Third Part : Price Bid	11
5.2	Signing of Bid Documents	11
5.3	Mandatory documents required along with the Bid	12
5.4	Deviation from Tender	12
6.0	Bid Related Details	12
6.1	Bid Prices	12
6.2	Bid Currencies	12
6.3	Period of Validity of Bids	12
6.4	Alternative Bids	13
6.5	Modifications and Withdrawal of Bids	13
7.0	Bid Opening & Evaluation	13
7.1	Bid Confidentiality	13
7.2	Technical Bid Opening	13
7.2.1	Preliminary Examination of Bids/Responsiveness	13
7.2.2	Techno Commercial Clarifications	14
7.2.3	Right of Acceptance/Rejection	14
7.3	Price Bid Opening	14
8.0	Market Integrity	14

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

9.0	Supplier Confidentiality	15
10.0	Reverse Auctions	15
11.0	Award Decision	15
12.0	Order of Preference / Contradiction.....	16
13.0	Post Award Contract Administration	16
13.1	Special Conditions of Contract	16
13.2	Drawing Submission and Approval	17
13.3	Payment Terms.....	17
14.0	Climate Change	17
15.0	Ethics	17
16.0	Specification and standards.....	18
17.0	General Condition of Contract	18
18.0	Safety Policy and Safety Terms & Conditions	18
19.0	Tata Code of Conduct	18
20.0	Environment & Sustainability Policy	18
	ANNEXURE-I : Price Schedule	19
	ANNEXURE-II : Technical Specification	21
	ANNEXURE III : Schedule of Deviations	22
	ANNEXURE IV : Schedule of Commercial Specifications	23
	ANNEXURE V : Checklist of all the documents to be submitted with the Bid	24
	ANNEXURE VI : Acceptance form for Participation in Reverse Auction Event.....	25
	ANNEXURE VII : General Conditions of Contract.....	26
	ANNEXURE VIII : Safety Policy and Safety Terms & Conditions	27
	ANNEXURE IX : Tata Code of Conduct.....	28
	ANNEXURE X : Environment & Sustainability Policy.....	29
	ANNEXURE XI : Authorization Letter Format.....	31
	ANNEXURE XII : Instructions to Bidder for participation in ARIBA System.....	32

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

Centralized Contracts Group (CCG)

The Centralized Contracts Group (CCG) is a shared service group of four Tata Power Odisha Distribution Companies (DISCOMs) - TPCODL, TPNODL, TPSODL & TPWODL. CCG is responsible for carrying out tendering activities to cater to the purchasing needs of all four DISCOMs.

1.0 Event Information

Bids are invited in Two Bid system from interested Bidders to establish a Rate Contract with Two years of validity as mentioned below:

Tender Enquiry No.	Work Description	EMD (Rs.) *	Tender Fee inclusive of GST (Rs.) **	Last Date and Time for payment of Tender Fee
TPCODL / CCG / 2025-26 / 1000008710	2 Years RC for SITC of FRTU & Accessories for TPCODL, TPWODL, TPSODL & TPNODL.	2.00 Lakh	5,000	12.04.2026 18:00 Hrs

* EMD exempted for MSMEs registered in the State of Odisha.

** Tender fee – Rs. 1,000/- including GST. for MSMEs registered in the State of Odisha (Ref. Odisha MSME Preferential Norms^ for details on Odisha MSME support)

1.1 Scope of work

Bids are invited from interested Bidders to award Rate Contract (RC)/Purchase Order (PO) for Procurement of SITC & FRTU as per specification, as per below mentioned below:

SL No	Description	UOM	TPCODL Qty	TPNODL Qty	TPSODL Qty	TPWODL Qty	Total Qty
1	Pre-Wired FRTU Panel with FRTU	No	90	15	17	37	159
2	Managed Layer2 Ethernet Switch (FRTU Panel)	No	90	15	17	37	159
3	Networking Accessories	No	90	15	17	37	159
4	CMR with Mounting Base for Digital Inputs	No	2880	480	544	1184	5088
5	Interposing Relay for Digital Output	No	1440	240	272	592	2544
6	Battery Charger	No	90	15	17	37	159
7	Battery	No	90	15	17	37	159
8	4G Modem cum Router	No	90	15	17	37	159
9	Instrumentation Cable 12 C X 0.5 mm2, Armored cable for Status and	Mtr	3600	600	680	1480	6360

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

	Indications						
10	Instrumentation Cable 7 C X 1.5 mm2, Armored for Control Output	Mtr	3600	600	680	1480	6360
11	Twisted Pair Shielded & Over all shielded Instrumentation Cable 5 P X 1.0 mm2, Armored for Analog Input	Mtr	3600	600	680	1480	6360
12	4 C X 2.5 mm2 Copper cable for extension of CT & PT	Mtr	1800	300	340	740	3180
13	2 C X 4 mm2 Cable for DC Power Supply	Mtr	900	150	170	370	1590
14	4P X 0.36 mm2, Armored Communication Cable for MFM	Mtr	1800	300	340	740	3180
15	Armored CAT6 SFTP Cable	Mtr	1800	300	340	740	3180
16	Un-Armored CAT6 SFTP Cable	Mtr	1800	300	340	740	3180
17	Multi Function Meter	No	180	30	34	74	318
18	Services of FRTU Panel, Communication and Other Supplied System	No.	90	15	17	37	159

Sr. No.	Category	Spare Line Item	UOM	Spare Quantity Requirement
1	Mandatory Spares	FRTU Chassis	No.	1 no. for up to every 30 nos. of FRTUs , and so on
2	Mandatory Spares	CPU Module of FRTU	No.	1 no. for up to every 20 nos. of FRTUs , and so on
3	Mandatory Spares	Power Supply Module of FRTU	No.	1 no. for up to every 20 nos. of FRTUs , and so on
4	Mandatory Spares	Memory Module of FRTU	No.	1 no. for up to every 20 nos. of FRTUs , and so on
5	Mandatory Spares	Communication Module (Ethernet)	No.	1 no. for up to every 20 nos. of FRTUs ,

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

				and so on
6	Mandatory Spares	Communication Module (Serial)	No.	1 no. for up to every 20 nos. of FRTUs , and so on
7	Mandatory Spares	DI Cards with Interface Module & Cables (Digital Inputs)	Set	1 set for up to every 10 nos. of FRTUs , and so on
8	Mandatory Spares	DO Cards with Interface Module & Cables (Digital Outputs)	Set	1 set for up to every 10 nos. of FRTUs , and so on
9	Mandatory Spares	AI Cards with Interface Module & Cables (Analog Inputs)	Set	1 set for up to every 20 nos. of FRTUs , and so on
10	Mandatory Spares	OEM-Specific Modules (Any other modules forming part of solution)	Lot	1 lot for complete RC
11	Optional Requirement	Managed Ethernet Switch – FRTU	No.	1 no. for up to every 20 nos. of FRTUs , and so on
12	Mandatory Spares	CMR Relay with Base	No.	1 no. for up to every 5 nos. , and so on
13	Mandatory Spares	HDR Relay with Base	No.	1 no. for up to every 5 nos. , and so on
14	Mandatory Spares	Battery Charger	No.	1 no. for up to every 20 nos. of FRTUs , and so on
15	Optional Requirement	Multi-Function Meter	No.	1 no. for up to every 10 nos. of FRTUs , and so on

Detailed scope as stipulated elsewhere in this tender document.

^Odisha MSME Preferential Norms

- **Tender Fees Relaxation:** To participate in the tender, MSMEs registered in the State of Odisha shall pay Rs.1,000/- including GST towards cost of tender paper.
- **Earnest Money Deposit (EMD) Exemption:** EMD shall be exempted for MSME registered in the State of Odisha. However, Bidder shall be barred to participate in the tendering process for a period of 2 years in case it backs out post award of the contract.
- **Qualification Requirement Relaxation:** Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria.
- **Past Experience Relaxation:** Instead of relying on the volumes / value of earlier Supplies / Projects, assessment of the Bidder shall be done on the basis of feedback from Customers. Past performance experience at Tata Power and its Group Companies shall supersede feedback from other Customers.
- **Reservation for MSME:** TP DISCOM shall procure at least 20% of the total volume of the procurement

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

from MSME registered in the State of Odisha (however, it shall not apply where goods/services are not available with the MSME), subject to matching L1 discovered prices and meeting technical specifications including quality requirements.

- **Performance Bank Guarantee (PBG) Relaxation:** Performance Bank Guarantee for MSME registered in the State of Odisha shall be 25% of the value normally prescribed.

1.2 Availability of Tender Documents

The bidder can get primary information about the tender from the Newspaper advertisement. Tender documents can be downloaded from TP Odisha DISCOMs' websites: -

www.tpcentralodisha.com, www.tpnodl.com, www.tpwesternodisha.com, www.tpsouthernodisha.com

Non-Refundable Tender Participation Fee, as indicated in tender document, to be submitted before last date of tender fee payment, in the form of direct deposit / NEFT / RTGS in the following bank account.

Account Name: TP Central Odisha Distribution Limited

Bank Name: State Bank of India,

IDCO Towers, Bhubaneswar

Bank Account No. : 10835304915

IFSC Code : SBIN0007891

To receive online bidding link, eligible and Interested bidder shall send an email to Package Owner (Ref. Clause 4.0 for details) attaching duly signed and stamped letter on Bidder's letterhead, with following details, expressing their intent to bid against above tender in following format:

Sr No	Description	Bidder's Response
i)	Tender Enquiry No.	
ii)	Description of materials / Works Tendered	
iii)	Name and address of the bidding company	
iv)	Name of the authorized contact person	
v)	Contact No. of authorized person	
vi)	E-mail Id to which online ARIBA link to be sent	
vii)	Tender Fee details (Amount / NEFT-RTGS UTR No / Date) (Ref sec 1.2)	
viii)	GST No. of bidder	
ix)	MSME Certificate (if applicable)	
x)	Postal address of bidder for return of EMD BG	

E-mail has to be sent to < rajib.bhattacharya@tpwesternodisha.com > with copy to HOD-CCG < sony.jha@tpcentralodisha.com > before last date and time for payment of tender participation fee (Clause 1.3). On receipt of the above letter, after due verification, ARIBA link for participation in the tender will be sent to bidder's e-mail address from ARIBA system. Bids shall be submitted only through online e-procurement platform, ARIBA. Any other form of bid submission shall not be accepted. **(Ref. Annexure XII for detailed instructions on bid submission in ARIBA)**

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP**NIT No.: TPCODL / CCG / 2025-26 / 1000008710****1.3 Calendar of Events**

(a)	Date of sale/ availability of tender documents from Website	06.04.2026
(b)	Date by which Interested and Eligible Bidder to pay Tender Fee and confirm participation as mentioned in "Procedure to Participate in Tender"	12.04.2026, 18:00 Hours
(c)	Date & Time of Pre-Bid Meeting (If any)	NA
(d)	Due Date of receipt of pre-bid queries by e-mail, if any	14.04.2026, 18:00 Hours
(e)	Due Date of Posting Consolidated replies to all the pre-bid queries as received	17.04.2026, 18:00 Hours
(f)	Due date and time of receipt of Bids	24.04.2026, 17:00 Hours
(g)	Date & Time of opening technical bids	24.04.2026, 17:30 Hours
(h)	Date & Time of opening of Price of qualified bids	To be notified to the successful bidders

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

Note: In the event of last date specified for submission of bids and date of opening of bids is declared as a closed holiday for TP Discoms office, the last date of submission of bids and date of opening of bids will be the day following working day at appointed times.

2.0 Pre- Qualification Criteria

Sr No	Parameter	Owner Requirement	Documents to be submitted by Bidder
A	Technical Pre-Qualification Requirements		
1	Technical Experience / Performance	The bidder / OEM (either or) should have performance certificates for a similar or higher rating of work from at least 2 reputed companies and one of them must be from Power utilities in India. The work against these issued certificates should be completed in last Five years from the date of bid submission. In case the bidder has got previous association with Tata Power / TPCODL / TPSODL / TPNODL / TPWODL for supply of similar product, performance feedback of the same will be solely considered. The performance certificate and contact details of the client need to be submitted.	The performance certificate and contact details of the client need to be submitted
2	Manufacturing Capacity	The bidder should either be an OEM for tendered equipment's or an authorized channel partner of OEM. In case of authorized channel partner authorization Letter along with MAF from OEM to be submitted in this regard. Warranty & service responsibility is backed by OEM in case of any defects & trouble shooting. The bidder should meet the requirements as set out in the technical specification. In the case of OEM and the bidder must submit a self-undertaking in this regard on their letter heads.	Self- Undertaking/MAF certificate to be submitted.
3	In-house Testing Facility	Bidder / OEM (either or) should have manufacturing facilities and In-house testing facilities for carrying out acceptance test as per tender specifications. Self-undertaking to be submitted in this regard. DISCOM reserves the right to inspect the said manufacturing facility as proof of compliance to this parameter	Self- undertaking to be submitted
4	Service Team	The bidder should have dedicated service team in Odisha to attend issues within 24 hours, or bidder shall develop dedicated service team in Odisha in the event of award of contract, before commencement of supplies.	Self- undertaking to be submitted.
B	Financial Pre-Qualification Requirements		

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

1	Commercial Capability	The bidder should have Average Annual turnover of at least Rs. 10 Cr. for any of last 3 Financial Year (FY) out of FY 18-19, FY 19-20, FY 20-21, FY 21-22 & FY 22-23. Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria.	Copy of audited P&L Account (with UDIN no.) to be submitted in this regard
2	Experience	The intending bidder must have successfully undertaken at least the following numbers of similar assignments during the last Five years of the value specified herein: a. One project of similar nature of not less than the amount Rs. 3 Cr. Or b. Two projects of similar nature of not less than the amount Rs. 1.5 Cr (each) Or c. Three projects of similar nature of not less than the amount of Rs. 1.0 Cr (each).	Order copies has to be submitted by bidder in this regard.
3	Statutory Compliances	The prospective Bidder(s) should be have following certificates- a. Valid GST Registration Certificate. b. Valid PAN No. c. Odisha State MSME Certificate (if applicable)	Certificate to be submitted
4	Blacklisting	Bidder should not have been blacklisted by any Govt. Organization / utility.	Bidder shall submit self-undertaking in this regard.

3.0 Evaluation Criteria

- The bids will be evaluated techno-commercially and on qualifying criteria of tender terms and conditions.
- The bids will be evaluated commercially on Overall BOQ Basis for all-inclusive lowest cost as calculated in Schedule of Items [Annexure I]).
- Bidder has to mandatorily quote against each item of Schedule of Items [Annexure I]. Failing to do so, CCG may reject the bids.
- In case the bidder has a previous association with Odisha DISCOM for similar products, the performance feedback for that bidder from Odisha DISCOM's User Group shall only be considered irrespective of performance certificates issued by any third organization.
However, Odisha DISCOMs reserve the right to scrutinize and reject any of such existing vendors without assigning reason what so ever may be.
- Based on latest / previous years experiences of Tata Power / Tata Power group companies with BA, Odisha DISCOM reserves the right to disqualify the bidders during techno - commercial evaluation of the bid.

NOTE: In case a new bidder is not registered with DISCOM, factory inspection and evaluation shall be carried out to ascertain bidder's manufacturing capability and quality procedures. However, DISCOM reserves the right to carry out factory inspection and evaluation for any bidder prior to technical

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

qualification.

In case a bidder is found as Disqualified in the factory evaluation, their bid shall not be evaluated any further and shall be summarily rejected. The decision of DISCOM shall be final and binding on the bidder in this regard.

3.1 Price Basis

Price shall be fixed and firm during the contractual period.

4.0 Contact Information

All the bidders are requested to send their pre-bid queries (if any) against this tender through e-mail within the stipulated timelines. The consolidated reply to all the queries received shall be posted on website by the stipulated timelines as detailed in calendar of events.

Communication Details:Package Owner:

Name: Rajib Bhattacharya

Contact No.: 9434210425

E-Mail ID:

Rajib.bhattacharya@tpwesternodisha.comEscalation Level I:

Name: Sony Jha, HoD- CCG

E-Mail ID: sony.jha@tpcentralodisha.comEscalation Level II:

Name: Mr. Vipin Chauhan, Head -CCG

E-Mail ID: Vipin.Chauhan@tpnodl.com**5.0 Submission of Bid Documents****5.1 Bid Submission**

Bidders are requested to submit their offer in line with this Tender document through e-tendering process.

All future correspondence regarding the tender, bid submission, bid submission date extension, Pre-bid query etc. shall be through E-Tender system (Ariba).

Bids shall be submitted in 3 (Three) parts:

5.1.1 First Part: EMD

EMD as applicable shall be submitted. The EMD shall be valid for 210 days from the due date of bid submission in the form of Bank Guarantee / Bank Draft / Bankers Pay Order (issued from a Scheduled Bank) online NEFT/ RTGS transfer favoring 'TP Central Odisha Distribution Limited' payable at Bhubaneswar. The EMD BG has to be strictly in the format as mentioned in General Condition of Contract, failing which it shall not be accepted by CCG and the bid as submitted shall be liable for rejection. A separate **non-refundable tender fee** of stipulated amount also needs to be transferred **online through NEFT/ RTGS** in case the tender document is downloaded from our website. TPCODL Bank Details for transferring Tender Fee and EMD is as below:

Account Name: TP CENTRAL ODISHA DISTRIBUTION LIMITED

Bank Name: SBI, IDCO Towers, Bhubaneswar

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

Bank Account No.: 10835304915**IFSC Code: SBIN0007891**

Note- EMD is preferred in form of Bank Guarantee and to be delivered at the following address. However, in view of present situation if Bidder is finding it difficult to submit BG for EMD amount, they can do online transfer of EMD amount in the above-mentioned Account and submit proof of the same as part of Bid Submission.

-In such case, Tender Fee and EMD should be strictly 2 separate transactions else bids shall be rejected.

-Return of EMD from Bank Account is non-standard practice and the **same** may take more time than return of EMD BG.

EMD Original Hard Copy shall be delivered at the following address in Envelope clearly indicating Tender Reference/ Enquiry Number, Name of Tender and Bidder Name

“EMD (Earnest Money Deposit)”

“2 Years RC for SITC of FRTU & Accessories for TPCODL, TPWODL, TPSODL & TPNODL.”

**Chief –Centralized Contracts Group
TP Central Odisha Distribution Limited
1st Floor, Anuj Building, Plot No. 29,
Satya Nagar, Bhubaneswar- 751007**

Kind Attn.: Mr. Rajib Bhattacharya, Mob No.: 9434210425

**EMD shall be exempted for MSME registered in the State of Odisha. However, Bidder shall be barred to participate in the tendering process for a period of 2 years in case it backs out post award of the contract.*

The bidder shall furnish, as part of its bid, an EMD amounting as specified in the tender. The EMD is required to protect DISCOM against the risk of bidder's conduct which would warrant forfeiture.

The EMD shall be denominated in any of the following form:

- Bank Guarantee in favor of TP Central Odisha Distribution Limited payable at Bhubaneswar.
- Online transfer of requisite amount through NEFT/ RTGS.
- Bank Guarantee valid for 210 days after due date of submission.

Ref. GCC for Format of Bank Guarantee

The EMD shall be forfeited in case:

- a) The bidder withdraws its bid during the period of specified bid validity.

Or

- b) The successful Bidder does not
- a) accept the Purchase Order, or
 - b) furnish the required Performance Security Bank Guarantee

5.1.2 Second Part: Techno-Commercial Bid

Techno-Commercial bid shall contain the following documents. Absence of any of these may attract bid rejection:

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

1. Index Stating Document name & Page No./Document No. in bid. As illustrated below: *****The type tests specified in technical specifications should have been carried out within five years (unless otherwise explicitly stated) prior to the date of opening of technical bids and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost. The decision to accept/reject such bids rests with DISCOM.***

2. Indexing of the Content of Techno-commercial Bid may also be furnished per the Bidder's preference. But in that case, the above- mentioned table as well as the **Corresponding Page Nos.** need to be modified and furnished accordingly.

The technical bid shall be submitted through E-tender System (Ariba) only. Hard Copy of Technical Bids need not be submitted unless specifically asked for.

5.1.3 Third Part : Price Bid

Price Bid shall contain only the price details and strictly in format as mentioned in Annexure I along with explicit break up of basic prices and Taxes & duties etc. In case any discrepancy is observed between the item description stated in Schedule of Items mentioned in the tender and the price bid submitted by the bidder, the item description as mentioned in the tender document (to the extent modified through Corrigendum issued if any) shall prevail. The price bids containing any deviations/conditions shall be liable to be rejected.

Price Bid is to be submitted in soft copy through E-Tendering system (Ariba) only. Hard copy of Price Bid shall not be submitted.

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and CCG, shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by an English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

5.2 Signing of Bid Documents

The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

The Bid being submitted must be signed by a person holding a **Power of Attorney** authorizing him to do so, certified copies of which shall be enclosed.

The Bid submitted on behalf of companies registered with the Indian Companies Act, for the time being in force, shall be signed by persons duly authorized to submit the Bid on behalf of the Company and shall be accompanied by certified true copies of the resolutions, extracts of Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the Bid on behalf of the Company. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with bid.

A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

The Bidder's name stated on the Proposal shall be the exact legal name of the firm.

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

5.3 Mandatory documents required along with the Bid

- I. EMD of requisite value and validity
- II. Tender Fee.
- III. Requisite Documents for compliance to Qualification Criteria mentioned in Clause 1.7.
- IV. Acceptance of Specification, drawing with filled in GTP as per Annexure II.
- V. Duly signed and stamped 'Schedule of Deviations' as per Annexure III on bidder's letter head.
- VI. Duly signed and stamped 'Schedule of Commercial Specifications' as per Annexure IV on bidder's letter head.
- VII. Duly filled in Annexure V and VI.
- VIII. Proper authorization letter/ Power of Attorney to sign the tender on the behalf of bidder.
- IX. Copy of PAN, GST registration (In case any of these documents is not available with the bidder, same to be explicitly mentioned in the 'Schedule of Deviations')

Please note that in absence of any of the above documents (as applicable), the bid submitted by a bidder shall be liable for rejection.

5.4 Deviation from Tender

Normally, the deviations to tender terms are not admissible and the bids with deviation are liable for rejection. Hence, the bidders are advised to refrain from taking any deviations on this Tender. Still in case of any deviations, all such deviations shall be set out by the Bidders, clause by clause in the 'Annexure III - Schedule of Deviations' and same shall be submitted as a part of the Technical Bid.

6 Bid Related Details**6.1 Bid Prices**

Bidders need to quote for all items as per the Price schedule attached in Annexure I. The bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total price with taxes, duties & freight up to destination at various DISCOMs' sites. The all-inclusive prices offered shall be inclusive of all costs –Insurance, Transport, duties, taxes, levies paid or payable etc. during the execution of the supply work. Applicable GST to be specified clearly.

The quantity break up shown else-where other than Price Schedule may tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any items not indicated in the price schedule but which are required to complete the job as per the Technical Specifications/ Scope of Work/ SLA mentioned in the tender, shall be deemed to be included in prices quoted.

6.2 Bid Currencies

Prices shall be quoted in Indian Rupees Only unless otherwise stated explicitly.

6.3 Period of Validity of Bids

Bids shall remain valid for **180 days** from the due date of submission of the bid.

Notwithstanding clause above, CCG may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and responses thereto shall be made in writing.

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

6.4 Alternative Bids

Bidders shall submit Bids, which comply with the Bidding documents. Alternative bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the bidding documents.

6.5 Modifications and Withdrawal of Bids

The bidder is not allowed to modify or withdraw its bid after the Bid's submission. The EMD as submitted along with the bid shall be liable for forfeiture in such event.

7 Bid Opening & Evaluation**7.1 Bid Confidentiality**

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence CCG in processing of Bids or award decisions may result in rejection of the Bidder's Bid.

7.2 Technical Bid Opening

Technical Bids shall be opened online as per schedule mentioned in section 1.3, in CCG Office (1st Floor Conference room, Plot -29, Anuj Building Satya Nagar, Bhubaneswar). Bidders having authorization letter (format Annexed- XI) for attending bid opening from competent authority of respective Organizations, who may choose to be present physically / online at the time of tender opening. If the office is closed on the specified date of opening of the bids, the opening shall be done on the next working day at the same time. Technical bid must not contain any cost information whatsoever, else bids shall be liable to be rejected.

First the envelope marked "EMD" will be opened. Bids without EMD/cost of tender (if applicable) of required amount/ validity in prescribed format, shall be rejected.

Next, the technical bid of the bidders who have furnished the requisite EMD will be opened, one by one

7.2.3 Preliminary Examination of Bids/Responsiveness

CCG will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are in order & format as detailed elsewhere in this document. CCG may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

Prior to the detailed evaluation, CCG will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation. CCG reserves the right to reject non-responsive bids.

7.2.4 Techno Commercial Clarifications

Bidders need to ensure that the bids submitted by them are complete in all respects. To assist in the examination, evaluation and comparison of Bids, CCG/Engineering may at its discretion, ask the Bidder for a clarification on its Bid for any deviations with respect to specifications and attempt will be made to bring all bids on a common footing. Any such clarification as sought shall have to be responded to bidder **within two working days**, post which the bids shall be liable to be rejected. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted owing to any clarifications sought.

7.2.5. Right of Acceptance/Rejection

Bids are liable for rejection in absence of following documents:

- i. EMD of requisite value and validity.
- ii. Tender fee of requisite value.
- iii. Price Bid as per the Price Schedule mentioned in Annexure I (BOQ)
- iv. Necessary documents against compliance to Qualification Requirements mentioned in Clause 2.0 of this Tender Document.
- v. Filled in Schedule of Deviations as per Annexure III.
- vi. Filled in Schedule of Commercial Specifications as per Annexure IV.
- vii. Signed and filled in Specification and GTP as per Annexure II.
- viii. Duly filled and signed Annexure V and VI.
- ix. Receipt of Bid within the due date and time.

CCG reserves the right to accept/reject any or all the bids without assigning any reason thereof.

7.3 Price Bid Opening

Price Bids will be opened online for all technically qualified bidders on the dates as shall be informed to qualified bidders in CCG Office (First Floor Conference room, Plot -29, Anuj Building Satya Nagar, and Bhubaneswar). Bidders having authorization letter (format annexed) only for attending bid opening from competent authority of respective Organizations, who may choose to be present physically/online at the time of bid opening. If the office is closed on the specified date of opening of the bids, the opening shall be done on the next working day at the same time. The EMD of the bidder withdrawing or substantially altering his offer at any stage after the technical bid opening will be forfeited at the sole discretion of DISCOM without any further correspondence in this regard.

8 Market Integrity

We have a fair and competitive marketplace. The rules for bidders are outlined in the General Condition of Contracts. Bidders must agree to these rules prior to participating. In addition to other remedies available, CCG reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the General Condition of Contracts. A bidder who violates the market place rules or engages in behavior that disrupts the fair execution of the marketplace, may result in restriction of a bidder from further participation in the marketplace for a length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

- Failure to honor prices submitted to the marketplace
- Breach of terms as published in TENDER / NIT

9 Supplier Confidentiality

All information contained in this tender is confidential and shall not be disclosed, published or advertised in any manner without written authorization from CCG. This includes all bidding information submitted to the DISCOM. All tender documents remain the property of DISCOM and all suppliers are required to return these documents to DISCOM upon request. Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

10 Reverse Auctions

CCG reserves the right to conduct the reverse auction for the products/ services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached as Annexure VI of this document. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form attached as Annexure VI as a token of acceptance for the same.

Bidders shall be allowed to participate in Reverse auction as per following criteria hence bidders are advised to quote their most competitive rates while submitting the bids to avoid disqualification from participation in Reverse Auction.

Reverse Auction shall be as per the below approach:

No of bidders allowed to participate in RA process shall be: Total No of bidders on whom tender would be split PLUS 2 more bidders

Illustrative example: Total no of qualified bidders is 10 & tender needs to split amongst 4 bidders.

PLUS 2 means (04 + 02 = 06) means lowest 6 bidders i.e., L1 to L6 bidders would be allowed in the RA process. Balance, H1 to H4 bidders would not be allowed in the RA process.

In case – Total no of qualified bidders is equal to or less than the **PLUS 2** number, all qualified bidders shall be allowed in the RA process.

Illustrative example: Total no of qualified bidders is 4 & tender needs to split amongst 2 bidders. PLUS 2 means (02 + 02 = 04), so all 4 qualified bidders would be allowed in the RA process

Illustrative example: Total no of qualified bidders is 3 & tender would be awarded to single party only. PLUS 2 means (01 + 02 = 03), so all 3 qualified bidders would be allowed in the RA process

11 Award Decision

DISCOM will award the contract to the successful bidder whose bid has been determined to be the lowest-evaluated responsive bid as per the Evaluation Criterion mentioned at Clause 3.0. The Cost for the said calculation shall be taken as the all-inclusive cost quoted by bidder in Annexure I (Schedule of Items) subject to any corrections required in line with Clause 7.2.1. The decision to place purchase order/LOI solely depends on CCG on bidder qualification & cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that CCG may deem relevant.

CCG reserves the right to split the order quantity wise/Line item wise between **minimum 2 Nos. of Bidders**. All bidders are advised to quote their most competitive rates against each line item. However, CCG reserves the right to adjust the splitting as per bidders' participation/qualification/any other unforeseen condition in tender.

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

DISCOM reserves the rights to award contract to one or more bidders so as to meet the delivery requirement or nullify award decision without assigning any reason thereof.

In case any supplier is found unsatisfactory during delivery process, the award will be cancelled and DISCOM reserves right to award contract to other suppliers who are found fit.

12 Order of Preference / Contradiction

In case of contradiction in any part of various documents in tender, following shall prevail in order of preference:

1. Schedule of Items – Price Bid (Annexure I)
2. Technical Specifications (Annexure II)
3. Special Conditions of Contract (Clause 13.1)
4. Submission of Bid Documents (Clause 5.0)
5. Acceptance Form for Participation in Reverse Auction (Annexure VI)
6. General Conditions of Contract (Annexure VII)

13 Post Award Contract Administration**13.1 Special Conditions of Contract**

1. Rate Contract shall be valid for a period of Two Years from the placement of the Rate Contract. Release Order (RO) shall be placed as per the requirement of respective TP Odisha DISCOM. Rates shall remain firm throughout the RC period.
2. Prices shall be on FOR Basis, inclusive of Transit Insurance/ Packing & Forwarding & ITC charges and shall be inclusive of unloading & stacking at DISCOM site / store locations.
3. BA shall submit applicable PBG as per GCC within 30 days of issuance of RC. PBG applicable shall be 5% of contract value. PBG submitted, shall be released after completion of applicable guarantee period plus one month. Performance Bank Guarantee for MSME registered in the State of Odisha shall be 25% of the value normally prescribed.
4. Guarantee period shall be as per the technical specification of this tender.
5. BA shall submit GTP/ Drawing within 07 days from issuance of the Rate Contract. If drawing is not approved by competent authority due to document shortfall or any changes are suggested, vendor has to resubmit new drawing/GTP/documents within 03 days of such intimation. BA shall offer for prototype inspection within 15 days of issuance of approved Drawings/GTP (if applicable). In case BA does not get necessary approvals for issuance of manufacturing clearances /CAT-A within mentioned / mutually agreed timelines, then CCG/TP Odisha Discoms reserve the right to cancel issued rate contract / release order and also reserve the right to forfeit EMD/PBG.
6. Delivery Terms:

Supply Part

Delivery shall be made within 90 days from the date of issuance of Release Order/ Manufacturing Clearance, whichever is later.

ITC Part

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ITC shall be made within 15 days from the date of site clearance from respective discoms.

7. TP Odisha DISCOM reserves right to short close the issued Release Order / Rate contract, in case of any quality or performance issues.
8. Any change in statutory taxes, duties and levies during the contract period shall be borne by respective TP Odisha Discom. However, in case of delay in supply owing to reasons not attributable to TP Odisha Discom, any increase in total liability shall be passed on the Bidder, whereas any benefits arising owing to such statutory variation in taxes and duties shall be passed on TP Odisha DISCOM.
9. All other terms of GCC – Supply & Services of respective DISCOM shall be applicable.

13.2 Drawing Submission and Approval

As per SCC, Clause number 13.1

13.3 Payment Terms

80 % payment will be released within 60 days from date of receipt of materials at store /site and 20 % Payment will be released within 30 days from the date of invoice certification of complete ICT. But the time capping between supply and site availability for ITC will be 90 days. Any further delay in making the site available beyond 90 days will lead to remittance of balance 20 % payment of Supply Part to BA on immediate basis for each such site. 20% retention terms apply site wise, individually, and not collectively for all the sites of the Purchase Order. Payment of 20% retained amount of an ITC completed site will not be withheld for pendency of ITC at any other site or sites. For MSME bidders 80% payment will be released within 45 days from date of receipt of materials at store /site. Other clauses in payment terms will remain same as above.

100% service value (ITC cost) will be released within 30 days from the date of invoice certification of complete ICT.

14 Climate Change

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change. Please refer attached Environment Policy and Sustainability Policy (Annexure–X).

15 Ethics

TP DISCOMs are ethical organizations bound by Tata Code of Conduct. As a policy we lay emphasis on ethical practices across its entire domain. Bidder should ensure that they should abide by all the ethical norms and in no form either directly or indirectly be involved in unethical practice.

DISCOM work practices are governed by the Tata Code of Conduct which emphasizes on the following:

- We shall select our suppliers and service providers fairly and transparently.
- We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
- Our suppliers and service providers shall represent our company only with duly authorized written permission from our company. They are expected to abide by the Code in their interactions with,

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

and on behalf of us, including respecting the confidentiality of information shared with them.

- We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
- We respect our obligations on the use of third party intellectual property and data.

Bidder is advised to refer Tata Code of Conduct (TCOC) attached for more information. For details, refer link: <https://www.tata.com/about-us/tata-code-of-conduct>

Any ethical concerns with respect to this tender can be reported to the following:

Mr. Pradip Sil (Chief Central Contracts Group): pradip.sil@tpcentralodisha.com

16 Specification and standards

As per Annexure II

17 General Condition of Contract

Any condition not mentioned above shall be applicable as per GCC attached as Annexure VII along with this tender.

18 Safety Policy and Safety Terms & Conditions

Annexure VIII attached along with this tender.

19 Tata Code of Conduct

Annexure IX attached along with this tender.

20 Environment & Sustainability Policy

Annexure X attached along with this tender.

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE-I : Price Schedule

SL No	Description	UOM	Total Qty	Unit Price (Rs.)	GST@18%	Unit Price (Rs.)- All Inclusive (Rs.)	Total Amount- All Inclusive (Rs.)
1	Pre-Wired FRTU Panel with FRTU	No	159				
2	Managed Layer2 Ethernet Switch (FRTU Panel)	No	159				
3	Networking Accessories	No	159				
4	CMR with Mounting Base for Digital Inputs	No	5088				
5	Interposing Relay for Digital Output	No	2544				
6	Battery Charger	No	159				
7	Battery	No	159				
8	4G Modem cum Router	No	159				
9	Instrumentation Cable 12 C X 0.5 mm2, Armored cable for Status and Indications	Mtr	6360				
10	Instrumentation Cable 7 C X 1.5 mm2, Armored for Control Output	Mtr	6360				
11	Twisted Pair Shielded & Over all shielded Instrumentation Cable 5 P X 1.0 mm2, Armored for Analog Input	Mtr	6360				
12	4 C X 2.5 mm2 Copper cable for extension of CT & PT	Mtr	3180				
13	2 C X 4 mm2 Cable for DC Power Supply	Mtr	1590				
14	4P X 0.36 mm2, Armored Communication Cable for MFM	Mtr	3180				
15	Armored CAT6 SFTP Cable	Mtr	3180				
16	Un-Armored CAT6 SFTP Cable	Mtr	3180				
17	Multi Function Meter	No	318				
18	Services of FRTU Panel, Communication and Other Supplied System	No.	159				

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

Sr. No.	Category	Spare Line Item	UOM	Spare Quantity Requirement
1	Mandatory Spares	FRTU Chassis	No.	1 no. for up to every 30 nos. of FRTUs , and so on
2	Mandatory Spares	CPU Module of FRTU	No.	1 no. for up to every 20 nos. of FRTUs , and so on
3	Mandatory Spares	Power Supply Module of FRTU	No.	1 no. for up to every 20 nos. of FRTUs , and so on
4	Mandatory Spares	Memory Module of FRTU	No.	1 no. for up to every 20 nos. of FRTUs , and so on
5	Mandatory Spares	Communication Module (Ethernet)	No.	1 no. for up to every 20 nos. of FRTUs , and so on
6	Mandatory Spares	Communication Module (Serial)	No.	1 no. for up to every 20 nos. of FRTUs , and so on
7	Mandatory Spares	DI Cards with Interface Module & Cables (Digital Inputs)	Set	1 set for up to every 10 nos. of FRTUs , and so on
8	Mandatory Spares	DO Cards with Interface Module & Cables (Digital Outputs)	Set	1 set for up to every 10 nos. of FRTUs , and so on
9	Mandatory Spares	AI Cards with Interface Module & Cables (Analog Inputs)	Set	1 set for up to every 20 nos. of FRTUs , and so on
10	Mandatory Spares	OEM-Specific Modules (Any other modules forming part of solution)	Lot	1 lot for complete RC
11	Optional Requirement	Managed Ethernet Switch – FRTU	No.	1 no. for up to every 20 nos. of FRTUs , and so on
12	Mandatory Spares	CMR Relay with Base	No.	1 no. for up to every 5 nos. , and so on
13	Mandatory Spares	HDR Relay with Base	No.	1 no. for up to every 5 nos. , and so on
14	Mandatory Spares	Battery Charger	No.	1 no. for up to every 20 nos. of FRTUs , and so on
15	Optional Requirement	Multi-Function Meter	No.	1 no. for up to every 10 nos. of FRTUs , and so on

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

NOTE:

- Prices shall be firm till the validity of the Rate Contract.
- The bids will be evaluated commercially on Individual Line Item basis.
- The unit price to be entered in column “7” of above table is unit price of the tendered item and exclusive of GST.
All itemized prices are to be quoted on FOR basis at TP Odisha DISCOM Site/ Stores.
- Issuance of Release Orders (RO) shall be done by respective Discoms as per their requirement.
- The material shall be delivered as per the location captured in the Release Order.
- The bidders are advised to quote prices strictly in the above format. Failing to do so, bids are liable for rejection.
- The bidder must fill each and every column of the above format. ***Mentioning “extra/inclusive”/other conditions in any of the column may lead for rejection of the price bid.***
- No cutting/ overwriting in the prices is permissible.
- The quantity mentioned above are for evaluation purpose only and may vary as per actual site requirement.

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE-II: Technical Specification

Attached separately with Tender

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE III: Schedule of Deviations

Bidders are advised to refrain from taking any deviations on this TENDER. Still in case of any deviations, all such deviations from this tender document shall be set out by the Bidders, Clause by Clause in this schedule and submit the same as a part of the **Technical Bid**.

Unless specifically mentioned in this schedule, the tender shall be **deemed** to confirm the specifications:

S. No.	Clause No.	Tender Clause Details	Details of deviation with justifications

By signing this document we hereby withdraw all the deviations whatsoever taken anywhere in this bid document and comply to all the terms and conditions, technical specifications, scope of work etc. as mentioned in the standard document except those as mentioned above.

Seal of the Bidder:

Signature:

Name:

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE IV : Schedule of Commercial Specifications

(The bidders shall mandatorily fill in this schedule and enclose it with the offer Part I: Technical Bid. In the absence of all these details, the offer may not be acceptable.)

S. No.	Particulars	Remarks
1.	Prices firm or subject to variation (If variable indicate the price variation clause with the ceiling if applicable)	Firm / Variable
a.	If variable price variation on clause given	Yes / No
b.	Ceiling	- ----- %
c.	Inclusive of GST	Yes / No (If Yes, indicate % rate)
d.	Inclusive of transit insurance	Yes / No
2.	Delivery Clause acceptable	Yes / No
3.	Guarantee clause acceptable	Yes / No
4.	Terms of payment acceptable	Yes / No
5.	Performance Bank Guarantee acceptable	Yes / No
6.	Liquidated damages clause acceptable	Yes / No
7.	Validity (180 days) (From the date of opening of bid)	Yes / No
8.	Inspection during stage of manufacture	Yes / No
9.	Covered under Small Scale and Ancillary Reg'n No.) Industrial Undertaking Act 1992	Yes / No (If Yes, indicate, SSI

Seal of the Bidder:

Signature:

Name:

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE V : Checklist of all the documents to be submitted with the Bid

Bidder has to mandatorily fill in the checklist mentioned below:

S. No.	Documents attached	Yes / No / Not Applicable
1	EMD of required value	
2	Tender Fee as mentioned in this tender	
3	Signed copy of this tender as an unconditional acceptance	
5	Duly filled schedule of commercial specifications (Annexure IV)	
6	Sheet of commercial/technical deviation if any (Annexure III)	
7	Balance sheet for the last completed three financial years; mandatorily enclosing Profit & loss account statement	
8	Acknowledgement for Testing facilities if available (duly mentioned on bidder letter head)	
9	List of Machine/tools with updated calibration certificates if applicable	
10	Details of order copy (duly mentioned on bidder letter head)	
11	Order copies as a proof of quantity executed	
12	Details of Type Tests if applicable (duly mentioned on bidder letter head)	
13	All the relevant Type test certificates as per relevant IS/IEC (CPRI/ERDA/other certified agency) if applicable	
14	Project/supply Completion certificates	
15	Performance certificates	
16	Client Testimonial/Performance Certificates	
17	Credit rating/solvency certificate	
18	Undertaking regarding non blacklisting (On company letter head)	
19	List of trained/untrained Manpower	

Seal of the Bidder:**Signature:****Name:**

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE VI : Acceptance form for Participation in Reverse Auction Event*(To be signed and stamped by the bidder)*

In a bid to make our entire procurement process more fair and transparent, CCG intends to use the reverse auctions as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. CCG shall provide the user id and password to the authorized representative of the bidder. *(Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).*
2. CCG will make every effort to make the bid process transparent. However, the award decision by CCG would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of CCG, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of CCG.
6. In case of intranet medium, CCG shall provide the infrastructure to bidders. Further, CCG has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out-rightly rejected.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at Discom site / store.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for event time extension of auction event shall be considered by CCG.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all-inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

[Signature & Stamp of Bidder]

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE VII : General Conditions of Contract

Attached Separately with Tender

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE VIII : Safety Policy and Safety Terms & Conditions

Attached Separately with Tender

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE IX : Tata Code of Conduct

The Owner abides by the Tata Code of Conduct in all its dealing with stake holders and the same shall be binding on the Owner and the Contractor for dealings under this Order/ Contract. A copy of the Tata Code of Conduct is available a tour website:

<https://www.tatapower.com/pdf/aboutus/Tata-Code-of-Conduct.pdf>

The Contractor is requested to bring any concerns regarding this to the notice of our Chief Procurement & Stores e-mail ID: pradip.sil@tpcentralodisha.com

TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE X : Environment & Sustainability Policy**CORPORATE ENVIRONMENT POLICY**

Tata Power is committed to a clean, safe and healthy environment, and we shall operate our facilities in an environmentally sensitive and responsible manner. Our commitment to environmental protection and stewardship will be achieved by:

- Complying with the requirements and spirit of applicable environmental laws and striving to exceed required levels of compliance wherever feasible
- Ensuring that our employees are trained to acquire the necessary skills to meet environmental standards
- Conserving natural resources by improving efficiency and reducing wastage
- Making business decisions that aim towards sustainable development
- Engaging with stakeholders to create awareness on sustainability

(Praveer Sinha)
CEO & Managing Director

Date: 15th June, 2018

TATA POWER
Lighting up Lives!



CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

**CORPORATE SUSTAINABILITY POLICY**

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
 - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
 - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
 - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
 - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
 - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.

Date: 15th June, 2018


(Praveer Sinha)
CEO & Managing Director

TATA POWER
Lighting up Lives!



TPCODL

TP Central Odisha Distribution Limited

TPNODL

TP Northern Odisha Distribution

TPSODL

TP Southern Odisha Distribution Limited

TPWODL

TP Western Odisha Distribution Limited

CENTRALIZED CONTRACTS GROUP**NIT No.: TPCODL / CCG / 2025-26 / 1000008710****ANNEXURE XI : Authorization Letter Format**

(To be presented by the authorized person at the time of opening of Bid on the letter head of Bidder and should be signed by an Authorized Signatory with Name and Seal of the Company)

Chief - Central Contracts Group

Tata Power Odisha DISCOMs

Plot-29 Anuj Building

Satya Nagar Bhubaneshwar

SUB: Tender for

.....
Ref: Tender No..... dated.

.....

Dear Sir,

This has reference to your above Tender. Mr. / Miss / Mrs.
_____ is hereby authorized to attend the bid opening of
the above Tender on _____ on behalf of our organization.

The specimen signature is attested below:

Specimen Signature of Representative

Signature of Authorizing Authority
Name & Designation of Authorizing Authority

NOTE: This Authorization letter is to be carried at the time of Bid Opening

Property of CCG – Not to be reproduced without prior written permission of CCG (TP Odisha DISCOMs)

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

ANNEXURE XII : Instructions to Bidder for participation in ARIBA System

Step 1: Eligible and Interested bidder shall send an email to Package Owner (Ref. Clause 4.0 for details) attaching duly signed and stamped letter on Bidder's letterhead, with following details, expressing their intent to bid against above tender:

Sr No	Description	Bidder's Response
i)	Tender Enquiry No.	
ii)	Description of materials / Works Tendered	
iii)	Name and address of the bidding company	
iv)	Name of the authorized contact person	
v)	Contact No. of authorized person	
vi)	E-mail Id to which online ARIBA link to be sent	
vii)	Tender Fee details (Amount / NEFT-RTGS UTR No / Date) (Ref sec 1.2)	
viii)	GST No. of bidder	
ix)	MSME Certificate (if applicable)	
x)	Postal address of bidder for return of EMD BG	

E-mail has to be sent to < sumitkumar@tpsouthernodisha.com > with copy to < saikatroy@tpnodl.com > before "Last date and time for payment of Tender Participation Fee".

Step 4: On receipt of the document as mentioned in Step 3 above and after due verification of the same, ARIBA link for participation in the tender will be sent to bidder's e-mail address from ARIBA system.

Step 5: In this e-mail online link as "**Click Here**" shall be there to access the event & participate in the tender.

Step 6: First time bidders need to **Sign Up** for accessing the event. Create User Name and password as mentioned in Sign Up page. A one-page registration screen will open for first time user. All * mark mandatory field to be filled in.

Those who are already having User Name and password for accessing events, may LOGIN using same User Name and password. (Bidder's user name and password for their other customer shall not be applicable for TPCODL / TPWODL / TPNODL / TPSODL)

Step 7: Post login, access the RFQ

Step 8: After review and downloading of all documents click on "**Review Pre-requisites**"

Step 9: Review and accept "**Bidder Agreement**".

CENTRALIZED CONTRACTS GROUP

NIT No.: TPCODL / CCG / 2025-26 / 1000008710

Step 10: Tender document (PDF) can be downloaded from relevant section in Ariba Portal

Step 11: Technical Bid Submission: Bidder has to attach pdf version of technical bid in section relevant to technical bid submission. Uploading any price related information in this section shall lead to bidder rejection.

Step 12: Price Bid Submission: Price schedule as attached in relevant section has to be downloaded. Price and tax details to be filled-in as per the format. PDF version of duly filled price bid to be uploaded in relevant section. Price bid to be mandatorily signature & sealed by authorized person on Company letter head. For Price Bid put all the unit price and taxes and duties in provided field. Put "NA" in not applicable field.

Step 13: After successfully uploading Techno commercial offer and price part, click - **"Submit Entire Response"**

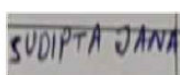
Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

TECHNICAL SPECIFICATION

Specification of FRTU (Feeder Remote Terminal Unit)

Central Engineering Services

TPC-M/TPDDL/TPCODL/TPNODL/TPWODL/TPSODL/TPADL

Prepared By	Reviewed By	Reviewed By	Reviewed By	Reviewed By	Approved By	Released By
CEG	TPCODL	TPWODL	TPNODL	TPSODL	HEAD ENGG.	CHIEF ENGG.
Nirojanalini Garnaik	Gauri Sankar Behera	Ganesh Mane/ Jyoti Mohanty	Sudipta Jana/ Suryakanta Mohanty	Biswajit Dey/ Shailendra Jaiswal/ Debi Prasad Roy	Niranjan Khuntia	Pourush Garg
						
08.05.2025	13.05.2025		08.05.2025	08.05.2025	14.05.2025	

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Contents

1. SCOPE	5
2. APPLICABLE STANDARDS	5
3. CLIMATIC CONDITIONS OF THE INSTALLATION:	7
4. GENERAL TECHNICAL REQUIREMENTS	8
Detail Technical Specification for Feeder Remote Terminal Unit (FRTU)	12
SCOPE	44
STANDARDS IEC / ISO Indian Standard Title.....	44
Technical Details	45
Rated Voltage and Temperature Control and Panel Wiring Cables (PVC Insulated).....	45
Insulation	45
Inner Sheath	46
Conductor Sizes	46
Cable Drum Length	46
Cable Identification	46
Sampling of Cables	46
• Lot 46	
• Scale of Sampling	46
• Sampling Rates.....	46
• Number of Tests and Criterion for Conformity	47
TESTS ON 1.1 KV PVC INSULATED Armored Control Cable	47
• Type Tests	47
Acceptance Tests	48
Routine Tests	48
DETAILS OF TESTS	49
General	49
Bending Test	49
Dielectric Power Factor Test	49
For Type/ Acceptance Test	49
Routine Test	49
Flammability Test	49
Control / LV Wiring Accessories	49
Terminations.....	50
General Particulars and Guarantees.....	50
Compliance with Specification.....	50
Compliance with Regulations	50
Non-Conforming Product.....	50
Inspection and Testing	50

Guarantee.....	51
Packing and Shipping.....	51
Packing.....	51
Storage.....	52
Hazardous substances.....	52
Spare Parts and Special Tools.....	52
5. TESTS.....	52
Variance Records.....	55
6. TYPE TEST CERTIFICATES.....	61
7. PRE DISPATCH INSPECTION.....	61
8. INSPECTION AFTER RECEIPT AT STORES.....	64
WARRANTY SUPPORT.....	65
10. PACKING.....	68
11. TENDER SAMPLE.....	68
12. QUALITY CONTROL.....	68
13. TRAINING:.....	68
Training Requirement.....	69
Course Descriptions.....	69
Training Curriculum.....	69
FRTU Hardware Training.....	69
System Software Training.....	70
Application Software Training.....	70
FRTU Configuration/Engineering Training.....	70
FRTU System Administration.....	71
Simulator Training.....	71
14. MINIMUM TESTING FACILITIES.....	71
15. MANUFACTURING ACTIVITIES.....	71
16. SPARES, ACCESSORIES AND TOOLS.....	71
Start-Up Spares:.....	72
Mandatory Spares.....	72
Recommended Spares.....	72
17. DRAWINGS AND DOCUMENTS.....	73
General Requirement.....	74
Definitions.....	75
Document Format.....	76
Document Review and Approval.....	77
Document Review.....	77
Document Approval.....	77
Scope of Reviews and Approvals.....	78

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

<i>Deliverable Documentation</i>	79
Document Standards.....	79
Hardware Documentation.....	79
List of Deliverable Hardware	80
Equipment Configuration Diagram	80
Network Configuration Diagram	80
Interconnection List	80
Site Installation Drawings and Procedures	80
Equipment Manuals.....	80
Hardware Maintenance Manuals.....	81
Software Documentation	81
List of Deliverable Software.....	82
Software Development Standards.....	82
Database Definition	82
Interface Requirements Document.....	83
Software Functional Description.....	83
Installation Images and Source Code	84
Software Requirements matrix	84
Detailed Design Document.....	84
System Maintenance Manual	85
Operating Manual	85
System Administration Documentation	85
Database Editor's Manual	85
Acceptance Test Procedures	86
18. GUARANTEED TECHNICAL PARTICULARS	86
19. SCHEDULE OF DEVIATIONS	87
Annexure – 1: Preferred/Approved Make of Equipment/System	88
Annexure-3 : Door layout of FRTU	90
Annexure-4 : Bidder's Technical Evaluation Criteria	91
Annexure-5 : Pin Configuration	93
Annexure-6 : BOM/Price Schedule	94

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

1. SCOPE

The scope of this specification covers all the technical requirement with all accessories, tools and tackles of Design, Engineering, Supply, Insurance, Testing at Manufacturer's works, packing, forwarding, Transportation, Delivery at site, unloading at site/stores, material storage, Installation, Testing & Commissioning of FRTU with all accessories and seamless integration with Purchaser's SCADA Systems, and RTU system of the 33/11 kV Primary Substations, Standard Warranty support as per the detailed specifications. Including all works required for successful integration with all RMUs (I/Os, IEDs, Meters etc.).

Any item though not specifically mentioned but is required to complete the project shall be considered and the same shall be supplied and installed by the bidder.

Bidder to note that the proposed solution shall give more emphasis on the following aspects

- a. Reliability
- b. High Availability
- c. Cyber Security Resilience

2. APPLICABLE STANDARDS

The design, manufacture and performance of the FRTU System shall comply with all the requirements of the latest editions of international codes and standards applicable. Nothing in this specification shall be construed to relieve the Bidder of this responsibility.

Emissions Standards		
1	EN55011 (CISPR 11)	ISM RF Equipment – Electromagnetic Disturbance Characteristics
2	60255-25	Electromagnetic emission tests for measuring relays and protection equipment
3	61000-3-2:2000	EMC-Limits for harmonic current Emissions.
4	61000-3-3:1994+2001	EMC Limits-Limitations in voltage changes, voltage fluctuations and flicker in public low-voltage supply systems.
Immunity Standards		
1	61000-4-2 1995-01 60255-22-2, IEEE C37.90.3	Electrostatic discharge (ESD) immunity test
2	61000-4-3 1998-11, 60255-22-3 IEEE C37.90.2 (10V/m)	Radiated, radio-frequency electromagnetic field immunity test
3	61000-4-4 1995-01 60255-22-4	Electrical fast transient/burst immunity test
4	61000-4-5 1995-02	Surge immunity test
5	61000-4-6 1996-03	Immunity to conducted disturbances, induced by radio- frequency fields

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

6	60255-22-6	Electrical fast transient/burst immunity test
7	61000-4-81993-06	Immunity to power frequency magnetic fields
8	61000-4-12	Oscillatory waves immunity test
9	1995-05, 60255-22-1, IEEE C37.90.1	(Damped Oscillatory and Ring wave)
Safety		
1	61010-1	Harmonized Safety Standard
2	60255-5 2000-12	Insulation coordination for measuring relays and protection equipment- Requirements and tests
Power Supply Standards		
1	61000-4-11 1994-06	AC Power supply interruptions
2	61000-4-16 1998-01	Immunity to conducted, common mode disturbances.
3	61000-4-17	Ripple on D.C. power supply
4	61000-4-29+ 2000-08 60255-11	Voltage dips, short interruptions & voltage variations on D.C. input power port immunity test
Environmental Standards		
1	60068-2-1 1994-05	Environmental Testing Cold
2	60068-2-2 1974	Environmental Testing Dry Heat
3	60068-2-6 1995-03 60255-21-1	Environmental Testing Vibration tests (sinusoidal)
4	60068-2-27 1987	Environmental Testing Shock
5	60068-2-29 1987	Environmental Testing Bump
6	60068-2-30 1980	Environmental Damp Heat cyclic (12+12 hour cycle)
7	60068-2-31 1969	Environmental Testing Drop and Topple
8	60255-21-2	Shock and bump tests
9	IEC 61850-3	Substation Environment Requirement
Communication Standards		
1	IEC 61850-5 to 10 IEEE 802.3 CSMA/CD	Substation Comm. Standard access method and physical layer specifications
Other Applicable Standards		
1	IS 9000	Basic Environmental testing procedure for electrical and electronic items
2	IS 694-1990	PVC insulated cables for working voltage up to and including 1100V
3	IS 2629-1985	Recommended practice for Hot Dip Galvanizing of iron & Steel.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

4	IS 2633-1986	Test for uniformity of Zinc Coating
5	IEC 60529	Degrees of Protection provided by enclosures (IP Code)
6	IEC 62052-11	Electricity metering equipment (a.c.) – General requirements, tests & test conditions
7	IEC 62053-22	Static meter for active energy (Class 0.2S and 0.5S)
Product Conformance as per GoI Letter No. 12/34/2020-T&R dated 8th June 2021, Ministry's Order No. 25-17/6/2018-PG dated 2nd July 2020		
1	• IEC 60870-5-104, Security Conformance • IEC 62351-100-1: Clause 5, Clause 6, Clause 7, Clause 8 • IEC 62351-100-3: Clause 5, Clause 6, Clause 7 (IEC 62351-3:2014 / AMDI: 2018, Clause 7), • IEC TS 62351- 5/IEC TS 60870-5-7	IEC 60870-5-7 Telecontrol equipment and Systems – Part 5-7; Transmission protocols – Security extensions to IEC 60870-5-104 protocol (Applying IEC 62351) IEC 60870-5-7 Security extension & IEC 62351 series (IEC 62351-100 parts 1 & 3) and other cross-referenced standards. IEC 61850 – 5, 6, 7, 8, 9, 10 Certificate of Common Criteria as per ISO/IEC 15408

Wherever, new standards and revisions are issued during the period of the contract, the Bidder shall attempt to comply with such standards, provided there is no additional financial implication to Purchaser.

In the event of the bidder offers to supply material and/or equipment in compliance to any standard other than those listed herein, the bidder shall include with their proposal, full salient characteristics of the new standard for comparison.

3. CLIMATIC CONDITIONS OF THE INSTALLATION:

1	Maximum ambient temperature	50 deg.C
2	Max. Daily average ambient temp	35 deg.C
3	Min Ambient Temperature	07 deg.C
4	Maximum Relative Humidity	100%
5	Minimum Relative Humidity	40%
6	Average No. of thunderstorm days	50 annum
7	Average Annual Rainfall	2380mm
8	Average No. of rainy days per annum	120 days max.
9	Rainy months	June to Oct.
10	Altitude above MSL not exceeding	1000 meters

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

11	Wind Pressure	Zone V (maximum recorded 300Kmph)
12	Earthquakes of an intensity in horizontal direction	equivalent to seismic acceleration of 0.3g
13	Earthquakes of an intensity in vertical direction	equivalent to seismic acceleration of 0.15g (g : being acceleration due to gravity)

TPCODL/TPNODL/TPSODL/TPWODL service area has heavy saline conditions along the coast and High cyclonic Intensity winds with speed up to 300 Kmph. The atmosphere is generally laden with mild acid and dust in suspension during the dry months and is subjected to fog in cold months.

Note: Climatic Condition will be considered as per respective TP DISCOM TPC-Mumbai/TPDDL/ TPCODL/TPNODL/TPSODL/TPWODL.

4. GENERAL TECHNICAL REQUIREMENTS

	Detailed Technical Specifications
4.1	Feeder Remote Terminal Unit (FRTU)
4.2	L2 industrial grade managed Ethernet Switch
4.3	FRTU Panel
4.4	CMR & HDR
4.5	Multi-Function Meter
4.6	Modem cum Router
4.7	Battery & Battery Charger
4.8	Control Cables

4.1 FRTU Technical Specification

The Intent of this specification is to commission FRTUs for RMUs of Secondary Distribution Network for Remote Monitoring & Control and its integration with Purchaser's SCADA/ADMS System. The proposed Feeder Remote Terminal Unit (FRTU) shall facilitate controlling and monitoring of the RMUs / Field Equipment from the SCADA/ADMS System at Main Control Center (MCC) and Backup Control Centre (BCC) over IEC 60870-5- 104 and MQTT protocol.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Data Sheet : FRTU			
SL. NO.	TECHNICAL PARTICULARS	TPCODL REQUIREMENT	BIDDER's RESPONSE
1	Feeder Remote Terminal Units (FRTU)	Din Rail Mounted	
		It shall have capability to be part of a larger RTU family for T&D function	
2	Make & Model Proposed	Make	
		Model	
3	RTU Redundancy	Optional (CPU, Power, Communication & Memory)	
4	Digital Inputs (Physical)	As per RFP / RMU type and Indicative Signal List	
5	Digital Outputs (Physical)	As per RFP / RMU type and Indicative Signal List	
	Close / Open	Required	
	Raise / Lower	Required	
6	Analog Inputs (Physical)	As specified in the I/O Requirement	
7	Energy Meters / Numerical Relays Integration	Facility to interface Multifunction Meters and Numerical Relays	
7.1	Accumulator Data from Multi-Function Meter	Capable of Acquiring 32 bit Analog and Accumulator Data from Multifunction Meters	
8	Distributed I/O modules	Required	
9	Ports Requirement and Type	All ports shall be galvanically isolated	
		2 Nos. RS 485 electrical ports for communication with Serial Devices over IEC60870-5-103, Modbus protocol	
		2 Nos. Ethernet Ports / FRTU (Both the ports should support IEC 104, IEC 61850 & other standard protocols for Communication with Control Center and Field IEDs)	
	For Structuring (Configuration) System (Separate Port)	A galvanically isolated USB port for local engineering through laptop	
10	Protocol Support	IEC61850 (Ed1 & Ed2), IEC60870-5-103, IEC60870-5-104 (Master & Slave), MODBUS (Serial & TCP/IP), SNTP & SNMP with Server and Client licenses	
11	Time synchronization between FRTU, I/O modules, IEDs	Required on SNTP and direct pulse (1 PPS, 1 PPM). FRTU shall have capability for Time Synchronization from Minimum 2 Server with priority selection	
	Real time stamping at FRTU level, I/O level	Required, Mandatory	
12	Response Time		
	Digital Input	1 msec or better	
	Analog Measurement	1 sec or better	

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Data Sheet : FRTU			
SL. NO.	TECHNICAL PARTICULARS	TPCODL REQUIREMENT	BIDDER's RESPONSE
	Digital Output	<1 sec or better	
13	I/O handling Capacity	Min 1000 Physical Tags / RTU	
14	Pseudo Points (Digital, Analog)	Required	
15	Calculated Points (Digital, Analog)	Required	
16	SOE List storage	Min 1000 (shall be user configurable)	
	SOE list Retention Period	1 Month	
	Measurement Events	10000	
17	Fault Disturbance Recorder	1000 events	
	FDR Retention Period	1 Month	
18	Development of Interlock logic	Required, Mandatory	
19	Support of mathematical function - Arithmetic, Logical, Trigonometric functions, Differential and Integration functions, Timer, Counter etc.	Required, Mandatory	
20	Logic and Calculation functionality	Required, Mandatory	
21	Check-Before-Execute Scheme for Control	Required (Bidder shall submit their Check-before-Execute scheme)	
22	Auxiliary Relays for Digital Outputs	Required, Auxiliary relays with Min 10 Ampere rating with 2 NO contacts for each digital output	
23	Status LEDs on all module – for fault indication and Inputs / Outputs	Required	
24	Module replacement in RTU	Hot-Swappable module	
25	Software – All diagnostic tools, simulator tool, maintenance tools, configuration application for database and process control program development, documentation, and maintenance	Required Licensed FRTU configuration software minimum 5 numbers	
26	Engineering Functions	a) Configuration shall be possible both locally and remotely	
		b) FRTU shall have multilevel passwords	

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Data Sheet : FRTU			
SL. NO.	TECHNICAL PARTICULARS	TPCODL REQUIREMENT	BIDDER's RESPONSE
		c) On-line monitoring facility of real time data for monitoring/analyzing the real time status of the process, program logic from the engineering station	
		d) Allow configuration of the FRTU with different versions of the Configuration Tool	
		e) ICD file generation shall be possible from the proposed Configuration Tool	
		f) FRTU must have the provision to configure IP of the redundant SCADA Systems (Socket IP)	
27	Cyber Security	Bidder to confirm Cyber security measures as indicated in the Specification	
28	Battery Backup / Flash-PROM backup	Required	
29	Auxiliary Power Supply	Auxiliary Power Supply of FRTU shall be 18-72 V DC (24V DC) Supply. The FRTU shall have adequate protection against reversed polarity, over current and under voltage conditions, to prevent the internal logic from being damaged and becoming unstable causing mal operation.	
29.1	Auto-Startup and Restoration	In case of Power Supply Failure, Auto-Startup and Restoration of the FRTU required	
30	RTU health monitoring contacts (CPU, Communication, I/O modules, Power Supply)	Required both Physical and Soft, Mandatory	
31	Environment Requirement, Reliability & Cooling	FRTU with accessories will be installed in the Relay/Control room with no temperature or humidity control. The RTU shall be capable of operating in ambient temperature from 0 to +65 degree C with rate of temperature change of 20 degree C/hour and relative humidity of 95%, non-condensing	
		All the modules shall be with conformal coating	
32	Number of Multi Master Reporting possible with same ASDU	8 Nos.	
33	Web Based Monitoring	Required, Mandatory	
34	FRTU's Digital Input/Output Capacity	Capacity of I/O should be sufficient for Two 4 way RMU automation (Minimum 80 DIs and 32 DOs & 8 AI hardwired capacity).	

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Data Sheet : FRTU			
SL. NO.	TECHNICAL PARTICULARS	TPCODL REQUIREMENT	BIDDER's RESPONSE
35	CPRI report for the product offered as per the GoI order no. 25-17/6/2018-PG dated 2nd July 2020 and subsequent order No. 12/34/2020-T&R dated 8th June 2021	Mandatory, Bidder to submit the CPRI report along with Bid Document	

Detail Technical Specification for Feeder Remote Terminal Unit (FRTU)

FRTU is envisaged for data acquisition and integration with control centers to carry out remote monitoring and control of the RMUs. A state-of-art microprocessor based industrial FRTU designed for the electrical process environment in both decentralized and centralized manner shall be considered. The FRTU shall guarantee high availability and ensure safe and secure operations of all substation equipment.

The FRTU shall be multifunctional, designed in accordance with applicable International Electro-Technical Commission (IEC), Institute of Electrical and Electronics Engineer (IEEE), American National Standards Institute (ANSI), and National Equipment Manufacturers association (NEMA) standards, unless otherwise specified in this Technical specification. In all cases the provisions of the latest edition or revision of the applicable standards in effect shall apply.

FRTUs shall be a modular and reliable system for acquisition of required information from IEDs e.g. FRTUs, BCPUs, Numerical relays, Multifunction meters, and other communicable devices as well as hardware signal through I/O cards.

DI/DO card should have sufficient ratings to take care of operations with required 30 nos. CMR.

All functional capability described herein shall be provided by the bidder even if a function is not initially implemented. As a minimum, the FRTU shall be capable of performing the following functions:

- The proposed FRTU, I/O and Interfacing modules shall be of the same family of FRTU or Embedded, industrial grade system with high availability & reliability. FRTU hardware shall be easily scalable for expansion and to integrate IEDs/IOs in future on open protocols.
- The FRTU shall be non-redundant for the current application, however proposed FRTU shall support redundancy in hot standby mode with bump less Auto Changeover.
- FRTU shall have vast protocol support capability, adaptable for customization and additional protocols and Multi master communication capability.
- The FRTU shall support a wide range of Server/Client protocols including IEC61850 (ED1 & ED2 edition), IEC 60870-5-104 (Master/Slave), IEC 60870-5-103, Modbus - RTU, Modbus - TCP/IP (Master), MQTT.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- The FRTU shall have min 1,000 Physical I/O tags and shall support integration of at least 10 IEDs on IEC 61850 and at least 10 IEDs on serial protocols. Bidder to consider the hardware such as I/O peripheral, Serial Ports, Communication processors, Converters etc., in the FRTU accordingly.
- The proposed FRTU shall communicate simultaneous with eight independent remote master (redundant) stations on IEC 60870-5-104 and MQTT Protocol.
- FRTU to the Purchaser's SCADA Systems shall allow scanning & control of all defined points (Physical/Pseudo points) within the field substation independently to each of the SCADA systems. Proposed system shall simultaneously respond to independent scans & commands from Purchaser's SCADA/ADMS Systems. Proposed system shall support the use of a different communication data exchange rate (bits per second), scanning cycle, and/or communication protocol for each remote-control center. Also, each control center's data scan and control commands may be different for different data points within the proposed system's database.
- The FRTU shall be Din Rail Mounted.
- Disturbance and fault record collection over IEC 60870-5-104 protocol
- It shall support IEC 61131 based programming logic. The FRTU shall support programming language (Functional Block) with arithmetic & logical functions to incorporate Interlock Logic for SCADA Controls. Bidder to ensure supply of necessary hardware and software to achieve the functionality without any price implication.
- Web Server functionality to monitor and configure the FRTU along with Substation IEDs by authorized users (AAA functionality).
- Should provide latest Microsoft Windows based maintenance and configuration tools. The tools should have functionality of both remote and local access.
- Time synchronization based on SNTP (Server/ Client) and Protocol specific synchronization (IEC 60870-5-104 etc.). The FRTU shall accept minimum two independent sources for time synchronization over SNTP/Protocol specific Synchronization. FRTU in turn shall synchronize the IEDs integrated on different protocols.
- FRTU shall support SNMP protocol for device monitoring and management from Purchaser's Network Management System.
- FRTU shall support configuration File Upload and Download from the Engineering Station (Configuration Laptop), functionality shall support both Local & Remote configuration.
- FRTU shall be capable of acquiring 32-bit analog and accumulator data from Multi-function meters on MODBUS (RTU & TCP/IP)/IEC61850/IEC60870-5-104/MQTT.
- FRTU communication protocol shall be configured to report analog & Status changes by exception to master stations. However, FRTU shall support periodic reporting of analog data and periodicity shall be configurable from 1 sec to 1 hour. Digital status shall have higher priority than the analog data. In addition, analog values shall also be reported to Master station by exception on violation of a defined threshold limit.
- The XML based Substation Configuration Description Language (SCL) of IEC 61850 configuration interfaces shall allow information to be shared between the various configuration tools, reducing the overall engineering time.
- User friendly on-line health and data monitoring facility shall be provided to maintenance engineer for monitoring/analyzing the real time status of the process, program logic from the

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

engineering station (Configuration tool – Laptop) from Local and Remote.

- The Master Station user shall be able to perform a virtual connection through FRTU with any IED, provided by the communication protocol functionality, to support the information transfer to/from IEDs. e.g., the Master Station shall gather on-demand IED data; visualize IED configuration parameters. On the other hand, the Master Station shall be able to download to the IEDs configuration parameters, code changes, etc.
- The system shall comprise of features namely failsafe control (i.e. check-before-execute, selection timeout etc.), Interlock & Sequential Logic Control system, Sequence of Event Recording (SER), Interfacing with third party IEDs (e.g. Multifunction Meters, Condition Monitoring & Protection system etc.), interfacing with third party computer system, Integration of data as per time base (e.g. 15 minutes energy integration), direct GPS clock connectivity, through SNTP server or through the Master (Main & Standby) for time synchronization.
- In case of power supply failure, auto start-up and restoration of the FRTU shall be possible without manual intervention.
- The FRTU should support features i.e. Logic Development, Auto-Change over of source functionality, Communication between FRTUs for automatic GRID management. These features shall be available by default without any additional hardware & Software.
- All the cards/modules of the FRTU, Ethernet Switch etc. must have conformal coating for protection against harsh environments.
- It shall be possible to increase the number of communication ports in the FRTU by addition of cards, if required in future. The FRTU shall support the use of a different communication data exchange rate and scanning cycle on each port and different database for each master station.
- Internal battery backup to hold data in SOE buffer with time & date in case of failure of supply.
- The proposed FRTU shall be KEMA Certified or by equivalent certification body like NABL
- /CPRI/International Accredited Lab.
- It shall be capable to perform all functions as per the current RFP requirement including future requirements. Processor & RAM shall be selected in such a manner that during normal operation not more than 30% capacity of processing & memory are used.
- FRTU shall communicate to MCC, BCC system over IEC60870-5-104 and MQTT protocol.
- Continuous self-supervision function with self-diagnostic feature shall be included.
- Shall support Scheduled rebooting and hard rebooting.
- Hard rebooting of FRTU through SMS (modem should have single DO)

Ports for Communication

- 2 Nos. Ethernet Ports / CPU, each port shall support IEC60870-5-104, IEC61850 (ED1, ED2), MQTT for simultaneous communication with Min Eight (8) independent redundant master's and IEDs (IEC61850 ED1, ED2).
- 2 Nos. RS 485 electrical ports for communication with serial devices over serial protocols such as IEC60870-5-103, Modbus protocol in the FRTU. Bidder to mention all other protocol supported by the proposed FRTU in the technical offer as standard/default solution.
- In addition to above, Ports for internal communication, maintenance and configuration shall be considered.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Protocols Support

- The communication protocol for FRTU to Master Control Center must be IEC 60870-5-104 and MQTT.
- IEC 61850 ED.1 & 2, IEC 60870-5-104, IEC 60870-5-103, MODBUS (Serial and TCP/IP) MQTT shall be supported. The RTU shall meet the IEC 61850 standard in every respect and interoperability with other manufactures IEDs and tools shall be verified.
- Time synchronization over SNTP and Communication protocol from Master.
- Master and slave licenses shall be considered for all the above-mentioned protocols.
- Should generate XML file for integration/engineering with vendor Independent SCADA systems
- FRTU shall support RSTP.
- SNMP (v1, v2c and v3) for Health monitoring of the Hardware.

Input / Output Requirement

- Hot replacement of all I/O modules
- A complete set of process interface
- High disturbance immunity, meeting the requirements of the IEC directives 89/336/EEC and 73/23/EEC when placed in cabinets.
- Comprehensive self-diagnostics
- On-board processing capabilities such as time-tagging, event handling, filtering & gain control.
- Modularity, permitting step-by-step expansion
- Reliability and auto-diagnostics
- Easy to configure
- Quick fault finding with help of LEDs of each module and channel
- The relative time error between events (DI signals) handled within one controller shall be
- <1 ms (interrupt driven). The relative time error between events handled within separate FRTU shall not be more than 2 ms.
- Input / Output Requirement for each Substation: Typical Input/Outputs requirement

I/O Requirement	Digital Inputs (DI)	Digital Output (DO)	Analog Input (AI)
DI+DO+AI cards (Channels)	80	32	8
CMR +IPR(Nos.)	CMR-32 nos.	IPR-32 nos.	8

The following Input / Output modules are envisaged to acquire the field information. Bidder to note that, the I/O requirement considered from hybrid architecture, i.e. Acquisition of I/O from IEDs and as well from proposed I/O modules.

- Analog input
- Digital inputs
- Digital outputs

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Dummy breaker latching relay

The Contractor shall provide a latching relay to be used to simulate and test supervisory control from the Master station. The latching relay shall accept the control signals from the FRTU to open and close and shall provide the correct indication response through a single point status input.

Analog Input Sub System

- The entire analog, Telemetered, Non-Telemetered and calculated point values shall be stored in the database in engineering units
- The system shall provide the capability to perform analog-to-digital conversion accuracy monitoring and raising an alarm should any such points exceed tolerance
 - a. **Analog Signal Conditioning**
 - Galvanic isolation of input and output signals
 - Input filtering and non-linear filtering for attenuation of noise-level
 - Amplification of low-level signals
 - Cold junction compensation
 - b. **Analog Signal Monitoring**
 - Power supply failure monitoring due to loose plug connection, short circuit, wire break and voltage interruption
 - Transducer / Energy Meter monitoring for parity, wire break, live zero and end limit values
 - Short circuit proof
 - Monitoring of A/D conversion
 - On-line simulation
 - Cable monitoring for open circuit
 - Fuse protection and fuse failure detection
 - Communication monitoring
 - Configurable Dead band
 - c. **Design and Performance requirement of Analog Input modules**
 - The Analog Input module shall be a solid-state type. The following features shall be provided:
 - The decoding logic shall ensure that no two channels are selected simultaneously
 - Cross-Talk attenuation between selected and unselected channel shall be more than 80 dB
 - The Analog – to – digital converter (ADC) shall preferably be of successive approximation type, the following feature shall be provided:
 - Guarded input section to ensure large common mode noise rejection
 - Provisions for ADC overflow detection
 - Repeatability of +/- 0.025% of full scale
 - The following design features shall be provided to offer protection to the analog input modules:
 - Protection for continuous overload up to 200% of all input ranges. Such overload on any analog input point shall not affect the accuracy of the next analog input in the same range.
 - Features to ensure that power line voltage variations up to +/-20% and line frequency variation up to +/- 10% do not affect the accuracy of the system
 - Connection of any point for indefinite time shall not damage the system

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- Provision for isolating failed channels and for ensuring that such partial failure does not affect remaining healthy channels
- Modular design to enable easy field expandability
- Provision for two high accuracy reference voltages to be used for checking the accuracy of the ADC for linearity, zero drift and gain. The reference voltage shall be set at equal intervals with respect to the ADC range. This check shall be made automatically at periodic intervals not exceed 6 secs and shall be alarmed if conversion is out of tolerance
- On-line replacement of individual modules in case of failures
- Surge withstands capability as per IEEE standards.
- Measurement range: +/- 2.5 V, +/- 5 V, +/- 10 V, 0-+/- 5 mA, 0-+/- 10 mA, 0-+/- 20 mA, 4- 20mA
- Resolution: 14 bits + sign
- Type of input: Differential
- Input impedance (Voltage input) – 2 Megaohms
- Shunt resistance – 250 ohms
- Common Mode Voltage – 100 V
- Conversion time - < 100 millisecond
- Fusing of Transducer Supply – Individual
- Temperature drift with Gain=1 - 0.05%/10°C (Typical), 0.1%/10°C (Max)

Digital Input Sub System

Digital input with memory shall be considered in case when two items of information received simultaneously i.e. the current point state and flag indicating if the state has changed more than once since the last scan cycle. Number of changes shall be computed using the new state, the memory flag & the last state.

- a. **Digital Input Signal Conditioning**
 - Galvanic isolation of input signals
 - Input filtering for noise-level
- b. **Digital Input Signal Monitoring**
 - Contact monitoring
 - Contact bounce protection
 - Power Supply failure
 - Fail safe condition on failure of card / channel
 - On-line simulation / blocking
 - Fuse protection and fuse failure detection
 - Communication monitoring
 - Cable monitoring
- c. **Design and Performance requirement of Digital Input modules**

The digital input modules shall be provided for the periodic scanning of both low resolution and high resolution digital inputs. The following design features shall be provided:

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- Internal voltage source to convert contact state of potential free contacts, either changeover or ON-OFF into logic level signals. Possibility of surface film or contamination on the contacts shall be considered while selecting this source
- Voltage level sensing units, with non-zero values for the binary status output
- Differential input circuit to offer common mode isolation
- Choice of polarity and threshold range
- Buffer registers
- Filtering to protect against contact bounce or electrical noise on input lines
- Detection of card power supply failure
- Surge withstands capability as per IEEE standards
- Self-Checking features for detecting faulty operation
- Status indicating LEDs for each input
- On-line replacement of individual modules in case of failure
- Simulation facility
- Digital inputs with interrupt-controlled updating
- Provision for isolating failed channels and for ensuring that such partial failure does not affect remaining healthy channels
- The digital input can be inverted so the value is 1 when the electrical signal is off, and 0 when it is on
- Rated Voltage – 24 V DC / 48 V DC
- Input Voltage Range “1” – 18 – 30 V / 36 – 72 V
- Input Voltage Range “0” – (-) 28 – 10V / (-)28 – 20 V
- Input Resolution – 1 mSec
- Time Stamping – at Card level
- Event Detection – Yes
- Current consumption (+5V) – 460 mA
- Number of channels per module / card – 16 (max)

Digital Output Sub System

- Digital Output Signal Conditioning**
 - Galvanic isolation of output signals
- Digital Output Signal Monitoring**
 - Contact monitoring
 - Contact bounce protection
 - Power Supply failure
 - Fail safe condition on failure of card / channel
 - On-line simulation / blocking
 - Fuse protection and fuse failure detection
 - Communication monitoring
 - Cable monitoring

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

c. Design and Performance requirement of Digital Output modules

The digital output module shall provide contact closure outputs by driving relays. The features to be provided are as follows:

- On-line replacement of individual modules in case of failure
- Long life, bounce free, high-speed mercury wetted or dry reed relays
- Surge withstands capability as per IEEE standards
- Type of Output – Opto isolated short circuit protected transistor output
- Number of channels per module / card – 32 (max)
- Voltage rating – 24 V DC /48V DC
- Load Supply – 19.2 V (minimum), 56 V (maximum) / 38.4 V (Min),112 V (Max)

Algorithm and Logic

- a. The FRTU shall be based on advanced and proven algorithms and an easy and efficient upgrade of the FRTU functionality shall be possible.
- b. The FRTU shall support IEC61131 for constructing the interlock logic functions.
- c. The FRTU shall facilitate user defined logic functions such as automatic control sequences by means of available logic elements. e.g., with one command perform a safe change of the connection of a selected line from one bus-bar to another bus-bar in double bus- bar switchgear.
- d. Command is always to be given in two stages: selection of the object and command for operation under all mode of operation. Final execution shall take place only when selection and command are actuated (Select-before-execute).
- e. It shall also be possible to interconnect and derive input and output signals, logic functions, using built-In functions, complex voltage and currents, additional logics (AND- gates, OR gates and timers).
- f. A delay/integrator shall allow the pick-up and reset of binary signals of IEDs to be delayed before being displayed or used to control other functions.

Self-Supervision

- a. The FRTU shall have extensive self-supervision including all functional module and communication channel.
- b. The FRTU shall have LEDs for healthiness / error indication
- c. FRTU shall have the facility to generate & download the log files for maintenance and troubleshooting.
- d. Command execution timer (configurable) must be available for each control point. If the control action is not completed within a specified time, the command should get cancelled (Run Time Command cancellation). The timer for time-out feature shall also be user configurable.
- e. In case of restoration of communication links, power supply after failure, the software along with hardware shall be capable of automatically synchronizing with the remaining system without any manual intervention.
- f. It shall be possible to re-boot the FRTU through the LAN/WAN from a remote location.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Event Recording pertaining to FRTU

- a. The FRTU shall support event recorder that can handle up to 1000 time tagged events. Events shall be stored in non-volatile memory. In case of failure of RTU or communication channel, the recorded events shall be communicated to the master as soon as communication is restored after failure.
- a. The FRTU shall have an internal clock with the stability of minimum 10 ppm or better. The FRTU time shall be set from time synchronization messages received from GPS clock or Master station. SOE time resolution shall be 1ms or better.
- b. The FRTU shall maintain a clock and shall time-stamp the digital status data. Any digital input data in the FRTU shall be assignable as an SOE point. Each time a SOE status indication point changes the state, the FRTU shall time-tag the change and store in SOE buffer within the FRTU. SOE shall be transferred to Master Station through FRTU as per IEC 60870-5-104 protocol.
- b. It shall be possible to retrieve the recorded event on the Purchaser's SCADA system.
- c. FRTU shall support Event storage capacity as follows:

Measurement Events	
System Events	
Alarms & Events	

- d. FRTU shall support web-based monitoring from remote as well as local.

Power Supply

- a. The FRTU shall be powered from the 18-72 VDC (24/48 V DC) Power Supply. The FRTU shall accept power from the DC system with the following characteristics:
- b. Nominal Voltage of 24V DC/ 48V DC with operation between 18 - 72 VDC. The voltage may vary during normal operation between these limits with a duration not less than 1 msec.
- c. Reverse polarity protection.
- d. The RTUs shall operate with grounded input power from purchaser
- e. The RTU shall have adequate protection against reversed polarity, over current and under voltage conditions.
- f. Each Input / Output Supply within the panel shall be through power supply distribution module with MCBs with NO contacts (for supply monitoring).

Time Synchronization

- a. FRTU time synchronization shall be over the Communication protocol from master (IEC 60870- 5-104, MQTT).
- b. FRTU in turn shall be capable of synchronizing all the slave IEDs
- c. Timing Accuracy: The FRTU shall time-tag event reports to an absolute accuracy of 1ms or better.
- d. FRTU shall generate an alarm if it gets drifted or loose the synchronization signal.
- e. FRTU shall have min 2 (two) source input for Time synchronization with priority provision

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- f. Bidder to propose the solution for time synchronization of the FRTU, if the same drifts beyond specified limit (e.g. 30 minutes drift)
- g. With each power cycle the FRTU shall time synchronize with the available source.

Environment requirements, Reliability & Cooling

- a. The Unit shall have high reliability in operation and shall not use cooling fans. The unit shall have vermin proof enclosure and shall insulate electronics, internal components and electronics from external environment in order to avoid failures due to dust, humidity, fungus etc.
- b. The FRTU Panel hardware installed shall comply to IP54 or better enclosure.
- c. The FRTU panel shall be rugged, environment independent and can be installed in the harsh environment (Outdoor/Indoor) with no temperature or humidity control. FRTUs shall be capable of operating in ambient temperature from 0 to +65-degree C with rate of temperature change of 20-degree C/hour and relative humidity 95%, non-condensing.

Expansion in future

Offered system shall be suitable for extension in future for additional equipment & other IEDs. During such requirement, all the drawings and configurations shall be designed in such a manner that its extension shall be easily performed by the Purchaser. During such event, normal operation of the existing system shall be unaffected, and system shall not require a shutdown. The Bidder shall provide all necessary hardware and complete set of software tools along to perform addition of equipment/IEDs in future and complete integration with Purchaser's SCADA System. These hardware and software tools shall be able to configure IED, add additional analogue measurements, digital I/Os, modify interlocking logics etc. for additional IEDs/equipment which shall be added in future.

Cybersecurity

- a. Secure access- Level Wise enabling of settings with User Rights should be incorporated with Password protection in the FRTU. Each User shall have his/her own User Id & Passwords.
- b. User Credentials to access FRTU shall be authenticated through Purchaser's Active directory Server.
- c. All actions/modifications/deletions shall be logged in the FRTU. These logs shall be pushed to Purchaser's Central Asset Management system/SOC.
- d. It shall be possible to access the FRTU through a web browser (Https Support) anywhere from the LAN for configuration, diagnosis, monitoring, file upload & download, simulation and log retrieval by using appropriate user account management viz. Role based access control & password complexity
- e. The FRTU should also supports Authentication and Authorization of individual users, Security logging.
- f. FRTU shall be NERC-CIP/NIST 7628, IEC62351, IEC 62443 and IEEE 1686 compliant.
- g. FRTU shall be enabled with System hardening viz. disabling/removal of unused ports and services.
- h. FRTU Should support System Audit Logs, SYS logs etc.

Reliability

Reliability of the equipment's offered shall be better than 99.9999% per year availability for overall end equipment. FRTU reliability and availability calculation shall be provided with engineering document for approval.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Configuration and Management Tool

Bidder shall provide all the Configuration and Management software tools, which can be installed on Purchaser's existing Engineering Laptops. The proposed configuration and management software shall be compatible with Microsoft Windows version 10 and above. Bidder to consider software tools for FRTU configuration, diagnosis, simulation, Logic development.

A Software tool for user friendly engineering and disturbance handling shall be available for

- a. Configuration of all input and output logical, communication interfaces and other built-in functions and signals shall be possible both locally and remotely from the Master Station for configuration & maintenance activity.
- b. Configuration application shall have multilevel passwords to safeguard control, logic, and automation settings.
- c. Data collection, data modelling, configuration and parameter setting
- d. Engineering of process information for automation and control center systems
- e. Engineering of process information for automation of non-bidder systems and their individual parameters.
- f. User friendly on-line monitoring facility of real time data shall be provided to maintenance engineer for monitoring/analyzing the real time status of the process, program logic from the engineering station. The FRTU simulator shall be capable of emulating master and slave protocols for all the applicable open protocols. Bidder shall submit the details of the offered simulator packages along with the bid.
- g. Shall be used to monitor all communication traffic on a channel.

4.2 Layer 2 Industrial Grade Managed Ethernet Switch

Technical specifications for the Managed Layer 2 Industrial grade, 61850-3 compliant Ethernet switch is given below:

- a. The switch shall be of industrial grade type designed for continuous operation.
- b. Switch shall have minimum 8 ports –
 - o No. of CU Ports : 6 Ports (RJ45 - 10/100Mbps)
 - o No. of FO Ports : 2 Ports (SM)

Speed of FO: 1000 MBPS, Type of Connector: LC Type – 1000 FX

- c. Switch shall be DIN Rail mounted with Power Socket and Ports
- d. LED indicators for link establishment and data transfer for each port
- e. Should support remote configuration
- f. It should own separate maintenance/console port
- g. Latency shall not be more than 10 μ s.
- h. Should support SNMP Server v1.0/v2.0/v3.0
- i. Should be KEMA Certified or equivalent
- j. All the cards/modules of the Switch must have conformal coating for protection against harsh environments.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- k. Switch shall support IEEE802 series for VLAN, RSTP, MSTP and Suitable for ring configuration etc.
- l. Switch shall be IEC 61850 EMC and operating conditions for Power Substations environment.
- m. Switch shall be IEEE 1613 Environmental Standard for Electric Power Substations environment.
- n. Switch shall have design for minimum Heat generation and high MTBF (minimum time between failure)
- o. Switch shall Support Simple plug and play operation - automatic learning, negotiation, and crossover detection
- p. Switch shall Support Quality of Service (802.1p) for real-time traffic
- q. Switch shall Support SNTP time synchronization (client and server) for synchronization of networks
- r. Switch shall Support Industrial automation features (e.g. Modbus, Ethernet/IP and IEC61850 protocols for transparent data transmission)
- s. Switch shall be suitable for PRP/HSR configuration and devices.
- t. Switch shall Support Management Tools like:
 - Web-based, Telnet & Command Line Interface (CLI) for quickly configuring major managed functions
 - SNMP v1/v2c/v3 for different levels of network management
 - Remote Monitoring (RMON)
 - Rich set of diagnostics with logging and alarms
 - Bidder shall supply Console Cable along with each switch

LAYER 2 features

- a. The Switch should support Layer 2 switch ports with Secure VTP or similar protocols to reduce administrative burden of configuring VLANs on multiple switches in turn eliminating the configuration errors & troubleshooting in secure manner.
- b. The Switch should support Rapid Spanning Tree Protocol & Multiple Spanning Tree Protocol.
- c. The Switch shall have IEEE compliance for 802.1Q VLAN, 801.2p, 802.1d STP, 802.3ad (Port aggregation), 802.1w RSTP, 802.1s MSTP, 802.3ad LACP, IEEE 802.1ab Link Layer Discovery Protocol.
- d. The switch should have support for Port mirroring
- e. The Switch should be able to discover the neighboring device of the same vendor giving the details about the platform, IP Address, Link connected through etc, thus helping in troubleshooting connectivity problems or equivalent
- f. The Switch should support a mechanism to prevent edge devices not in the network administrator's control from becoming Spanning Tree Protocol root nodes

Management features

- a. Switch Latency period: 7 Microsecond or better
- b. Transfer Rate of the Switch: 50.4 Gbit/sec
- c. The Switch should support SNMP v2, V3
- d. The Switch should support Configurable SNMP traps
- e. The Switch should support Logging to syslog with time stamp

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- f. Java Run time version - Latest
- g. The Switch should support NTP, SNTP support.
- h. Full environmental monitoring of PSUs, Fans, temperature and internal voltages, with SNMP traps to alert network managers in case of any failure

Power supply

- a. 18-72 V DC power supply module, with $\pm 15\%$ tolerance
- b. Separate MCB with appropriate rating shall be used to power up the Switch
- c. Provision for connecting redundant power supply option should be available.

Environmental

- a. The switches should have IEEE 802.3az Energy efficient Ethernet and ROHS compliance
- b. Switch should be capable of operating under normal room temperature without the requirement of Air conditioning.
- c. Conformal Coating: Required
- d. Operating Temperature: -5° to $+85^{\circ}\text{C}$.
 - IEC60068-2-1 - Cold Temperature
 - IEC60068-2-2 - Dry Heat
 - IEC60068-2-30 - Humidity (Damp Heat, Cyclic)
 - IEC60068-21-1 - Vibration
 - IEC60068-21-2 - Shock
 - IEC61850-3 - Environmental

Product Conformity

Product Conformity	Purchaser Requirement
02.3-10BaseT	Yes
02.3u-100BaseTX	Yes
02.3u-100BaseFX	Yes
02.3ab-1000BaseT	Yes
02.3ad-Link Aggregation	Yes
02.3x-Flow Control	Yes
02.1d-MAC Bridges	Yes
02.1d-STP	Yes
02.1p-class of service	Yes
02.1Q-VLAN tagging	Yes
02.1Q-2005 (formerly IEEE 802.1s) MSTP	Yes
02.1w-RRST	Yes
02.1x-port based Network Access Control	Yes

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Networking Accessories

a. *Patch Panel*

All structured Ethernet copper cabling shall be terminated on of Cat 6 E type patch panels on L2 switch side.

b. *I/O Box*

All the structured CAT6 cabling on the device side shall be terminated on I/O boxes.

c. *Ethernet Patch cords*

All the terminations on the switches / devices shall be done using factory crimped, flexible Cat 6 E UTP Patch cords of suitable length.

4.3 FRTU Panel

Panel and other Accessories

- The panel shall be of IP 65/67 class and industrial grade along with CANOPY.
- Control panel shall be suitable for bottom cable entry.
- Interconnection between panels shall be by prefabricated cables.
- The Bidder shall submit the GA drawing considering the maintenance and aesthetic requirements and submit the drawings along with bill of material for purchaser's review.
- The bidder shall guarantee the satisfactory functioning of the system hardware mounted in the panels even in the event harsh environment.
- Proper size Cable trays shall be provided in the panel after reviewing the number of cables to be terminated in the panel.
- Enough space (for easy termination, for easy viewing of cable tags) shall be provided between the terminal channels and cable trays.
- Terminals shall be distributed functionally in the panel.
- Panel door locks shall have the common key.
- Acrylic glass sheet shall be provided, wherever the power cables & terminations are exposed and prone to be fatal.
- Electrostatic strap shall be fitted with each panel.

Sheet Metal Work

- The panel frame shall be fabricated using suitable mild steel structural sections or pressed and shaped cold rolled sheet steel of thickness not less than 2.5 mm.
- Frames shall be enclosed by cold rolled sheet steel of thickness not less than 2 mm, smoothly finished, leveled and free from flaws. Stiffeners shall be provided wherever necessary. The Panels shall be provided with MS Base Channel of 75 x 50 mm.
- All panel edges and door edges shall be reinforced against distortion by rolling, bidding or by the addition of welded reinforcement member.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- Cut-Outs shall be true in shape and devoid of sharp edges.
- The complete structure shall be rigid, self- supporting, free from vibration, twists and bends.

Galvanizing

- All galvanizing shall be carried out by the hot dip process, in accordance with Specification ISO : 1460 or IS: 2629. However, high tensile steel nuts, bolts and spring washers shall be electro - galvanized to service condition four. The zinc coating shall be smooth, continuous and uniform. It shall be free from acid spots and shall not scale, blister or be removable by handling or packing. There shall be no impurities in the zinc or additives to the galvanic bath, which could have a detrimental effect on the durability of the zinc coating.
- Before pickling, all welding, drilling, cutting, grinding and other finishing operations must be completed and all grease, paint, varnish. Oil, welding slag and other foreign matters completely removed. All protuberances that would affect the life of galvanizing shall also be removed.
- The weight of zinc deposited shall be in accordance with BS 729 and shall not be less than
- 0.61 kg/m² with a minimum thickness of 86 microns for items of thickness more than 5 mm,
- 0.46 kg/m² (64 microns) for items of thickness between 2 mm and 5 mm and 0.33 kg/m² (47 microns) for items less than 2 mm thick.
- Parts shall not be galvanized if their shapes are such that the pickling solution cannot be removed with certainty or if galvanizing would be unsatisfactory or if their mechanical strength would be reduced.
- In the event of damage to the galvanizing the method used for repair shall be subject to the approval of the Project Manager or that of his representative. Repair of galvanizing on site will generally not be permitted.
- The threads of all galvanized bolts and screwed rods shall be cleared of shelter by spinning or brushing. A die shall not be used for cleaning the threads unless specifically approved by the Project Manager. All nuts shall be galvanized. The threads of nuts shall be cleaned with a tap and the threads oiled. Partial immersion of the work shall not be permitted, and the galvanizing tank must therefore be sufficiently large to permit galvanizing to be carried out by one immersion.
- After galvanizing no drilling or welding shall be performed on the galvanized parts of the equipment excepting that nuts may be threaded after galvanizing.
- To avoid the formation of white rust, galvanized material shall be stacked during transport and stored in such a manner as to permit adequate ventilation. Sodium dichromate treatment shall be provided to avoid formation of white rust after hot dip galvanization.
- The galvanized steel shall be subjected to tests as per IS-2633 and BS: 729

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Constructional Features

SAS cabinet shall be outdoor type, floor mounted, with suitable to accommodate all electronics, auxiliary relays, ethernet switch, modem, battery and battery charger with front side opening.

As these FRTU are for outdoor application, proper concrete plinth to be established for erection of the FRTU panels to protect it from high wind speed of more than 150 Km/ hr and water logging.

The panel shall be -

- a. Panel shall be of the metal, floor mounted.
- b. Panel shall be of reputed vendor
- c. Made up of the requisite vertical sections of dust, moisture and vermin proof construction.
- d. It shall have lifting i-bolts for hooks of good capacity and even distributed lifting. Test certificates shall be available for the lifting bolts.
- e. Suitable to provide a degree of protection of not less than IP 55/IP65/IP67 as per IS: 2147.
- f. It is the responsibility of the bidder to ensure that the equipment specified, and such unspecified complementary equipment required for completeness of the SAS design shall be properly accommodated in the panel, in such a way that the maintenance, identification, isolation of any component or circuit shall be easy. Equipment shall be mounted such that removal and replacement can be carried out individually without affecting the services of the adjacent devices. No price increase at a later date on this account shall be allowed.
- g. Self-cooled design with adequate louvers on sides. The louvers shall have screens and filters on inner side of panel. The screens shall be of fine wire mesh made of brass or GI wire.
- h. Shall have maintenance access to the hardware and wiring through lockable full height doors.
- i. Shall have the provisions for bottom cable entry.
- j. The safety ground shall be isolated from the signal ground and shall be connected to the ground network each ground shall be a copper bus bar. The grounding of the panels to the owner's grounding network shall be done by the contractor.
- k. All panels shall be supplied with 230 V AC, 50 Hz, single-phase switch and socket arrangement for maintenance.
- l. FRTU panel shall be with 1 No. internal maintenance lamps (CFL) and space heaters and gaskets.
- m. All panels shall be outdoor, dust-proof with rodent protection, and meet IP55/IP65/IP67 class of protection.
- n. There shall be no sharp corners or edges. All edges shall be rounded to prevent injury.
- o. Document Holder shall be provided inside the cabinet to keep test report, drawing, maintenance register etc.
- p. Provided with labels on the front and rear indicating the panel designation.
- q. Proper provision must be provided for the entry of FO cables and Ethernet cables at the bottom along with AC & DC power supply cable.
- r. Provided with neoprene gaskets all-round the perimeter of covers, gland plates, removable covers and doors.
- s. All sheet steel work shall be degreased, pickled, phosphate and then applied with two coats of zinc chromate primer and two coats of finishing synthetic enamel paint, both inside and outside. The paint shade shall be Siemens Grey (RAL 7032). The final finished thickness of paint film on steel shall not be less than 100 microns and shall not be more than 150 microns.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- t. For every distribution of AC and DC circuits MCB's must be provided. These MCB's must be rated according to the load on the distributed circuit.
- u. Each FRTU panel shall be provided with 20% spare terminals.
- v. Each FRTU panel should have 20% free space for future expandability.
- w. Terminal blocks shall be having provision for isolation, with full-depth insulating barriers made from moulded self-extinguishing material. Terminal blocks shall be appropriately sized and rated for the electrical capacity of the circuit and wire used. No more than two wires shall be connected to any terminal. Required number of TBs shall be provided for common shield termination for each cable.
- x. All materials used in the enclosures including cable insulation or sheathing, wire troughs, terminal blocks, and enclosure trim shall be made up of flame-retardant material and shall not produce toxic gasses under fire conditions
- y. Space heater with thermostat shall be provided in the panel to maintain the required temperature.
- z. Disconnecting type terminal blocks shall be used for CT, PT and for all Digital Outputs.
- aa. Enough space (for easy termination, for easy viewing of cable tags) shall be provided between the terminal channels and cable trays.
- bb. Terminals shall be distributed functionally in the panel.
- cc. Horizontal and vertical Grounding bus shall be provided in the panel. Green coloured wires shall be used for grounding purpose. Cable gland plate fitted on the bottom of the panel shall be connected to earthing of the Panel/Station through a flexible braided copper conductor rigidly.

FRTU supplied alongside RMU Panel

If a single vendor is supplying both the RMU and FRTU, then the FRTU panel should not be standalone & separate from the RMU Panel. The FRTU should be an extended part of the RMU panel by housing it in separate compartment of RMU panel and the mounting method is to be same as per specification of mounting the RMU panel. No cables including the power cables, instrumentation cables, CT/PT cables should be laid outside from RMU compartments to FRTU compartments and proper cable entry should be provided from side entry.

The FRTU compartment should be designed to house all the equipment including the LIU box and should have the provision of space for expansion of the I/Os as per the tender document. There should be provision of FO cabling through gland plate in the base.

The FRTU panel should have indication for AC Power, DC Power, Local & Remote at the front side of the panel. The FRTU front panel must have marking

“TPC-M/TPDDL/TPCODL/TPNODL/TPWODL/TPSODL/TPADL FRTU PANEL, PO, WARRANTY, QR CODE PARAMETERS”

with white color printed on black color acrylic sheet. The FRTU panel compartment shall be designed to be tamper proof and separate battery charger & battery to be considered for FRTU compartment.

Earthing of the FRTU compartment should be considered along with the RMU compartments as it is integrated Panel housing both. However, it is to be ensured that the earthing resistance should be less than 2 ohms for FRTU applications.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

The metal sheet work/ panel paint/IP class should be same as RMU specifications. However, the FRTU internal wiring, earthing terminals, terminal blocks etc. should be as per the specification mentioned in this tender document.

Wiring /Cable Requirements

The FRTU panels shall gather all signals from and to the devices located in RMU. Pre-wired and prefabricated cabling may be used. All wires that carry low-level signals shall be adequately protected and separated as far as possible from power wiring. All wires shall be identified either by using ferrules or by colour coding. In addition, cables shall be provided with cable numbers at both ends, attached to the cable itself at the floor plate where it enters the cubicles. The cable distance shall be site surveyed by the bidder. The distance between FRTU panels and RMU panels at site is maximum 6 mtrs. These cable lengths mentioned are for indicative purpose only. The bidders are required to quote as per their site survey. All the external Cabling between the FRTU and RMU panels shall use armored cables.

The external cables (except communication cables) shall have the following characteristics:

- All cables shall have stranded copper conductor
- Minimum core cross-section of (3/20) 2.5 mm² for Control outputs and 0.5 mm² for Status inputs
- Minimum core cross-section of (3/20) 2.5 mm² for PT cables and for CT cables.
- Rated voltage Vo/V of 0.6 / 1.1kV
- External sheathing of cable shall have oxygen index not less than 29 & temperature index not less than 250. Cable sheath shall meet fire resistance test as per IS 1554 Part-I.
- Shielding, longitudinally laid with overlap.
- Dielectric withstand 2.5 kV at 50 Hz for 5 minutes
- External marking with manufacture's name, type, core quantity, cross-section, and year of manufacture.
- The Communication cable shall be of shielded, twisted pairs and of 0.22sq mm² size with dielectric withstand of 1 kV at 50 Hz for 1 minute.

FRTU cabinet shall be wired with all the DC distribution wiring and AC wiring for the Illumination and fans. Following sizes of wires shall be used

Colour Codes

DC wiring	1.5 sq.mm	Red/Black
AC wiring	1.5 sq.mm	Red/ Black

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Engraved identification ferrules marked to correspond with the wiring diagram shall be fitted at both ends of each wire. These ferrules shall fit tightly on the wires and should not fall off when the wire is removed.

The wires should be terminated on terminal blocks using soldering crimping type of tinned copper lugs. Insulated sleeves shall be neatly punched and cleaned without affecting access to equipment mounted within the cabinet. Wiring troughs shall be provided for cable routing inside the cabinet. One piece molded, 650 V grade terminal blocks complete with insulated barriers, screws, identification strips shall be used.

Terminals links shall be of Elmex or Connectwell make. Terminals for power connections shall be adequately rated for the circuit current and the rating of other terminal blocks for central indication etc. shall not be less than 15 amps. At least twenty percent spare terminal blocks shall be provided. All the terminal blocks should be provided with proper identification strips. Terminal blocks shall be provided with transparent acrylic covers.

All internal wiring shall be securely supported, neatly arranged, readily accessible and connected to equipment terminals and terminal blocks. Cable ways & troughs shall be used for this purpose.

Wire termination shall be made with solderless crimping type and tinned copper lugs, which firmly grip the conductor. Insulated sleeves shall be provided at all the wire terminations. Engraved core identification plastic ferrules marked to correspond with panel wiring diagram shall be fitted at both ends of each wire. Ferrules shall fit tightly on the wire and shall not fall off when the wire is disconnected from terminal blocks.

Labels

All equipment shall be provided with individual labels with equipment designation engraved. Also, the control cabinet shall be provided on the front with a label engraved with designation of the cabinet as furnished by PURCHASER. Labels shall be made up of non-rusting metal or 3 ply lamicaid. Labels shall have white letters on black or dark blue background. Sizes of labels and lettering are subject to PURCHASER's approval.

Manufacturer's label should be provided at the side wall, which should mention the project ref, substation, P.O ref, circuit details, drawing ref.

Earthing Terminals

Control cabinet shall be provided with two separate earthing terminals suitable to receive PURCHASER's earthing conductors of size specified.

Positive connection between all the frames of equipment mounted in the switchboard and earth bus bar shall be provided by using insulated copper wire/bars bus bars of cross section equal to that of the bus bar or equal to half the size of circuit load current carrying conductor, whichever is smaller.

All equipment shall be connected to the earth busbar using 1100V grade PVC insulated 2.5 sq.mm stranded

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

tinned copper earthing conductor.

All hinged doors shall be positively connected to the earthing bus terminals, with the help of braided copper conductors of adequate size.

An electrostatic discharge arrangement shall be provided in each panel so as to discharge human body before he handles the equipment inside the panels

Terminal Blocks

Terminal blocks shall be having provision for disconnection (isolation), with full-depth insulating barriers made from mounded self-extinguishing material.

Terminal blocks shall be appropriately sized and rated for the electrical capacity of the circuit and wire used. No more than two wires shall be connected to any terminal.

Each analog input signal, digital status input and digital output signals shall require two terminals per point plus a common shield termination for each cable.

All terminal blocks shall be suitably arranged for easy identification of its usages such as CT circuits, PT circuits, analog inputs, status inputs, control outputs, auxiliary power supply circuits, communication signals etc.

4.4 CMR/ IPR

Interposing Relay (Digital Output)			
SL. NO.	TECHNICAL PARTICULARS	REQUIREMENT	Bidder Response
1	Make		
2	Model		
3	Type	Magnetic Blow out	
4	Contact Configuration	2 NO with LED Indicator + Free wheeling	
5	Contact Material	AgNi	
6	Contact make and carry	30A for 3 sec. & 5A continuously at 660V	
7	Contact mechanism	Self-Reset	
8	Coil Voltage	24VDC	
9	Input impedance	more than 50 Kilo ohms	
10	Operating time	Less than 15 m secs (DC)	
11	Mechanical durability	100000 cycle	
12	Ambient Temperature	-40 deg C to + 55 deg C	
13	Type of Mounting	Din Rail Mounting	
14	Socket	S8LD SOCKET	
15	Standard applicable	IEC 60255-5	
16	Other Accessories	Necessary TB, Din rail channel and other accessories to mount in SIC/RTU/CRP Panel	

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Contact Multiplying Relay (Digital Inputs)			
SL. NO.	TECHNICAL PARTICULARS	TPCODL REQUIREMENT	
1	Make		
2	Model		
3	Type	CMR	
4	Contact Configuration	1 NO + 1 NC with LED Indicator + Free wheeling	
5	Contact Material	Silver alloy	
6	Contact make and carry	5 Amps @ 24VDC / 48V DC	
7	Coil voltage	24VDC / 48V DC	
8	Contact Resistance	50 M ohms	
9	Die Electric Strength		
9.a	Between open contacts	500V RMS	
9.b	Between contact and coil	2500 VAC	
10	Insulation Resistance	500 M Ohms @ 500VDC	
11	Operate time at Nominal voltage	20 milli secs	
12	Release time at Nominal voltage	10 milli secs	
13	Ambient temperature	-40 deg C to + 55 deg C	
14	Life Expectancy		
14.a	Mechanical Operations	20 million DC Relay	
14.b	Electrical Operations	> 100,000 operations	
15	Coil Resistance at nominal voltage (DC)	30,000 ohms + 10% @ 20 C	
16	Type of contact multiplie	1NO + 1NC with LED Indicator + Free wheeling	
17	Type of mounting	DIN RAIL MOUNTING WITH SOCKET	
18	Standard applicable	IEC 60255-5	
19	Other Accessories:	Necessary TB, Din rail channel and other accessories to mount in SIC/RTU/CRP Panel	

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

4.5 Technical Specification for Multi-Function Meter (MFM)

Bidder to consider Multifunction meter for each Breaker panels of RMUs, which shall be mounted on the RMU panel. These meters shall be integrated to FRTU on MODBUS in daisy chain loop. Necessary cutout to be made to flash mount these MFMs in the RMU panels.

Sl. No.	Description	Functionality Expected
1	Sampling rate	128 samples per cycle for true RMS measurement
2	Voltage Input	0 to 690VAC
3	Voltage Burden	< 0.15VA
4	Current Input	1 A or 5A Site selectable
5	CT Burden	0.1VA
6	CT range	0.1% to 200%
7	Current over range	Three times continuously, eighty times for one sec
8	Accuracy kW / kWh	0.5S as per IEC62053:22
9	Real time & average parameters	Required
10	Four quadrant measurement	Required
11	LED Load Bar Indication	Optional
12	Self-Diagnostic LED	Required
13	Real time clock	Required
14	Min./Max of parameters	Required
15	THD	Required
16	Individual Harmonics upto 39th	Required
17	Real time waveform monitoring	Standard software to monitor real-time waveform
18	RS485 communication	Min 1 port
19	Isolation	Galvanic
20	Communication protocols	MODBUS RTU, ASCII, selectable at site
21	User defined registers	Optional
22	Energy pulse LED for calibration test	Required
23	Relay output	Optional
24	Aux. power supply	18-72 V DC
25	Ambient operating temperature	60 °C
26	Mounting Panel cutout	6 mm

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

4.6 Technical Specification for Modem cum Router

1	The Modem should be in the active phase of the product life cycle and Bidder to submit the details in this regard.	
2	Radio Interface	
2.1	Radio Interface	5G Fall back to 4G/3G/2G
2.2	Data interface	Cat 5 , Download and Upload 1000 Mbps
2.1	Supported frequency band	1.Modem should support multiband connectivity with FDD 5G & TDD 5G. 2.It should support Band 1, 3, 5, 8, 40 and Band 48. 3.The offered cellular modem should support and compatible to the data & radio interface of the network of public mobile service provider in Odisha City.
2.4	Radio Transmitter Power	Vendor to provide details of radio transmitter power
2.5	Receiver Sensitivity	Vendor to provide details of receiver channel sensitivity
2.6	Cellular Module / Chip	Vendor shall give details of cellular chip /Module used along with datasheet
3	Operating Condition	
3.1	Operating Temperature	-20 C to 70 C
3.2	Operating Humidity	5 % to 100 % (non -condensing)
3.1	Power Consumption	Vendor to provide power consumption for idle and max during data transmission
3.4	Storage /transport temperature	-40 °C to 85 °C
3.5	MTBF	Vendor to provide details of MTBF
3.6	Protection from pollution	Vendor shall provide design details such as protective paint /conformal coating on MCB, high grade electronic components uses to protect from environmental pollution .
4	System Characteristics	
4.1	CPU	1. Vendor to provide make & technical details of CPU used. 2. Vendor should also attached technical data sheet of CPU. 3. CPU usage should not crossed 40 % in typical operating & maintenance condition
4.2	RAM	1. Vendor to provide details of memory type, Speed & Size. 2. Usage of memory should not crossed 60 % in typical operating & maintenance condition

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

4.3	Flash Storage	Vendor to provide details of flash storage Memory Provision to store system logs, event logs ,configuration file
5	Mechanical Construction	
5.1	Dimension (W X H X D)	Vendor to provide details of Dimension (W X H X D)
5.2	Weight in Kg	Vendor to provide details of Weight in KG
5.3	Housing	Metal Preferred Aluminum alloy having better heat dissipation & ruggedness
5.4	Mounting	DIN rail Mounting
5.5	Degree of Protection	IP30
6	Interface/Port Type	
6.1	Ethernet	1. Minimum 2 X RJ45 Port ethernet, Speed 10/100 Mbps auto negotiable having status LED indication. 2. Port should be configurable as LAN /WAN as required.
6.2	Cellular interface	1. Cellular modem should have dual SIM provision. 2. Dual SIM for network redundancy /backup. 3. Dual SIM operation ensures that the cellular connection is always available. 4. It will automatically disconnect the 1st SIM card's low/weak cellular connection and will reconnect to establish a stronger connection using the 2nd SIM card.
6.3	Ethernet Cable (CAT 6)	Vendor to provide Ethernet Cable (CAT 6) minimum 1.5 M
7	Software Features / Supported protocols	
7.1	Network Protocols	TCP/IP ,UDP/IP, HTTP, ARP,DHCP, ICMP, SNMP, V1/V2 & V1, NTP, SSL/TLS
7.2	Routing	Astatic Routing, RIP 1 & 2 ,OSPF V2 & V1
7.3	VPN	Open VPN , IP Sec, L2TP, PPTP, GRE
7.4	Alarm Message	Device shall have alarm notification on SNMP trap
7.5	Management /Monitoring	1. Cellular modem should shall support Local/ Remote management through web HTMLS, SSHP & Telnet4. 2. It shall support monitoring through system logs & SNMP version V1/V2 & V3. 3. Notification & command shall be possible over SMS. 4. Firmware upgradation through Web, backup & restore of configuration shall be possible. 5. Modem should be enabled through SMS 6. Modem shall support remote soft rebooting of modem over SMS 7. On receipt of SMS, modem shall operate DO operation & retain

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

		the original position after 60 sections. This feature will be utilized to disconnect the power supply of RTU for configured time and again restore power supply after it. This feature ensures remote rebooting of RTU over SMS
7.6	Operating System	Vendor to give the details of operating system & its Version
7.7	Application	Vendor to give the details of application & package installed in modem
7.8	AT Command Support	YES /NO
7.9	Scheduled rebooting	Device should be capable to program auto rebooting as per configured / scheduled configured scheduled time.
7.1	Watch dog feature	Modem Shall have feature of tracking data connectivity status by periodic ping test and switchover on backup.
7.11	Factory Reset	Provision of Resetting the device for factory configuration.
7.12	Diagnosis Feature	Device Shall support real time diagnostic such as active connection, traffic on interfaces
7.13	SCADA Protocols	1. Transparent Mode: The modem should be capable for communicating with multiple protocol FRTUs in Transparent Mode 2. Modbus Master Mode: The modem should be capable of reading Multiple Modbus Meters connected to it 3. Data Segregation Mode: modem should segregate the collected data as per Instantaneous 4. Parameters, Billing, Load Profile and Tamper parameters in separate files per Meter 5. IEC 104 – 104 Master – Multi Slave Mode: The modem should be capable to reading FRTUs in IEC60870-5-104 and MQTT protocol and communicate with SCADA system on IEC 60870-5-104 and MQTT protocol upto 8 masters. Adequate data interlock mechanisms should be implemented to avoid data loss. a. IEC 104 Slave mode Multi Master support b. Other Data Sending Modes: modem should support TCP, UDP, HTTPS, MQTT data sending formats c. Simultaneous Operations of multiple protocols. d. Ex modem should be capable of sending Modbus Data over 104 and MQTT simultaneously
8	Security	
8.1	Security	HTTPs, SSH, Authentication with RADIUS or TACACS + , activate cellular interface with SMS ,Ethernet 802.1X(EAP-PEAP/MsCHPv2 or EAP -TLS
8.2	Authentication	User Management (local, RADIUS, TACACS + , Mixed)

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

8.3	State inspection firewall	Static firewall IPv4 / IPv4 with incoming and forwarding ruleset, DoS protection, IP /Port/Protocol filtering, NAT
9	Antenna	
9.1	No Of Antenna	The 5G Cellular modem Should have two antenna connection (MIMO). One is primary cellular antenna & second is diversity antenna (MIMO)
9.2	Cable Length	Cable should have Low loss RF Cable with minimum 5M
9.3	Type of Antenna	Antenna Should be Omni directional with high gain (High gain ≥ 5)
9.4	Construction of antenna	It should be Steady, good quality material, water/ weatherproof having adequate gold plate connector compatible with cellular modem antenna. Port. It should be suitable mounting arrangement to installed indoor
9.5	Antenna Length	5 Meter length is required ; MIMO type two antenna for main & Aux.
9.6	Frequency Band, impedance & Polarization	Vendor Shall provide the details of frequency Band. Antenna should be compatible with offered device & network service provide with frequency band, port impedance & radio signal polarization
9.7	VSWR	Vendor Shall provide details of VSWR
9.8	Gain of antenna	Vendor Shall provide Gain details of primary & secondary antenna
10	Power Supply	
10.1	Power Supply	18V to 72 V dc
10.2	Connector Type	Modem Should have preferable screw type firm connection. It should have reverse polarity protection & surge protection
11	Status & diagnostics indicator	
11.1	LED indicator	Vendor to provide details of status & diagnostics indicator. (Power- ON & OFF, ERR- Error Red, Signal, network, SIM status)
12	Certification: - IEC Specified as below or equivalent to international Standard	
12.1	Electrostatic discharge immunity test	IEC EN 61000-4-2
12.2	Radiated, radiofrequency, electromagnetic field immunity test	IEC EN 61000-4-1

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

12.3	Electrical fast transient/burst immunity test	IEC EN 61000-4-4
12.4	Surge immunity test	IEC EN 61000-4-5
12.5	Immunity to conducted disturbances, induced by radio-frequency fields	IEC EN 61000-4-4
12.6	Information technology equipment –Safety	IEC 60950
12.7	Environmental testing- Vibration (sinusoidal)	IEC 60048-2-4
12.8	Environmental testing- Shock	IEC 60048-2-27
12.9	Environmental testing- Free Fall (withdrawn)	IEC 60048-2-12
12.1	Proof of check	vendor should give one number of modem along with Technical offer for performance & application compatibility check for period of minimum 15 days
12.11	Country of manufacturing	Vendor to provide Country of manufacturing details
12.12	Service Centre in India	Vendor to provide details of Service Centre in India
12.13	Regulatory compliance	Vendor shall confirm that offered product is complied & certified by all Indian government bodies related to telecommunication/ wireless communication (WPC, DOT) to operate & user this product in country . Vendor to share compliance certificate of the same
12.14	Surge protection /electrical isolation	It should be available on all Ethernet communication port & power supply input. vendor shall share certification

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

12.15	Environmental Condition	Cyclonic environment with wind velocity up to 250kmph. Some of the regions, where the work will take place includes coastal areas, subject to high relative humidity, which can give rise to condensation. Onshore winds will frequently be salt laden. On occasions, the combination of salt and condensation may create pollution conditions for electronic equipment. Some places are in heavily industrial polluted areas. Therefore, all supplied material and equipment shall be designed and protected for use in exposed, heavily polluted, salty, corrosive and humid coastal atmosphere.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

4.7 Technical Specification for Battery & Battery Charger

- VDC SMPS battery charger 230VAC input, 10 Amps Output.
- FRTU should be capable to monitor Battery and battery charger healthiness. It is more preferable if the battery charger have inbuilt feature of Battery health monitoring
- Battery and battery charger should be capable for all FRTU required operation and Aux. supply to Modem & MFM etc.
- Battery Rating: 24 V DC, 42AH, SMF-VRLA with chargers suitable for indoor as well as outdoor applications.
- The batteries are intended to operate the isolators of 11kV/22kV/33kV RMU. The rating of closing coil is in the range from 90 watts to 120 watts.
- The battery & its charger must withstand average operations of 10nos for max 30 seconds.
- Power supply package shall meet the power supply requirement for the MFM and modem as well.
- Suitable provision in FRTU shall be present to supervise/monitor and prevent accidental serious discharge of battery.
- Battery and battery charger plays very important role in remote operation while restoration of power supply to the customer. Hence to monitor healthiness of battery continuously in services condition, routine tests for battery condition monitoring shall be ensured.
- FRTU must be able to perform the battery discharge test at a manual set period or period can be pre-defined for auto discharge test.
- Battery Health Monitoring Unit must be of standard make.
- Ambient Temperature Operation: -5deg C to +60degC
- Ambient temperature Storage: -20deg C to +65 deg C.
- Humidity: 100% RH, non –condensing
- Adhere to Standards IEC60927-1, IEC61000 with ingress protection of IP20.
- Monitoring The power supply shall deliver the following status to the SCADA
 - a. End of life detection
 - b. Battery disconnected
 - c. Absence of power input
 - d. Voltage output faults
 - e. Battery fault
 - f. Any other data should be available through a serial link communication.
- Type 3 Pluggable Surge Protection Device in accordance with IEC 61643 with KEMA & UL approval must be installed at the incoming power supply of FRTU. DIN Rail Mounted Suitable Surge Protection must be installed on all communication lines (Ethernet/RS 485)

Sl. No.	Technical requirement	DISCOMS Requirement
1	Scope	The battery & battery charger are intended for operating 33kV/22kV/11KV RMU isolators. The rating of closing & opening coils is from 90-120 watts. Operating time 50ms Max. The battery should be capable of withstanding normal load of FRTU & operational load of RMU isolators
2	Average Number of Operations	Minimum 10 nos. for 30 sec
3	Standards	IS 1885/IEC 600504, IS -15549/2005
4	Climate	Must be able to operate efficiently considering hot & humid climate of Mumbai, India region. The battery shall be capable of operating satisfactorily in outdoor applications when it is housed in a Cubicle between 10 deg. C and 65 deg. C and in locations where the relative humidity between 30% to 100%
5.1	Voltage	24 VDC specified at 27 deg. C.
5.2	Battery Type	SMF, VRLA with chargers of conventional type
5.3	Voltage/cell	2 volts
5.4	Capacity of Batteries	42 AH,10Amps
5.5	Connecting cables	Cable size selection should provide the lowest voltage Drop possible between battery system and operating Equipment.
5.6	Method of charging	Constant voltage method and current limit (variable Current)
5.7	Efficiency	Not less than 90% at full rated load
6.1	Battery Charger type	Constant Voltage and Current limiting charger. Charger with inbuilt battery health monitoring is highly preferable.
6.2	Charger Input Voltage	Single phase (2 wire) voltage 250V AC +30% to -20% Frequency 50Hz $\pm$ 5%.
6.3.1	Regulation	$\pm$ 1%
6.3.2	Charger current	10 Ampere
6.3.3	Efficiency	Not less than 85% at full rated load
6.3.4	Current limit	110% of rated load
6.3.5	Insulation	Not less than 5 mega Ohms.
		i. between DC output terminals and AC input terminals.
		ii. Between AC input terminals and earth
		The charger shall have suitable indicators to visually know its mode of operation. Charger indication as below must be available:

Sl. No.	Technical requirement	DISCOMS Requirement
6.3.6	Indication	Mains on (Red LED), Charger on (Yellow), Boost on (Yellow LED), Float on (Green LED) and Battery reverse polarity (Red LED), O/p DC fuse blown (Red LED) LED lamp indication. (LED colors can be changed)
6.3.7	Protection	Input single pole MCB's for AC & DC of 10 Amperes separate for battery & charger.
		The battery charger must include protections like:
		i) AC input MCCB & ELBS with input ON/OFF switch and fuses/contactor.
		ii) DC output MCCB with output ON/OFF switch and fuses.
		iii) Current limit protection, soft start feature, surge suppressor.
		iv) Fast semiconductor fuses for rectifier bridge.
6.3.9	Battery & charger Alarms	v) Charger overload / short circuit vi) Battery polarity reverse, Battery Over/Under voltage, Charger rectifier fail, etc.
		Potential free contacts must be available to integrate with SCADA for abnormality if any. Most preferred alarms are like: AC supply fail, DC supply fail, Battery Low, Battery Fail, Battery Charger fail, Battery polarity reverse, Battery test. Serial Communication is preferred.
6.3.8	Cooling	External exhaust fan (Optional)
6.4	Climate	Must be able to operate efficiently considering hot & humid climate of Mumbai, India region. The battery shall be capable of operating satisfactorily in outdoor applications when it is housed in a Cubicle between 10 deg. C and 65 deg. C and in locations where the relative humidity between 30% to 100%
6.5	Wiring	The internal wiring of the charger shall be carried out with PVC insulated
6.6	Accessibility	650V grade standard copper conductor. The control wiring shall be carried out with 2.5 Sq.mm copper conductors.
		All the important components of the charger must be easily accessible for maintenance, repair, replacement in case of trouble without giving interruption to total D.C. supply as far as possible.
6.7.1	Acceptance And Routine Tests	All acceptance and routine tests as stipulated in the relevant standards shall be carried out by the bidder. The test certificates are to be furnished for approval.

Sl. No.	Technical requirement	DISCOMS Requirement
6.7.2	Acceptance test for battery charger with batteries	1. Marking
		2. Verification of dimensions.
		3. Regulation test.
		4. Ripple test
		5. Megger values and HV Test.
		6. Test for battery discharge capacity.
6.7.3	Type Tests	Following shall constitute type tests in respect of chargers and batteries.
		1. Insulation resistance
		2. High voltage test at 1.5KV for 1 minute
		3. Regulation (Load & Line)
		4. Dry heat test at 55°C for 16 hrs with full load on as per IS: 9000 part3/Sec5/1977.
		5. Damp heat test at 55°C and at 95% RH for two cycles as per IS: 9000 part5/Sec1/1981
7	Drawings	Detailed drawings, circuit details and technical literature of batteries shall be enclosed to the offer. Tenders not accompanied by the above are liable for rejections.
		Trouble shooting charts shall be supplied with each unit to trace faults in the charger with voltage and Resistances to be measured at various test joints.
8	Painting	The box shall be painted with powder coating with siemens grey colour.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

4.8 Technical Specification for Control Cables

SCOPE

This part of the specification covers the technical requirements of design, Engineering, manufacture, stage testing, inspection and testing before dispatch, packing, forwarding, delivery at site the PVC, armoured, copper control cables for installation in substations.

The material offered shall have been successfully type tested during last five years on the date of bid opening. The front page of type test report showing the evidence of successful type test of the items asked for in this Specification shall be uploaded with the signature of bidder. The full text of the type test report is to be submitted along with the technical proposal.

The control cables shall conform in all respects to highest standards of engineering, design, workmanship in accordance to this specification and the latest revisions of relevant standards, mentioned below.

STANDARDS IEC / ISO Indian Standard Title

Except where modified by this specification, the control cables shall be designed, manufactured and tested in accordance with the latest editions of the following standards.

Sl. No.	Standard Code		Brief Description of the Codes
1	IEC 811	IS-18-10810:1982	Testing cables
2	IEC 502	IS - 1554:1988 (Part 1)	PVC Cables 1100V
3	IEC 227	IS - 5819:1970	Short circuit ratings for PVC cables
4	IEC 228	IS-8130:1984	Conductors for insulated cables
5	IEC 287		Calculation of the continuous current rating of cables.
6	IEC 540	IS - 5831: 1984	Test Methods for insulation and sheaths of electric cables and cords IEC 287
7		IS - 3975: 1979	Mild steel wires, strips and tapes for armouring of cables

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

The Bidder may propose alternative standards, provided it is demonstrated that they give a degree of quality and performance equivalent to or better than the referenced standards. Acceptability of any alternative standard is at the discretion of the Tata Power Discoms. The Bidder shall furnish a copy of the alternative standard proposed along with technical proposal. If the alternative standard is in a language other than English, an English translation shall be submitted with the standard.

In the case of conflict, the order of precedence shall be

- a. Indian Standards
- b. IEC

This list is not to be considered exhaustive and reference to a standard or recommendation in this Specification does not relieve the Bidder of the necessity of providing the goods complying with other relevant standards or recommendations.

Technical Details

1.1 kV POLYVINYL CHLORIDE (PVC) INSULATED CABLES All control cables to be used shall be armored PVC type. The outer sheath of control cable shall be Polyvinyl chloride (PVC) type ST-2 of IS 5831.

Rated Voltage and Temperature Control and Panel Wiring Cables (PVC Insulated)

The conductor shall be of round stranded plain copper wires complying with IS - 8130:1984/ IEC 228.

N.B. - Conductor screening not required in this case.

Insulation

The insulation shall be of Polyvinyl Chloride (PVC) compound. 'Heat Resisting' Type C for the Control and Panel Wiring cables. Both shall conform to the requirements of IS - 5831: 1984.

Type of Insulation	Normal Continuous Operation	Short Circuit Operation
General Purpose	70 ⁰ C	160 ⁰ C
Heat Resisting	85°C	160°C

The PVC insulation shall be applied by extrusion and the average thickness of insulation as specified in IS – 1554 (part 1): 1988.

The insulation shall be applied so that it fits closely on to the conductor and it shall be possible to remove it without damage to the conductor.

Insulation Screening not required.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Core Identification and Laying up of Cores.

In multi-core cables, the cores shall be laid up together with a suitable lay as recommended in IS - 1554 (Part 1): 1988. The layers shall have successive right- and left- hand lays with the outermost layer having a right hand lay.

Inner Sheath

The laid-up cables shall be covered with an inner sheath made of thermoplastic material (PVC) applied by extrusion. The thickness of the sheath shall conform to IEC 502/IS - 1554: 1988. Single core cables shall have no inner sheath.

The outer serving shall incorporate an effective anti-termite barrier and shall be capable of withstanding a 10 kV DC test voltage for five minutes after installation and annually thereafter.

Current ratings shall be calculated in accordance with IEC 287 "Calculation of the continuous current rating of cables with 100% load factor".

Conductor Sizes

The following shall be used for Control and Panel Wiring:

The no. of Cores & Sizes of the Control Cable with flexible Copper Wires shall be 4 Core, 7 Core, 10 Core, 12 Core and 19 Core, 24 Core etc. There shall be one single core copper cable of 16 sq. mm size for earth wire. All panel wiring shall be done by 0.5 mm² for digital inputs, 1.5 mm² digital outputs, 1.0 mm² for Analog Inputs, 2.5 mm² for CT, PT, CVT, AC & DC Supply connection. 24 core with 1.0 mm² will be used as common for DI/DO extension of signals from RMU to FRTU panel.

4PX0.36 mm² armoured, pair shielded, Overall shielded multistrand serial communication cable for Multi-Function Meters and Other Condition monitoring devices.

Bidder shall consider the cable size, number of conductors as per the site requirement and as mentioned in the indicative BOM.

Cable Drum Length

The cable shall be supplied in 500 meter lengths or more but with prior approval for the owner.

Cable Identification

The manufacturers and Owner's name or trademark, the voltage grade, cable designation and year of manufacture shall be indented or embossed along the whole length of the cable. The indentation or embossing shall only do on the outer sheath. The alphanumerical character size shall be not less than 20% of the circumference of the cable and be legible.

Sampling of Cables

- **Lot**

In any consignment the cables of the same size manufactured under essentially similar conditions of production shall be grouped together to constitute a lot.

- **Scale of Sampling**

Samples shall be taken and tested from each lot to ascertain the conformity of the lot to specification.

- **Sampling Rates**

The number of samples to be selected shall be as follows:

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Number of Drums to be taken as samples	Number of Drums to be taken as samples
Up to 25	3
26 to 50	5
51 to 100	8
101 to 300	13
301 and above	20

The samples shall be taken at random. In order to achieve random selection, the procedure for selection detailed in IS - 4905: 1968 shall be followed.

- **Number of Tests and Criterion for Conformity**

Suitable lengths of test samples shall be taken from each of the selected drums. These samples shall be subjected to each of the acceptance tests. A test sample shall be classed as defective if it fails any of the acceptance tests. If the number of defective samples is less than or equal to the corresponding number given in the lot shall be declared as conforming to the requirements of acceptance test.

TESTS ON 1.1 KV PVC INSULATED Armored Control Cable

- **Type Tests**

Certification of type tests already completed by independent test laboratories shall be presented with the bid for each cable type. These tests shall be carried out in accordance with the requirements of IS - 8130: 1984/IEC 502, IS - 5831:1984/IEC 540 and IEC 811 unless otherwise specified. Type testing of 1.1 kV cables shall include the following:

Test Requirement Reference Test Method as a Part of IS-10810/IEC 811

Tests on conductor Annealing test (copper)	IS-8130: 1984/IEC 502
Resistance test	IS-8130: 1984/IEC 502
Tests for thickness of insulation and sheath	IS-5831:1984/IEC 540
Physical tests of Insulation Tensile strength & elongation at break	IS-5831:1984/IEC 540

	Ageing in air oven	IS-5831:1984/IEC 540
	Hot test	IS-5831:1984/IEC 540
	Shrinkage test	IS-5831:1984/IEC 540
	Water absorption (Gravimetric)	IS-5831:1984/IEC 540
(e)	Physical tests for outer sheath	
(f)	Tensile strength and elongation at break	IS-5831: 1984/IEC 540

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

(g)	Ageing in air oven	IS-5 831: 1984/IEC 540
(h)	Shrinkage test	IS-5831: 1984/IEC 540
(i)	Hot deformation	IS-5831: 1984/IEC 540
(j)	Loss of mass in air oven	IS-5831: 1984/IEC540
(k)	Heat shock	IS-5831: 1984/IEC540
(l)	Thermal stability	IS-5831: 1984/IEC540
	Insulation resistance test	IS-8130:1984/IEC502
	Volume resistivity	As per IS / IEC
	High voltage test	As per IS / IEC
	Flammability test	As per IS / IEC

Acceptance Tests

The following **shall constitute** acceptance tests:

- Tensile test (Aluminum)
- Annealing test (copper)
- Wrapping test
- Conductor resistance test
- Test for thickness of insulation and sheath
- Hot set test for insulation*
- Tensile strength and elongation at break test for insulation and outer sheath
- High voltage test
- Insulation resistance (volume resistivity) test
- PVC insulation only

** Test to be completed on full drum of cable

Routine Tests

Routine tests shall be carried out on all the cable on a particular order. These tests shall be carried out in accordance with the requirements of IS - 8130: 1984/IEC 502 and IS - 5831:1984/IEC 540 unless otherwise specified.

The following shall constitute routine tests.

- a. Conductor resistance test
- b. High voltage test
- c. Test to be completed on full drum of cable

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

DETAILS OF TESTS

General

Unless otherwise stated, the tests shall be carried out in accordance with the appropriate part of IS - 10810/IEC 502: 1994 and the additional requirements as detailed in this specification.

Bending Test

The diameter of the test cylinder shall be $20 (d + D) \pm 5\%$ for single core cables and $15 (d + D) \pm 5\%$ for multicores, where D is the overall diameter of the completed cable in millimeters and d is the diameter of the conductor.

After completing the bending operations, the test samples shall be subjected to partial discharge measurements in accordance with the requirements of this specification.

Dielectric Power Factor Test

Tan δ as a Function of Voltage

For cables of rated voltage 1.1 kV and above the measured value of tan δ at up shall not exceed 0.004 and the increment of tan δ between 0.5 up and 2 up shall not be more than 0.002.

For Type/ Acceptance Test

The cable shall withstand, without breakdown, at ambient temperature, an ac voltage equal to $3U_0$, when applied to the sample between the conductor and screen/ armour (and between conductors in the case of unscreened cable). The voltage shall be gradually increased to the specified value and maintained for a period of 4 hours. If while testing, interruption occurs during the 4 hour period the test shall be prolonged by the same extent. If the interruption period exceeds 30 minutes the test shall be repeated.

Routine Test

For Routine Test Single core screened cables, shall withstand, without any failure, the test voltages given in this specification for a period of five minutes between the conductor and metallic screen.

Single core unscreened cables shall be immersed in water at room temperature for one hour and the test voltage then applied for 5 minutes between the conductor and water.

Multicore cables with individually screened cores, the test voltage shall be applied for 5 minutes between each conductor and the metallic screen or covering.

Multicore cables without individually screened cores, the test voltage shall be applied for 5 minutes in succession between each insulated conductor and all the other conductors and metallic coverings, if any. When a DC voltage is used, the applied voltage shall be 2.4 times the power frequency test voltage. In all instances no breakdown of the insulation shall occur.

Flammability Test

The period for which the cable shall burn after the removal of the flame shall not exceed 60 seconds and the unaffected portion (uncharged) from the lower edge of the top clamp shall be at least 50mm.

Control / LV Wiring Accessories

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Terminations

Control wire terminations shall be made with solder less crimping type and tinned copper lugs which firmly grip the conductor. Insulated sleeves shall be provided at all the wire termination. Engraved core identification plastic ferrules marked to correspond with panel wiring diagram shall be fitted at both ends of each wire. Ferrules shall fit tightly on the wire and shall not fall off when the wire is disconnected from terminal blocks. All wires directly connected to trip circuit breaker or device shall be distinguished by the addition of red coloured unlettered ferrule. Numbers 6 and 9 shall not be included for ferrules purposes except where underlined and identified as 6 and 9.

Control cable terminals shall be provided with adequate size crimp type lugs. The lugs shall be applied with the correct tool, which shall be regularly checked for correct calibration. Bi-metallic joints between the terminals and lugs shall be provided where necessary. Terminals shall be marked with the phase colour in a clear and permanent manner. A removable gland plate shall be provided by the contractor at every cable entry to mechanism boxes, cabinets and kiosks. The Contractor shall be responsible for drilling the cable gland plate to the required size.

General Particulars and Guarantees

Compliance with Specification

The control cables shall comply in all respects with the requirements of this specification. However, any departure from the provisions of the specification shall be disclosed at the time of bidding in the Deviation Schedule in this document.

Compliance with Regulations

All the equipment shall comply in all respects with the Indian Regulations and Acts in force. The equipment and connections shall be designed and arranged to minimize the risk of fire and any damage which might be caused in the event of fire.

Non-Conforming Product

The Project Manager shall retain responsibility for decisions regarding acceptance, modification or rejection of non-conforming items.

Inspection and Testing

The equipment shall successfully pass all the type tests, acceptance tests and routine tests referred to in the section on Tests and those listed in the most recent edition of the standards given in this specification.

Tata Power the right to reject an item of equipment if the test results do not comply with the values specified or with the data given in the technical data schedule.

Type tests shall be carried out at an independent testing laboratory or be witnessed by a representative of such laboratory or some other representative acceptable to the Project Manager. Routine and acceptance tests shall be carried out by the Bidder at no extra charge at the manufacturer's works.

Type Test certificates shall be submitted with the bid for evaluation. The requirement for additional type tests will be at the discretion of the Tata Power Discom.

All costs in connection with the testing, including any necessary re-testing, shall be borne by the Bidder, who shall provide the Tata Power Discom with all the test facilities which the latter may require, free of

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

charge.

Guarantee

The Bidder shall guarantee the following:

- a. Quality and strength of materials used;
- b. Satisfactory operation during the guarantee period of one year from the date of commissioning, or 18 months from the date of acceptance of the equipment by the Project Manager following delivery, whichever is the earlier.
- c. Performance figures as supplied by the Bidder in the schedule of guaranteed particulars.

Packing and Shipping

Packing

The cable shall be wound on strong drums or reels capable of withstanding all normal transportation and handling. Each length of cable shall be durably sealed before shipment to prevent ingress of moisture. The drums, reels or coils shall be lagged or covered with suitable material to provide physical protection for the cable during transit and during storage and handling operations. In the case of steel drums adequate precautions shall be taken to prevent damage being caused by direct contact between the cable sheath and the steel. These precautions shall be subject to the approval of the Project Manager.

If wooden drums are used, then the wood shall be treated to prevent deterioration from attack by termites and fungi.

Each drum or reel shall carry or be marked with the following information:

- a. Individual serial number
- b. Owner's name
- c. Destination
- d. Contract Number
- e. Manufacturer's Name
- f. Year of Manufacture
- g. Cable Size and Type
- h. Length of Conductor (meters)
- i. Net and Gross Mass of Conductor (kg)
- j. All necessary slinging and stacking instructions.
- k. Destination:
- l. Contractor's name
- m. Name and address of Contractor's agent in Odisha
- n. Country of origin

The direction of rolling as indicated by an arrow shall be marked on a flange.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Storage

The site selected for the storage of cable drums shall be well drained and preferably have a concrete/firm surface which will prevent the drums sinking into the ground or being subjected to excess water thus causing flange rot.

All drums shall be stood on battens, in the upright position, and in such a manner to allow enough space between them for adequate air circulation. During storage the drums shall be rotated 90° every three months. In no instances shall the drums be stored "flat" on their flanges or one on top of each other.

Hazardous substances

The Bidder shall submit safety data sheets in a form to be agreed for all hazardous substances used with the equipment. The Bidder shall give an assurance that there are no other substances classified as hazardous in the equipment supplied. The Bidder shall accept responsibility for the disposal of such hazardous substances, should any be found. The Bidder shall be responsible for any injuries resulting from hazardous substances due to noncompliance with these requirements.

Spare Parts and Special Tools

The Bidder shall provide prices for spare conductor, joints and termination equipment. The Tata Power DISCOM may order all or any of the spare parts listed at the time of contract award and the spare parts so ordered shall be supplied as part of the definite works.

A spare parts catalogue with price list shall be provided for the various cables, joints and termination equipment and this shall form part of the drawings and literature to be supplied. Any spare apparatus, parts or tools shall be subject to the same specification, tests and conditions as similar material supplied under the Contract.

They shall be strictly interchangeable and suitable for use in place of the corresponding parts supplied with the equipment and must be suitably marked and numbered for identification. Spare parts shall be delivered suitably packed and treated for long periods in storage. Each pack shall be clearly and indelibly marked with its contents, including a designation number corresponding to the spare parts list in the installation and maintenance instructions.

5. TESTS

FRTU Test

The contractor shall supply type tested FRTU. The bidder shall submit FRTU type test reports along with the bid and model of FRTU. The type test reports minimum shall include the tests indicated in Table 1. Type test reports as per other equivalent standards are also accepted provided, they meet or exceed minimum requirements specified in this specification. In case the FRTU type test report do not meet specification requirements, the relevant type tests shall be performed without extra cost to Discom. The vendor should submit proof of FRTU certificate (As conforming to IEC 61850, IEC 60870-5-104) BY KEMA. Routine test to be performed in the factory and the field test to be performed in the site on the FRTU are indicated in Table – 1.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Table – 1: List of Tests on FRTU

No.	DESCRIPTION OF THE TEST	Type of test	Routine test	Field test
1.0	Functional Tests for FRTU			
1.1	Check for BOQ, Technical details, Construction & Wiring as per FRTU drawings		√	√
1.2	Check for FRTU database & configuration settings		√	√
1.3	Check the operation of all Analog inputs, Status input & Control output points of FRTU		√	√
1.4	Check operation of all communication ports of FRTU		√	√
1.5	Check for communication with multiple master stations using partitioned databases		√	√
1.6	Check for auto restoration of FRTU on DC power recovery after its failure		√	√
1.7	Test for FRTU self-diagnostic feature		√	√
1.8	Test for FRTU time synchronization from Master		√	√
1.9	Test for FRTU SOE feature		√	√
1.10	Test for downloading/uploading of FRTU data base from master station		√	√
1.11	End to end test (between FRTU & Master station) for all I/O points			√
1.12	FRTU Analog accuracy test for Analog inputs		√	
1.13	Test for FRTU operation with DC power supply voltage variation		√	
1.14	Test for FRTU internal Clock stability		√	
1.15	Test for FRTU Noise level measurement		√	
1.16	Test for M Q T T , IEC 60870-5 -104 & IEC 61850 protocol implemented and matching with protocol profile		√	
1.17	Test for Control Security and Safety for Control outputs		√	√
1.18	Other functional tests as per technical specification requirements		√	
1.19	Test for FRTU as Data concentrator for IEC 60870-5-104, M Q T T and MODBUS, IEC60870-5-103 protocol		√	√
1.20	Test for operation of CPU and Power supply unit		√	√
1.21	Test for Modems		√	√
2.0	EMI/EMC Immunity Tests for FRTU			
2.1	Surge Immunity Test as per IEC 60870-2-1	√		

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

2.2	Electrical Fast Transient Burst Test as per IEC-60870-2-1	√		
2.3	Damped Oscillatory Wave Test as per IEC 60870-2-1	√		
2.4	Electrostatic Discharge test as per IEC 60870-2-1	√		
2.5	Radiated Electromagnetic Field Test as per IEC 60870-2-1	√		
2.6	Damped Oscillatory magnetic Field Test as per IEC-60870-2-1	√		
2.7	Power Frequency magnetic Field Test as per IEC-60870-2-1	√		
3.0	Insulation Test for FRTU			
3.1	Power frequency voltage withstand Test as per IEC 60870-2-1	√		

3.2	1.2/50 μ s Impulse voltage withstand Test as per IEC 60870-2-1	√		
3.3	Insulation resistance test	√		
4.0	Environmental Test for FRTU			
4.1	Dry heat test as per IEC60068-2-2	√		
4.2	Exposure to cold as per IEC 60068-2-1	√		
4.3	Damp heat test as per IEC60068-2-3	√		
4.4	Exposure to damp heat as per IEC 60068-2-78	√		
4.5	Cyclic damp heat test as per IEC 60068-2-30	√		
4.6	Temperature variation as per IEC 60068-2-14	√		
4.7	Salt spray test as per IEC 60068-2-52	√		
5.0	Mechanical tests	√		
5.1	Vibrations as per IEC 60255-21-1	√		
5.2	Shock test as per IEC 60255-21-2	√		
5.3	Seismic test as per IEC 60255-21-3	√		
5.4	Packaging impact protection as per IEC 60068-2-32	√		
5.5	Enclosure protection as per IEC 60529 & IEC 62262	√		

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- described in the test procedure
- Test results for each test segment including a passed/failed indication. All information recorded during the test such as measurements, calculations, or times shall be included in the results.
- Identification of the Bidder's and Purchaser's representatives performing and witnessing the test
- Provision for comments by Purchaser's representatives
- References to all variance reports generated
- Copies of reports, display copies, and any other hardcopy generated as part of the test.

Variance Recording and Resolution

A variance tracking system shall be placed in service no later than one month before the start of Pre-FAT and shall remain in use through the completion of the warranty. Both the Bidder and Purchaser may initiate variances at any time. Variances may be used to record system deficiencies at any time, even if the system is not undergoing testing. This variance tracking system shall record and track variances for:

- Documentation deficiencies
- Functional deficiencies
- Performance deficiencies
- Procedural deficiencies (as when deviations from contractually required QA procedures are observed)
- Test deficiencies (as when the system cannot satisfactorily complete a test procedure due to a problem with the test).

The variance recording and tracking system shall produce reports of all variance information and shall produce subsets of the variances based on searches of the variance parameters singly and in combination. Variance reports shall always be available to Purchaser. The Bidder shall periodically distribute a variance summary that lists for each variance the report number, a brief overview of the variance, its category, and its priority.

Variance Records

The record of each variance shall include the following information:

- The date of the initial discovery of the variance
- A variance number – a sequential number assigned when the variance is entered into the tracking system
- An identification of the person submitting the variance and the names of any other witnesses or knowledgeable Purchaser or Bidder staff
- An identification of the FRTU and Communication Systems component, such as a hardware item or software function, against which the variance is being written
- An identification of the test plan or procedure, if applicable. The stage or step of the plan or procedure shall be identified
- An overview of the variance suitable for use in keyword searches
- A detailed description of the variance
- A variance category:
 - Open (recorded but not scheduled for further action)
 - ii. Assigned (scheduled for further action)
 - iii. Pending (the variance has been resolved but not tested)
 - iv. Closed (Purchaser has accepted the resolution)
- i. The date of assignment into each category
- j. A variance priority:

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Critical To be used only if the FRTU and Communication Systems is in commercial use, this priority identifies a problem that prevents the use of a system features that is essential to Purchaser's operation of the power system

High Denotes the failure of the FRTU and Communication Systems to perform a required feature in a manner that significantly reduces the utility of the systems or feature or which delays further testing of the systems or features

Normal Denotes the failure of the FRTU and Communication Systems to perform a required feature in a manner that reduces the utility of the systems or features. Normal priority variances shall not delay any testing

Low Denotes the failure of the FRTU and Communication Systems to perform a required feature in a manner that reduces the utility of the systems only slightly. Low priority variances shall not delay any testing. Variances that record transient failures, which cannot be readily reproduced, shall be initially assigned to this priority. Subsequent occurrences of the transient failure shall result in raising the priority of the variance.

A description of the resolution, including identification of all hardware, software, and documents modified or otherwise changed and the names of the Bidder or Purchaser staff involved with the resolution

- k. A record of all testing performed
- l. Identification of Purchaser staff accepting the resolution and the date of acceptance.

Schedule for Variance Correction

The Bidder and Purchaser shall meet periodically to review the variance list. Each new variance opened since the previous meeting shall be scheduled for correction at the meeting. Purchaser and Bidder shall follow these guidelines for scheduling corrections:

- A schedule for the correction of critical and high priority variances shall be set within one working day of their discovery. The schedule for correction of all other variances shall be set within one working week of their addition.
- Purchaser and the Bidder shall assign resources for the correction of critical variances with the intent of correcting the variance within two working days of their opening.
- Purchaser and the Bidder shall establish a mutually agreeable date for the correction of high priority variances, with the overall objective of:
 - i. If the FRTU and Communication Systems is in productive use, correcting the variances within one calendar week of their discovery
 - ii. Prior to the commencement of productive use, maintaining the overall project schedule
- Purchaser and the Bidder shall establish a mutually agreeable date for the correction of normal priority variances, with the overall objective of:
 - i. If the FRTU and Communication Systems is in productive use, correcting the variances within one calendar month of their discovery
 - ii. Prior to the commencement of productive use, maintaining the overall project schedule
- Low priority variances may be scheduled for correction at any time and shall not exceed 30 days after identification.

Variance Resolution

A variance shall be deemed resolved only upon written acceptance of the correction by Purchaser. Prior to

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

submitting the corrected variance for acceptance by Purchaser, the Bidder shall take all reasonable steps to verify that the correction has resolved the variance and the Bidder shall update the variance record to reflect the corrective action taken. Purchaser shall then schedule any testing to be performed in conjunction with the Bidder.

A variance shall be deemed accepted and the variance record shall be completed only after Purchaser has tested the corrected variance to its satisfaction. The Bidder shall support all testing deemed necessary by Purchaser to verify the corrections.

Test Schedule

The sequence of tests to be performed and their scheduling with respect to other activities shall be mutually decided.

Test Initiation

The following conditions must be satisfied before starting any test:

- Purchaser has approved all plans and procedures for the test
- Purchaser has reviewed or approved all relevant documentation
- A copy of all relevant documentation including design and maintenance documents, user manuals, test plans, and test procedures has been placed on the test floor
- A complete regeneration of the software under test has been performed immediately prior to the start of testing
- All operating system parameters, files, and configuration information has been saved to archive media so that the FRTU and Communication Systems operating environment can be recreated.
- All database, display, and report definitions have been saved to archive media so that the System databases, displays, and reports can be recreated if necessary.
- All source code libraries have been saved to archive media so that FRTU and Communication Systems software can be regenerated if necessary.
- For the factory test, preliminary testing, as described in Item-12.4.15 Preliminary Factory Testing has been completed and the Bidder has submitted written certification that the preliminary testing has been successfully completed.

For the availability test, all critical, high, and normal variances have been corrected and verified to the satisfaction of Purchaser

Test Completion

A test shall be deemed to be successfully completed only when:

- All variances have been resolved to the satisfaction of Purchaser
- All test records have been transmitted to Purchaser
- Purchaser acknowledges, in writing, successful completion of the test.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Test Suspension

If Purchaser believes, at any time, that the quantity or severity of FRTU and Communication Systems variances warrants suspension of any or all testing, the test shall be halted, remedial work shall be performed, and the test shall be repeated. The repeat of the test shall be scheduled for a date and time agreed upon by both the Bidder and Purchaser.

Modifications to the FRTU and Communication Systems during Testing

No changes shall be made to the FRTU after factory testing has started without the express authorization of Purchaser. It will be Purchaser's intent to carefully control the test environment so that all changes can be readily identified and so that any changes installed for any purpose can be removed and the previous test environment restored. Purchaser shall have the right to suspend testing, to revert to a previous version of any software or hardware, and to restart any testing previously performed if, in its opinion, changes have been made to the system under test without authorization.

Preliminary Factory Testing

The Pre-FAT shall be a complete dry run of the FAT, following the test plans and procedures. The intent is for the Bidder to detect and correct most design, integration, database, display, and performance problems prior to the FAT. The Bidder's project manager shall sign off each test. The completed test results shall be sent to Purchaser for inspection before Purchaser's personnel travel to the Bidder's facilities for the FAT. All tests shall be conducted using Purchaser-specific databases unless Purchaser authorizes the Bidder to use a test database.

The Bidder shall notify Purchaser at least fifteen days prior to the start of the Pre-FAT, and Purchaser shall have the option to witness all or parts of it. The Bidder shall notify Purchaser when the Pre-FAT has been successfully completed and the FRTU and Communication Systems is ready for FAT.

FAT should be integrated one, we will put our SIM in FAT and complete end to end P2P will be done from factory itself, and all FRTU's shall be configured before dispatch, this will reduce visits of automation field engineer visits during ITC

Site Acceptance Test (SAT)

The site test includes the installation test, the functional test, and the performance test as specified in the factory test that will be conducted at Purchaser's site after shipment and installation of the FRTU and Communication Systems.

SAT shall cover all equipment and functions as specified for the complete system (all hardware & software) and connectivity with Purchaser's system. As such SAT shall cover all the tests listed in FAT along with site-specific tests including interconnections with field equipment and other systems. Apart from testing and commissioning, SAT shall include one month of continuous trouble-free operation of the complete system without major intervention. In case of interruptions, one month trial shall be restarted after attending to the problem.

- i. IEDs used for protection, control, etc.; the inter-bay bus (and associated communications hardware/software), the station bus (and associated communications hardware/software), the time synchronization system and the local/station HMI (if any) are to be considered as SAS components, and shall undergo commissioning requirements as part of the SAT.
- ii. Vendor shall furnish, advance SAT protocols and list of vendor's instruments for site testing. Tests

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

shall include demonstration of loading & expandability of the system.

- iii. SAT shall be performed after the system has been installed, the final software has been loaded in each subsystem, all I/Os and functionality checked, system has been running and all commissioning checks have been completed successfully.
- iv. Unstructured tests shall be employed as necessary, to verify overall system operation under field conditions.

Installation Test

The installation tests shall be conducted by the Bidder and include:

- A repetition of the equipment test
- Loading of configuration of the FRTU and Communication Systems software and starting the system. At the option of Purchaser, configuration shall be recompiled, if required.
- In cooperation with Purchaser, establishment of the communication with all data sources and other systems that interface with the Systems
- Initialization and preliminary tuning of application software as needed.

Functional and Performance Tests

The site functional and performance tests shall be comprised of a subset of the functional and performance tests, The tests to be performed shall be proposed by the Bidder and approved by Purchaser. These tests shall be extended as necessary to test functions simulated during the FAT, such as communications with all field devices and all other systems that interface with the FRTU and Communication Systems. The extended tests shall be performed to a test procedure prepared by the Bidder and approved by Purchaser. Unstructured tests shall also be employed, as necessary, to verify overall operation of the systems under actual field conditions.

Availability Test

FRTU and Communication Systems and device availability in accordance with the criteria specified in the specification, System Availability shall be demonstrated by the availability test.

Predicted availability of equipment supplied shall exceed the following:

System Function	System Availability
Control and Monitoring of any one equipment (Breaker, Isolator etc.)	99.99%
Monitoring of Any One Single Alarm	99.99%
Monitoring of Any One Analog Input	99.99%

Test Activity

The test activity shall consist of normal FRTU and Communication Systems in use. Purchaser will modify the configuration during the availability test. Such modifications will be described to the Bidder at least 48 hours in advance of implementation to allow assessment of impact on the availability test, except where such changes are necessary to maintain control of the power system.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Test Definitions

The definitions of the time periods used in determining the duration of the test and the success of the test shall be as follows:

- **Downtime** : Downtime occurs whenever the criteria for successful operation defined in specification, Availability Requirements – FRTU and Communication Systems, are not satisfied. Downtime shall be measured from the start of diagnostic procedures until full service is restored. In the event of multiple failures, the total elapsed time for repair of all problems (regardless of the number of maintenance personnel available) shall be counted as downtime.
- **Hold time** : Certain periods of time during which the FRTU and Communication Systems is down may be due to circumstances that are beyond the control of either party. These contingencies may prevent successful operation of the systems but are not valid for the purpose of measuring systems availability. Such periods of unsuccessful operation may be declared hold time by mutual agreement of Purchaser and the Bidder. Specific instances of hold time are:
 - **Scheduled shutdown:** During scheduled shutdowns or if an equipment failure occurs due to scheduled maintenance, the resulting system outage shall be hold time, provided that service can be restored according to the Bidder- specified procedures within 30 minutes.
 - **Power Interruption & environmental excursion:** Loss of power or manual shutdown of the FRTU and Communication Systems is the event of power excursion or the loss of environmental control shall be considered hold time. If the systems are operated during periods of power or environmental conditions beyond those specified, any resultant downtime shall be considered hold time.
 - **Intermittent failure:** Periods during which an intermittent, recurring failure is experienced will be considered hold time, provided that the Bidder is engaged in remedial action and normal operation of the FRTU and Communication Systems can be restored within 30 minutes by Bidder-defined procedures whenever the failure occurs. Instead of accounting for the actual intermittent downtime, one hour of downtime shall be counted for each 120 hours of otherwise successful operation while the problem persists.
 - **Failure of Purchaser software:** Time during which the FRTU and Communication Systems software is upgraded shall be considered hold time. Of course, Systems can be restored within 30 minutes by Bidder-defined procedures.
 - **Corrected design defect:** Hold time may be declared by mutual agreement to ensure against similar future occurrences if a failure occurs due to a defect in design for which the Bidder defines and implements corrective measures. In such a case, enough hold time shall be allocated to allow verification of the corrective action.
 - **Logistics delays** – If repairs are delayed due to previous use of spare parts or because of Purchaser's failure to purchase recommended spare parts, hold time will be declared after diagnosis of the failure and while the Bidder is pursuing replacement parts in an expeditious fashion. A maximum of 48 hours of hold time will allowed for each occurrence of logistics delay.
 - **Service response time** – Hold time shall be declared from the time that a failure is detected until diagnostic procedures are begun. A maximum 24 hours of hold time will be allowed for each failure.

Total time:

The time elapsed from the start of the availability test until the end of the availability test

Test time

The time elapsed from the start of the availability test until the end of the availability test, excluding hold time. That is, $Test\_time = Total\ Time - Hold\_time$

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Duration and Criteria for Passing

In order to establish that all failures have been satisfactorily repaired prior to the end of the availability test, no downtime, intermittent (hold time) failures, or more than one uncommanded failover shall have occurred within 200 hours of the test's conclusion. The test shall be extended, if necessary, to satisfy this requirement.

After successful completion of site acceptance test and 72 hours have passed, system availability shall be computed using the following formula:

System _Availability = [(Test_time – Down Time) / Test_time] X 100%

If the system availability requirements presented in the specification, System Availability, have not been met, the test shall continue until the specified availability is achieved. Alternatively, and at Purchaser's discretion, the test may be restarted.

When it has been determined that the system availability requirement has been met, the availability of each System device shall be calculated and compared against the device availability requirements as specified, Availability Requirements – FRTU and Communication Systems. If one or more devices do not meet the requirements, the test shall be extended until Purchaser and the Bidder mutually agree that corrective action has been completed for those devices. Corrective action shall include all necessary procedures to test and verify proper operation to Purchaser's satisfaction.

6. TYPE TEST CERTIFICATES

The Bidder shall furnish the type test certificates of the quoted item for the tests as mentioned above as per the corresponding standards. All the tests shall be conducted at Internationally Accredited testing Laboratory, CPRI/ERDA/Government Labs/ KEMA / International Accredited Lab as per the relevant standards. Type tests should have been conducted in certified Test laboratories during the period not exceeding time span as per CEIG Guideline 5 years from the date of opening the bid. In the event of any discrepancy in the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to Tata Power Discoms.

7. PRE DISPATCH INSPECTION

The Material shall be subject to inspection by a duly authorized representative of the Tata Power Discoms. Inspection may be made at any stage of manufacture at the discretion of the purchaser and the equipment, if found unsatisfactory as to workmanship or material, the same is liable to rejection. Bidder shall grant free access to the places of manufacture to Tata Power Discoms's representatives at all times when the work is in progress. Inspection by the Tata Power Discoms or its authorized representatives shall not relieve the bidder of his obligation of furnishing equipment in accordance with the specifications. Material shall be dispatched after specific MDCC (Material Dispatch Clearance Certificate) is issued by Tata Power Discoms.

Factory Acceptance Test (FAT)

Factory tests shall include:

- Equipment test
- Functional test
- Performance test
- Stability test
- Unstructured test

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- **Equipment Test**

The equipment test shall verify that the FRTU and Communication Systems includes all required equipment, that the equipment is properly configured, and that the equipment can successfully execute the diagnostic programs provided.

The equipment tests shall include a visual inspection for proper workmanship, including cables, connectors, and labeling. The assembly drawings and configuration drawings shall also be verified at this time. These tests shall also verify that the required FRTU and Communication Systems capacity performance and expansion requirements as specified in this specification have been satisfied.

- **Functional Test**

The functional test shall use an equipment configuration that may include an extension of the Bidder's deliverables as required to prove the correct functionality of the FRTU and Communication Systems. The test procedures shall consider all additional test equipment and shall ensure that the additional equipment does not create false test results. The functional tests shall rigorously exercise all functions and devices, both individually and collectively, and shall verify the correct functional operation of all hardware and software. These tests shall include the following, as may be applicable to the system under test:

- a. Verification of all required functionality of the system, such as FRTU and Communication Systems, applications, data exchange, and information storage and retrieval. Verification shall include all standard and custom functions as well as purchased options.
- b. Verification that all software has been correctly sized and meets Purchaser's capacity requirements
- c. Verification of proper acquisition, processing, and storage of data from appropriate sources, and verification of protocol and data exchanges with all external systems that will interface with the system. Where necessary, the Bidder shall provide appropriate simulations of the external systems; such simulations must themselves be verified before being used.
- d. Verification of all user interface functions
- e. Verification of the application program and system development capabilities including, software configuration management, source code development, documentation management, user interface development, real-time data set development, database generation and maintenance, report generation and modification, alarm and event message definition, test environments, and other utility functions
- f. Verification of communications maintenance capabilities including diagnostics, communications maintenance (FRTU, data links, interfaces etc.), and local input/output maintenance.
- g. Verification of all hardware maintenance capabilities.
- h. Verification of the proper response of the system to at least the following abnormal situations:
 - i. Loss and restoration of processors and servers, including auxiliary memory
 - ii. Loss and restoration of user interface equipment
 - iii. Loss and restoration of archive storage devices
 - iv. Loss and restoration of external subsystems
 - v. Loss and restoration of input power
 - vi. Loss and restoration of communication network processors
 - vii. Loss and restoration of any other peripheral devices
 - viii. Loss and restoration of local and wide area network elements
- ix. Detection of and recovery from communication errors
 - i. Demonstration of the security of the system from unauthorized access
- j. Verification of the redundancy and failure recovery schemes of the system
- k. Verification that changes of system time will not prevent the system from operating properly and that the system can correctly handle the beginning of a new day, month and year, leap years

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

and the change in century and decade.

- I. Documentation verification that will verify that all documentation to be delivered with the system is present and meets requirements.

- **Performance Test**

The performance test shall verify that the specified performance requirements are met. Simulation shall be provided by the Bidder, where necessary, to create the conditions for the specified performance scenarios. The simulations shall be tested first to verify that the desired activity is being simulated. Execution of the performance tests shall be automated as much as possible so that test runs can be reproduced.

- **Stability Test**

A 100-hour continuous run of the system shall be performed after successful completion of the functional and performance tests. The stability test will be considered successful if no critical function is lost, no major hardware failure occurs, no failover occurs, and no restarts occur within the test period.

Major hardware failure is defined for the purpose of this test as the loss of hardware such as a processor, Power Supply, Communication port, I/O cards etc.

During this test, the system shall be exercised (with simulated inputs, events, and conditions) in a manner that approximates an operational environment. Purchaser will simulate unstructured user activity during this test. Purchaser will not purposely cause any hardware or software failure, that is, failover and restart testing is not a goal of this test.

The Bidder shall assist Purchaser in this test as required by Purchaser; this assistance will be primarily in the form of helping the set-up of the test, explaining the best procedures to run the test, and explaining all unexpected results.

- **Unstructured Test**

The test schedule shall allow time throughout the functional testing for unstructured testing by Purchaser. Time for unstructured testing shall be reserved at the rate of at least two hours of unstructured testing for each eight hours of structured testing, but no less than two days total. This time will be used by Purchaser to perform additional tests, the need for which may be recovered during the formal testing, and to investigate any potential problems detected. The unstructured tests will be performed during the functional and performance test period and during the stability test at the discretion of Purchaser.

The Bidder shall assist Purchaser in this test as required by Purchaser; this assistance will be primarily in the form of helping the set-up of the test, explaining the best procedures to run the test, and explaining all unexpected results.

Following documents shall be sent along with material

- a) Test reports
- b) MDCC issued by Tata Power Discoms
- c) Invoice in duplicate
- d) Packing list
- e) Drawings & catalogue
- f) Guarantee / Warrantee card
- g) Delivery Challan
- h) Other Documents (as applicable).

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

8. INSPECTION AFTER RECEIPT AT STORES

The material received at Tata Power DISCOM store will be inspected for acceptance and shall be liable for rejection, if found different from the reports of the pre-dispatch inspection and one copy of the report shall be sent to Project Engineering department.

9. Warranty, Maintenance, Upgrades, Patch Management & Database Modification Requirements

This Section specifies the requirements for Warranty, hardware and software maintenance for the System, Warranty maintenance and support, system upgrades, patch management etc.

Bidder to note the environmental condition of locations, the proposed system is being planned to be installed and operational.

Bidder shall provide facilities for carrying out online and offline maintenance of the components supplied as a part of the system. In general, this should include adequate testing equipment, tools, safety devices and other accessories. Bidder shall provide the details in their bid.

Bidder should provide Maintenance strategy of the product (Own & Sub-Vendor) being offered so as to schedule appropriate timeline for maintenance.

- Maintenance Performance Requirement

Purchaser envisaged that all offered equipment shall not require routine or planned maintenance. Therefore, no fans or moving parts shall be used in any of the system to avoid any need for maintenance. To ensure this, all the supplied equipment should be constructed to resist the entry of Dust, Water etc. A single technician shall be able to remove and replace for repair purposes, without special tools and test equipment, all equipment involved in the offered system. Restoration of equipment to full operational use shall be possible within 15 minutes (nominally) of repairs being completed. It should not be necessary to dismantle (remove multiple pieces of) the system in order to replace a module.

- Service Life

Purchaser prefers that the equipment shall be capable of complying with this standard, including performing its intended purpose, for a minimum of 10 years from the date of commissioning.

The supplier shall indicate the following:

- The date at which the product was released for sale.
- The anticipated date at which the product will be withdrawn from sale, but support will continue to be provided for Spares and Services.
- The anticipated date that product support will be withdrawn, i.e., spares and technical support will no longer be available.

- Interchangeability

All the parts/modules shall be interchangeable individually (e.g., FRTU parts/modules shall be interchangeable individually, and FRTU). This is applicable for all the parts/module supplied by the bidder under this contract.

Any such change or replacement shall not reduce the capability of the equipment to conform to the requirements of this specification.

- Definitions

The responsibility for maintenance of hardware and software will vary depending on the time during the

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Contract. So that the times for changes in responsibility can be determined, the following definitions shall be used:

Delivery – Delivery of any item shall be interpreted as receipt of the item at Purchaser's facility.

Commissioning – Commissioning of any item shall be interpreted as receipt of the item at Purchaser's facility, installation on-site, successful completion of the site tests, and correction of all variances from the tests.

- **Deliverable Hardware and Software Version**

The delivered Hardware and Software shall be the latest version being delivered by the manufacturer of the Hardware & Software six months prior to its delivery to Purchaser's facility. During delivery of the system, all the FRTU of a Bidder across the Tata Power Discoms network shall be upgraded to the latest version.

All hardware and software shall be of compatible versions. That is, the Bidder shall be responsible to ensure that all delivered hardware and software versions will inter-operate successfully. If it becomes necessary to upgrade some hardware or software to meet this requirement, the cost and time shall be borne by the Bidder. If it is necessary to revert to a previous version of any hardware or software to overcome incompatibilities among the hardware or software, the Bidder shall bear the cost and time of the "downgrade" and shall present a plan to correct the problems with the newer release. Such corrections shall also be at the Bidder's sole expense.

WARRANTY SUPPORT

a. Maintenance services for the supplied Hardware, System and application Software up-gradation, Patch Management services including sub-vendor products during the Standard warranty period of 5 Years from the date of system handover after SAT, resolution of all punch point of SAT and trouble-free operation of the entire system for a period of one month.

b. Bidder shall provide Software up-gradation (if any), Patch Management services including sub-vendor products for next 5 years over and above as mentioned in item a.

c. Training

d. SLA will be prepared and adhered by Bidder, Sub-Vendor's of bidder for extending the Hardware, Software and Service support to Purchaser for the period mentioned above. To mitigate major failure like Complete system failure, FRTU system instability, loss or failure of any major subsystem or system component such as to cause a significant adverse impact to system availability, performance, or operational capability. Some of the salient points as example are documented below:

- Bidder shall report to site within 48 hours of receipt of reporting of the failure occurrence
- Bidder shall provide replacement of the faulty equipment within 7 days after confirmation of the fact that the equipment can't be repaired at site. Failure to this clause may have some penalty reference on Bidder.
- Bidder will mandatorily provide detailed analysis report of the faulty equipment within 30 days from the date of the site visit.
- Any spare Equipment replacement, testing and its commissioning to be done by bidder, with no cost implications to Purchaser. Any tools, equipment, Software or Hardware required for testing of the System (e.g., IEDs/FRTU/Communication Equipment) will be the responsibility of the Bidder, this includes all system supplied by bidder under this contract.
- Any up gradation in application software and hardware will be informed to Purchaser and necessary up gradation to be carried out by Bidder with no cost implications to Purchaser.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Bidder to note that Tri-Party agreement will be prepared for Bidder, Sub-Vendor to have protection against quitting of executing bidder and its alliances during commissioning, warranty and post warranty period as specified in this document.

- Hardware Maintenance

The project schedule shall include an allowance for hardware maintenance prior to the availability test. The Bidder will not be granted any relief for project delays caused by maintenance problems prior to the availability test.

- Pre-Delivery Maintenance

The Bidder shall have the responsibility for maintenance of all hardware prior to delivery to Purchaser's site. This maintenance may be performed by a maintenance contract with Original Equipment Manufacturers (OEMs) or other parties or by the Bidder staff using spare parts from the Bidder's stores or other sources.

- Maintenance During Commissioning

The Bidder shall have the responsibility for maintenance of all hardware after delivery and prior to commencement of the Warranty. This maintenance may be performed by a maintenance contract with OEMs or other parties or by Bidder staff using spare parts from the Bidder's stores or other sources.

Failed equipment shall be replaced or repaired, and spares inventories (if any) replenished to their delivered level throughout the period of commissioning. Any spare parts found to be defective during initial delivery inspection or during this period shall be replaced within one week after notification. There shall be no charges to Purchaser for these replacement parts, including delivery charges. All spare parts replaced under maintenance shall be new parts unless otherwise accepted by Purchaser.

- Maintenance Under Warranty

Maintenance during the warranty shall be in conformance with the terms of the warranty sections of this RFP.

During the warranty period, Purchaser's hardware maintenance responsibilities will include the following:

- Provision of trained staff, responsible for call-out when problems occur
- Providing local assistance to the Purchaser during problem resolutions

The Bidder's hardware maintenance responsibilities shall include the following:

- Providing maintenance of all equipment, including spare parts
- Providing materials and instruction for appropriate engineering changes for equipment
- Provision of technical guidance towards the resolution of all hardware problems for equipment.

When needed, the Bidder shall respond to requests for technical support within Two Hours, 24 hours a day, seven days a week.

Failed equipment shall be replaced or repaired, and spares inventories replenished to their delivered level throughout this period. Any spare parts found to be defective during initial delivery inspection or during the Warranty period shall be replaced within one week after notification. There shall be no charges to Purchaser for these replacement parts, including delivery charges. All spare parts replaced under maintenance shall be new parts unless otherwise accepted by Purchaser.

The Bidder's technical support staff shall work with Purchaser's technical staff to establish a strategy to efficiently resolve each identified problem. If at any time, Purchaser believes that the Bidder's technical support is not effectively resolving a problem, Purchaser may request that the Bidder's system expert or staff from the equipment's manufacturer be dispatched to Purchaser's facility. The Bidder's technical team shall

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

be at Purchaser's facility within 48 hours of that request to provide hands-on support towards the problem resolution. Purchaser will not be responsible for any expenses connected to the technical support, including travel expenses.

The Resolution time for different complaints shall be as per the below matrix:

Category	Definition	Maximum Resolution Time
Severity 1 Urgent	Complete system failure, severe system instability, loss or failure of any major subsystem or system component such as to cause a significant adverse impact to system availability, performance, or operational capability	0-14 hrs.
Severity 2 Serious	Degradation of services or critical functions such as to negatively impact system operation. Failure of any redundant system component such that the normal redundancy is lost Non-availability of Manpower at site during working hours	0-36 hrs.
Severity 3 Minor	Any other system defect, failure, or unexpected operation Request for information, technical configuration assistance "how to" guidance, and enhancement requests.	0-72 hrs.

Failure by the Bidder to comply with the above-mentioned timelines, shall attract a penalty as per contractual LD clauses

Hardware Minimum Support Period

The Bidder shall guarantee the availability of spare parts and hardware maintenance support services for all System equipment for a minimum period of 10 years. Subsequent to this minimum support period, the Bidder shall provide to Purchaser a minimum of two year's advance notice of their intent to terminate such services.

Upgrades, Patch Management & Modifications

- Bidder shall continuously keep the Purchaser informed of all Software and Hardware upgrades as & when these are released.
- Bidder shall supply upgrades and patches of all installed software (both own and third party) for a period of ten years from the date of system acceptance without commercial implication.
- Bidder shall rectify all design defects and software bugs at no extra cost for a period of 10 years from the date of system acceptance.
- Bidder shall support the system totally for ten (10) years, even if no upgrades are implemented.
- Bidder shall provide lifetime support (10 years) for the system. To meet this requirement, Bidder shall refer with OEMs on the product's life cycle management and obsolescence. Bidder shall attach the product life cycle matrix for hardware and software offered under this RFP.
- The system referred to above includes Bidder's own as well as third party components.

- Database modification during Warranty Period

All database modification major or minor is in the scope of the bidder, after the system handover and during

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

the warranty period. The Scope covers FRTU configuration and necessary changes for control center communication. It is bidder's responsibility to provide resources as and when required by the purchaser for these changes and testing of the same as per the project and planned activity schedule. One of the examples of Configuration changes/modification are as mentioned below:

- a. Addition of Tags
- b. Addition/ Deletion of System/IEDs/Devices/SCADA enabled equipment/sensors

10. PACKING

Bidder shall ensure that all equipment covered under this specification shall be prepared for rail/road transport (local equipment) and be packed in such a manner as to protect it from damage in transit.

11. TENDER SAMPLE

NA, However, Bidder has to offer a prototype before mass production in case of first supply to Tata Power Discoms.

12. QUALITY CONTROL

The bidder shall submit with the offer Quality Assurance Plan indicating the various stages of inspection, the tests and checks which will be carried out on the material of construction, components during manufacture and bought out items and fully assembled component and equipment after finishing. As part of the plan, a schedule for stage and final inspection within the parameters of the delivery schedule shall be furnished. The Purchaser's engineer or its nominated representative shall have free access to the manufacturer's/sub-supplier's works to carry out inspections. The bidder shall ensure that the material supplied is as per the Guaranteed Technical Particulars as specified in the specifications.

13. TRAINING:

Bidder shall provide training to the Purchaser's personnel on the operation and maintenance of the system supplied equipment including Non-OEM equipment/3rd Party equipment. The training shall cover development, integration, installation and commissioning of both software & hardware components of the system.

The Bidder shall provide Classroom as well as hands-on training on the offered System. All required training materials such as System Catalogs, Test Instruments, Demo Equipment, and Simulation Jigs, etc. shall be arranged by the Bidder for own and Sub-Vendor Equipment. The training shall equip the Purchaser's engineers for Installation, Commissioning, Operation and Warranty Maintenance of Hardware, Software (Operating System, Administration and Applications), protocols and all Sub-Vendor systems.

The Bidder shall prepare and deliver a comprehensive training program on the operation and maintenance of FRTU, Communication equipment and associated accessories under this project. Configuration of FRTU, training shall cover the skills required for the maintenance and expansion. Hardware training shall qualify Purchaser to perform routine preventive maintenance, diagnostic testing on the processors, peripheral equipment, LANs & communications equipment.

Bidder shall indicate their Training facilities including test tools and simulation facilities. Bidder shall provide the training calendar and details of topics considered for the equipment offered.

The schedule, location and detailed content of each course will be finalized during detailed engineering.

Bidder to consider 10 man-days of the trainer for on-site training to Purchaser's personnel. Bidder to note

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

that the indicated man-days will be utilized in batches, according to availability of the Purchaser's personnel.

Training Requirement

Bidder shall provide training to the purchaser's personnel on the operation and maintenance of the system supplied by BA.

General requirements relating to the training are specified below:

- a) Personnel who speak understandable English and who are experienced in instruction shall conduct training courses.
- b) Classroom and Hands-on training shall be on the identical system being supplied to Purchaser.
- c) Bidder shall provide all necessary training material. Each trainee shall receive individual copies of the technical manuals and pertinent documents. These materials shall be supplied at least one month before the scheduled commencement of the training course.
- d) The purchaser shall be permitted to video tape all training classes.
- e) Class materials, including documents sent before the training classes and class handouts, shall become the purchaser's property. The purchaser may copy this material for in- house training and organization use only.
- f) Training sessions conducted at site shall accommodate the number of candidates in batches.
- g) Bidder to note that, requirement of Training for FRTU system is explained in detail, on similar line bidder to arrange training for all Non-OEM systems such as Ethernet Switch etc.
- h) Training Requirement- Shall provide all procedure in MP4 format

Course Descriptions

Course descriptions shall be included with the training plan that shall provide the following information for each course included in the training plan:

- a) The course name (and number if applicable)
- b) A brief description of the course
- c) A description of the intended audience for the course
- d) A description of the relation of the course to others in the training plan
- e) The duration of the course
- f) A breakdown of the course schedule, identifying classroom and hands-on periods
- g) A list of the training materials to be supplied
- h) A list of reference material to be used in the course
- i) A list of any prerequisite training or experience expected of the students.

At Purchaser's request, the Bidder shall provide a description of all courses offered by the Bidder and its Sub-vendors.

Training Curriculum

The training curriculum presented in this section is intended to describe the contents of the training when viewed. The subjects covered by individual courses may differ as long as the overall objectives are satisfied.

FRTU Hardware Training

FRTU system hardware course shall be designed to provide Purchaser's personnel enough knowledge of the overall design and operation of the system so that they can correct obvious problems, configure the hardware, perform preventive maintenance, run diagnostic programs, and communicate with OEM personnel. The following subjects shall be covered:

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- a) Configuration of the System Hardware.
- b) Basic and advance training of operation, maintenance techniques and diagnostic procedures for each element of the offered system, e.g., Processors, Auxiliary Memories, LANs, Routers etc. Configuration of all the hardware equipment.
- c) Techniques and procedures to expand and add IEDs/Feeder/Substation/Communication channels etc.
- d) Theory of operation and maintenance of the redundant/non-redundant hardware configuration, failover hardware, configuration control panels, and failover switches. Maintenance of protective devices and power supplies.
- e) Theory of design and operation, maintenance techniques and practices, diagnostic procedures, and (where applicable) expansion techniques and procedures. Course content shall include hands-on training for the specific subsystems that are part of Purchaser's equipment or part of similarly designed and configured subsystems. All interfaces to the computing equipment shall be covered in detail.
- f) Preventive and Corrective maintenance of all equipment, including use of special tools and instruments.
- g) Capable to diagnose and debug problem in the FRTU. Course should familiarize the different error code of the FRTU and how to rectify them.

System Software Training

The Bidder shall provide a System Software course that covers the following topics:

- a) All applicable programming languages, Stand-alone Service and Utility packages of the system. An introduction to software architecture, effect of tuning parameters (OS software, Network software, database software etc.) on the performance of the system.
- b) Operating System course consisting of the user aspects of the operating system, such as program loading and integrating procedures; scheduling, management, service, and utility functions; and system expansion techniques and procedures.
- c) System Initialization and Failover, execution of diagnostic procedures and the interpretation of diagnostic outputs.

Application Software Training

Comprehensive application software course, covering all applications database Logic and display building etc. The training shall include minimum the following:

- a) Overview of the application software and data flows.
- b) Programming Standards and Interface conventions.
- c) Functional capabilities, design, and major algorithms. Associated maintenance and expansion techniques.
- d) Software development techniques and conventions for the preparation and integration of new software functions.
- e) Generation of application software

FRTU Configuration/Engineering Training

The database and logic building course shall cover how to configure the inputs & outputs signals of the FRTU, communications with IED, communication with Control Centre, build the configuration database, storing and retrieving of the configuration file, database administration to maintain and modify the database and its structures. Following minimum topics shall be covered:

- a) How to set up configuration database for FRTU, identifying different component for configuration
- b) How to configure I/Os
- c) How to configure IEDs
- d) How to configure Control Centre Communication
- e) How to Configure Cyber Security features of FRTU
- f) How to Compile Configuration

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- g) How to Import / Export configuration file
- h) How to download/upload configuration file
- i) How to maintain different configuration file

FRTU System Administration

System administration course shall cover the procedures necessary to operate the FRTU configuration software, managing users and their roles. At the end of this course, participants shall be able to:

- a) Start up the FRTU configuration Tools and its components
- b) Shut down the Software and its components
- c) Switch functions to backup equipment
- d) Take equipment out of service and its restoration
- e) Interpret and react to messages generated by error-monitoring functions
- f) Test field device and communication links
- g) Implement procedures for installing new devices
- h) Use procedures for altering and replacing the configurations
- i) Identify procedures for using diagnostics
- j) Describe the backup functions required for normal maintenance
- k) Upgradation of System Software, Patch Management and Firmware Upgradation of OS and Application Software etc.

Simulator Training

This course shall cover the operation of the Simulator, scenario building, and maintenance. Enable the Purchaser personnel to:

- a) Prepare training scenarios using the scenario building tools
 - b) Simulate the communication over IEC 61850 protocol with devices
 - c) Simulate the communication over IEC 60870-5-104/101/103/MQTT and Modbus protocol
- Similarly, the bidder shall arrange training on Sub-vendor equipment supplied under this RFP.

14. MINIMUM TESTING FACILITIES

Bidder shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant International / Indian standards.

15. MANUFACTURING ACTIVITIES

The successful bidder will have to submit the required documents & drawing as mentioned in clause no-19, to get the CAT-A approval before mass manufacturing as a mandatory requirement.

16. SPARES, ACCESSORIES AND TOOLS

- a) Bidder needs to include competitive price for Mandatory Spare parts against the below specified list and schedules.
- b) Bidder shall include list of spares with quantities as recommended by him required for 10 years trouble free operation of equipment.
- c) The spares supplied shall be strictly interchangeable with parts for which they are intended for replacement.
- d) The spares shall be treated and packed for long storage (minimum 10 years) under the

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- e) climatic conditions prevailing at the site.
- f) The start-up spares shall be delivered at the site well in time before the start- up and commissioning of the system.
- g) Bidder to note the environmental condition of locations, the proposed system is being planned to be installed and operational.
- h) The Bidder shall give an assurance that spares will continue to be available through the life of the equipment, which shall be 15 years minimum. However, the supplier shall give a minimum of 12 months' notice in the event of plan to discontinue manufacture of any component used in this equipment.

Start-Up Spares:

The start-up spares are those spares which will be required during start-up and commissioning of the equipment/systems, and until Final Take Over. It is the responsibility of the bidder to supply all the necessary spares as required until the equipment/systems are handed over to the Purchaser.

An adequate stock of start-up spares shall be available at the site such that the start- up and commissioning of the equipment/systems, performance testing and handing over the equipment/systems to the Purchaser be carried out without hindrance and delay. All start-up spares which remain unused after the taking over the system shall remain the property of the Purchaser.

The Bidder shall furnish the Schedule of Start-up Spares.

Mandatory Spares

Essential spares are those considered necessary by the owner for ten (10) years of normal Sub- Station Automation System operations. A list of such spares has been listed in the below mentioned table and the same shall be included in bidder's scope. When an item of spares is indicated as 'percentage', it shall be considered as percentage of total number of that item of spares of overall project, unless specified otherwise and the fraction shall be rounded-off to the next higher whole number. Whenever the item of spares has been indicated as 'set' the same shall mean the supply for a single equipment/system. One set of spares for the particular equipment shall mean the total quantities of that particular spares for a single equipment e.g. 'set' of RTU, SIC etc. The 'set' shall however include all components required to replace that item of spares. The Owner reserves the right to buy any of the essential spare parts as considered necessary.

In case during start-up and commissioning certain essential spares are used up, the same shall be replaced within one (1) month without any commercial implications.

Bidder shall furnish details for all essential spares as per the approved vendor document list. Bidder to consider mandatory spares in the offer as per the BOM.

Note: Bidder to note that all above equipment shall be supplied along with Power supply, communication and specialized cables (if any)

Spares mentioned above shall be same as of installed system with necessary software key and licenses.

The table above indicate the minimum requirement of the owner, bidder to include 5% spares, which are not part of this table, but required for maintenance and upkeep of the system.

Recommended Spares

In addition to the spares mentioned above, the Bidder shall also furnish in his bid a list of recommended spares which may be required for ensuring the availability during the guaranteed availability period with unit prices. The final list of spares shall form part of scope of supply and accordingly the price thereof shall be

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

quoted by the bidder and shall be considered in the evaluation of the bids. The Purchaser reserves the right to buy any of the recommended spare parts as considered necessary by him. The prices of recommended spares shall be consistent with those of start-up/essential spares. Purchase of these spare parts will be covered under this order / by a separate order / an amendment to the contract.

The Bidder shall provide a list of recommended spares for a period of Ten (10) years from the date of handover of the project to Purchaser. The shelf-life of these spares is such as to last for at least Ten (10) years from the date of handover of the project. Spare parts supplied by the bidder shall be made available to the bidder for usage subject to replenishment at the earliest (within a month). Thus, at the end of every quarter the inventory of spares with the Purchaser shall be fully replenished by the bidder. However, any additional spares required to meet the availability of the system (which are not a part of the spares supplied by the bidder) should be supplied immediately by the bidder free of cost to the Purchaser. The list shall include the following:

Sl. No	Item Part Description	Recommended Quantity	Procurement Lead Time	Quantity of item held in Local office of Bidder	Quantity of item held in Head Office of Bidder as an emergency spare	Unit Price	Total Price

The Bidder shall provide the MTBF of various components, sub-assemblies, assemblies etc. (recommended as spares) and the relationship between MTBF and spare quantities recommended. The bidder is required to list the spares.

The Bidder shall submit the product life cycle details of all the hardware offered under this RFP.

Note: - The spares shall be included in PR only after furnishing requirement from user group.

17. DRAWINGS AND DOCUMENTS

Documentation shall be provided by the bidder for all equipment and functions offered as part of this procurement including Sub-vendors equipment/systems and functions. All documentation shall be in English. The documentation shall cover all systems required by Purchaser, including all its hardware, software, and interfaces and shall cover functionality, testing, installation, system startup, operations, and maintenance.

- Bidder shall provide all documentation in soft / hard form about licensing information for each software supplied (OS, application software, configuration, diagnostics, simulation & testing tools). (Please refer below i.e.19.2 onwards)
- The Documents shall be submitted as proposed. Master Document List (MDL) shall be prepared by Bidder and submitted for Purchaser's approval.
- The offered system shall store the copy of the system configuration, user configurable database, tools and relevant software as a backup at Purchaser's identified location for restoration under a disaster recovery plan.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- d) The bidder shall provide complete engineering data, drawings, reports, manuals and services offered etc. i.e., complete set of documentation / drawings / architectures/ Inter- Operability Tables (IOTs) submission of Test Reports, job progress reports etc.
- e) It is the responsibility of the Bidder to handover all project related drawings in AutoCAD formats only. The pdf version of above drawings / documents shall also be submitted for formal approval process.
- f) Submission of technical documentation related to design, installation, testing, operation & maintenance of the equipment and submission of Test Reports, job progress reports etc. in hard copies (3 sets) and soft copies (preferably in PDF).
- g) Providing complete source code, including customization.
- h) BA shall provide the license free web based application software without any additional cost accessible to all pre-defined users of TATA Power all Discom or else LAPTOP shall be provided. (Software shall be free of cost declaration needs to be provided by the manufacturer).
- i) Video Manuals for configuration and troubleshooting of FRTU, help in understanding the things in better way and skill enhancement.
- j) QR code sticker on FRTU panel, which will help in accessing the schemes, architecture and other important documents. Respective utility will generate QR code and keep data in share folder, the will be accessed by the responsible person who has authorized to access the same
- k) PLC logic software license to be provided by the manufacturer without any additional cost.

General Requirement

- a. The Bidder shall furnish the following drawings/documents during detailed engineering as per schedule from date of PO Placement Bidder to submit all datasheets, detailed GTP of the proposed BOM items during detailed engineering for the approval and finalization by Purchaser.
- b. System Architecture Drawing and design documentation. This drawing should show in detail of the following:
 - i. Network connections
 - ii. Protocol used
 - iii. Type of interconnecting cable
 - iv. All equipment, systems, FRTU, Modem, I/O devices, network switches etc. which are part of the complete proposed solution.
 - v. Panel GA, BOM and Complete wiring diagram
 - vi. Functional Design Specification document
 - vii. Step by Step test procedures for Factory Acceptance Test (FAT) and Site Acceptance Test (SAT)
 - viii. SCADA I/O List with protocol details along with addresses
 - ix. Interconnection Schedule (ICS) for Automation, detailed drawing indicating interconnections between various components.
 - x. Hardware, Software and Application manuals for all the equipment supplied including that of Third parties.
 - xi. All Software Licenses (both own & third party), key for Hardware Locks
 - xii. All interoperability tables
 - xiii. Software matrix indicating the details regarding versions, current license, expandability, tags/license limitations (if any) etc. along with the offer.
 - xiv. Guaranteed technical parameters & Guaranteed availability and reliability
 - xv. Calculation for power supply dimensioning
 - xvi. Bill of Material listing equipment designation, make, type ratings, etc. of all the equipment's supplied

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- xvii. Logic Diagram (Hardware & Software)
- xviii. Submit the details of all databases proposed and its relationship with application. Data flow diagram with entity relationship shall be submitted for key applications. The detail shall clearly mention the list of application which are required to build data models manually.
- xix. Operator's Manual
- xx. Complete documentation of implemented protocols between various elements
- xxi. IP addressing chart for all the systems, FRTU, network switches and other components/equipment which are connected to the network
- xxii. Other network diagram with all details pertaining to IP address and interfaces used to be provided as a controlled and restricted copy.
- xxiii. Password management policy document to be provided with mechanism for storage and changing of password at specified interval clearly defined.
- xxiv. Credentials created for all OEM systems for support to be provided as consolidated document stating clearly the SLA timelines agreed with each of the OEM.
- xxv. SLA signed document for system support and restoration in case of breakdown to be clearly document and provided as submission document.
- xxvi. Bidder to provide recommendation on proposed network bandwidth required for smooth operation of the system in non-blocking mode. Diagnostic and performance evaluation software and hardware tools
- xxvii. All tools and documents necessary to develop and maintain software such as compiler, CASE tool-kits and version control software shall be delivered along with FRTU Software.
- xxviii. Details of software (Operating systems, application software, engineering tools, communication systems management software, license details, I/O distribution protocol- wise etc.) for all offered systems (including FRTU and configuration laptop computers etc.) and loadable in CD/DVD ROM.
- xxix. Final as built drawings of all automation and communication system as final documents in AutoCAD & PDF format
- xxx. Other documents as may be required / applicable during detailed engineering
- xxxi. All drawings and data shall be annotated in English.
- xxxii. Bidder shall furnish Four (4) hardcopies and 3 soft copies on reliable media of all drawings, manuals (Administration, Operation & Maintenance, Configuration, Troubleshooting and Installation), Technical catalogues, Test Certificates and Acceptance Test Reports.
- xxxiii. Two copies of the internal test report, FAT and SAT documents with test protocol formats shall be submitted for approval at least four (4) weeks before Factory Acceptance Test. Two copies of SAT protocol shall be submitted for approval at least four (4) weeks before Site Acceptance Test.
- xxxiv. Bidder shall also furnish Original plus one copy of all System Software (OS, Application and tools) along with delivery. Bidder shall submit two copies of all the configuration, application, display, database backup of all equipment on reliable secondary media.

Definitions

For the purposes of this project, the following definitions shall be used:

- a. **Documents or Documentation** – Textual and graphical information describing the offered equipment, systems, and other items peripheral for Substation Automation System, whether embodied in hardcopy or electronic form such as common word processor files. Documents may also be referred to as manuals, guides, books, drawings, transmittals, and specifications. Documents are further divided into standard, OEM, and custom documents.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- b. **Standard documents** – Documents produced by the Bidder and used prior to the award of this contract that are applicable to all users of the equipment and software, including Purchaser. It is expected that the Bidder will use a formal revision control scheme to maintain its standard documents. Documents not maintained under such a scheme shall be considered custom documents.
- c. **OEM documents** – OEM (Original Equipment Manufacturer) documents are those standard documents produced by Vendor, Sub-vendors. Documents produced by Vendor, Sub- vendors for customized elements of the System shall be deemed custom documents.
- d. **Custom documents** – All documents not categorized as standard or OEM documents including the Bidder’s standard documents that are modified to meet Purchaser’s specific requirements.
- e. **Project Documents** – Project documents are those documents produced for the conduct of the project, but which do not directly describe the Sub-Station Automation System. Examples of project documents include meeting minutes, action item lists, test plans and procedures, and transmittal and document lists.

Document Format

Documents shall be delivered in two phases:

- a. Approval documents, submitted for Purchaser’s review and approval
- b. Final documents

Purchaser prefers that documents be delivered in both hard and soft form. Softcopy shall be delivered on magnetic media. Final documents shall be delivered on hardcopy, and on softcopy on Secondary Media. Any user shall be able to access on-line documentation on Engineering Laptop including functional design documents, user guides, maintenance manuals, on-line help, and operating procedures via a simple procedure involving a one-click operation.

Documents shall be supplied in a format that can be edited by Purchaser. Handwritten texts are not acceptable. Purchaser’s standard word processing software is Microsoft Office. The Bidder is encouraged to use this software for documents. If the Bidder uses other word processing or document production software, four copies of the software, suitable for installation on a personal computer using the Windows10 operating system or newer versions, shall be provided.

Drawings and diagrams may be supplied embedded in the document files or may be supplied as separate files. Purchaser’s standard drawing software is AutoCAD. If the Bidder uses other drawing software, four copies of the software, suitable for installation on a personal computer using the Windows10 operating system or newer versions, shall be provided.

Documents delivered as hardcopy shall be printed on both sides of A4 size paper and bound in three-ring binders. Divider pages with appropriately labeled tabs shall separate chapters. The spine of each volume shall be labeled with the document title and volume number so it may be easily identified when shelved. Documents delivered on softcopy media shall be formatted for printing on A4 size paper.

Each document shall include a title or information page showing the document number, title, and revision record. The document number shall be a unique number assigned in accordance with the Bidder's standard practice. The title page shall include a space into which Purchaser may enter a document number assigned from Purchaser’s document management system. The revision record shall describe each new version of the document since its original production. The revision record shall include:

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- i. The date of the change
- ii. A brief description of the change
- iii. An indication that the change has been reviewed and approved in accordance with the Bidder's quality assurance procedure
- iv. The version or release of the hardware or software to which the document applies.

Each document shall include a table of contents. If a document is divided into several physical volumes, each volume shall contain the complete table of contents of the whole document. Furthermore, each document shall have a cross-reference table, listing all topics of significance covered by the document, and giving the page or section references of all pages or sections with discussions of the topic.

Documents that describe generic or typical Substation Automation elements will not be acceptable to Purchaser unless the specific material applicable to this project can be readily identified and material not applicable to this project can be similarly identified. Custom documents shall not contain any material that is not pertinent to this project.

Where the phrase "on-line documentation" is used in these Specifications, it shall be interpreted to mean the ability to view the document from any workstation. The Bidder shall provide all software necessary to provide this capability. For non-OEM documentation (documentation produced by the Bidder), the Bidder shall also provide the capability to edit and annotate the document.

Document Review and Approval

All standard and OEM documents provided pursuant to this contract shall be subject to review by Purchaser. Custom documents provided pursuant to this contract shall be subject to approval by Purchaser.

Document Review

Purchaser's review of documents shall be limited to determining that:

- The documents have been produced in accordance with the documentation standards of the Bidder or Sub-vendors
- All hardware and software are in full conformance with the contract
- The documents clearly and accurately describe the features and options of the hardware and software that pertain to the Substation Automation System and other applications
- The documents are written in English, and hard copies are printed legibly, and well bound.

Purchaser will review documents as per the schedule mentioned in the MDL. If Purchaser does not transmit comments on the documents within the review period, the Bidder shall discuss with the Purchaser.

If Purchaser transmits comments on any documents, the Bidder shall respond to the comments within seven working days or as per the MDL after receipt of the comments. If the comments address OEM documents, the Bidder shall act as an advocate of Purchaser to initiate and facilitate resolution of the comments with the Sub-vendor.

Document Approval

All custom documents shall be subject to a formal approval process. The review for approval performed by Purchaser will be similar to that for document review process but will more closely examine the functionality and design aspects of the hardware or software. Clarity and completeness of the presentation of the material within the documents will be a key element of the review for approval.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

The approval process shall proceed as follows:

- The Bidder shall transmit documents subject to the approval process to Purchaser as per MDL. This MDL time may be adjusted by mutual agreement to accommodate the other activities of Purchaser and the Bidder. Requests by either party to change the time shall be made within two working days of receipt of the documents by Purchaser.
- Purchaser shall return comments to the Bidder within the agreed time. The transmittal cover for the comments shall clearly indicate that the document is either:

Approved (CAT-A) - If approved, the Bidder may proceed with the work covered by the document. No further approval action is required.

Approved with Comments - If approved with comments, the Bidder may proceed with the work covered by the document and the comments.

Not Approved (CAT-C) - If not approved, the Bidder may proceed with the work covered by the document and the comments only at their risk. No schedule or cost relief will be granted for any work undertaken prior to approval of the appropriate documents.

- If desired by any party, the comments may be discussed to clarify Purchaser's intent.
- The Bidder shall then revise and resubmit the documents within five working days after receipt of the comments from Purchaser. This time may be adjusted by mutual agreement to accommodate the other activities of Purchaser and the Bidder. Requests by either party to change the time shall be made within two working days of receipt of the comments by the Bidder.
- All changes made to documents to reflect approval comments shall be clearly highlighted and the revision record shall be updated to reflect the changes. Purchaser prefers the use of the change-tracking feature of the word processor used to produce the documents.
- The review and comment process shall be repeated until the document is accepted. After the document is accepted, Bidder shall deliver the required number of final copies free of highlighting due to tracking of changes.
- All changes made to documents to reflect approval comments shall be clearly highlighted and the revision record shall be updated to reflect the changes. Purchaser prefers the use of the change-tracking feature of the word processor used to produce the documents.

Scope of Reviews and Approvals

The acceptance or approval of any documents by Purchaser shall not relieve the Bidder of the responsibility to meet all the requirements of the contract or of the responsibility for the correction of the documents. The Bidder shall have no claim for additional costs or extension of time on account of delays due to revisions of the documents that may be necessary for ensuring compliance with the contract.

All deliverable documentation shall be revised by the Bidder to reflect the delivered System. Any modifications to the offered/installed system resulting from the factory and site acceptance tests shall be incorporated in this documentation. All previously submitted documents that have been changed because of engineering changes, contract changes, or errors or omissions shall be resubmitted for review and approval.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Deliverable Documentation

Two soft copy and three hard copies shall be provided for review and approval. Two soft copy and five hard copies shall be provided for all the final documentation for each site.

Document	Delivery Date
Basic hardware documents i. List of deliverables, configuration diagram ii. Network configuration, interconnection lists iii. Site installation drawings and procedures	As per MDL
Equipment manuals	With each hardware delivery
Hardware maintenance manual	With each hardware delivery
Software list of deliverables	As per MDL
Software development standards	As per MDL
Database definition	i. For standard software – As per MDL ii. For other software – with the software functional description
Interface Requirements Document	With the software functional description
Software functional description	As per the project schedule
Installation images and source code	With the System delivery
Detailed design document	As per the project schedule
System maintenance manual	With the System delivery

Document Standards

The Bidder shall provide a document defining the standards used to create and maintain all documentation supplied by the Bidder. The standards shall define:

- The word processing or document production software used to create the documents
- Templates for each document type
- Definitions of the contents for each document type
- Drawing standards to be followed
- The approval process to be followed for document releases.

Hardware Documentation

The following documentation shall be provided for all hardware provided pursuant to this contract:

- List of deliverable hardware
- Equipment configuration diagram
- Network configuration diagram
- Interconnection list
- Site installation drawings and procedures.

The other hardware documentation to be supplied shall be commensurate with the hardware maintenance

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

philosophy to be employed by Purchaser.

Equipment manuals shall be provided for all hardware to be maintained by the Bidder or a third-party maintenance Bidder. Equipment manuals and hardware maintenance manuals shall be provided for all hardware to be maintained by Purchaser.

List of Deliverable Hardware

The list shall itemize each hardware item and include equipment configuration information. The configuration information shall be enough so that Purchaser can procure an identical item from the manufacturer. The list shall also include network names and addresses (or these shall be included in the network configuration diagram) and shall include a space for Purchaser to enter equipment identification for their own purpose.

Equipment Configuration Diagram

The equipment configuration diagram shall depict the logical interconnection of all the Bidder- supplied equipment and its connection to Purchaser supplied equipment. The configuration diagram shall use the same terminology as the list of deliverable hardware so that the correspondence between the two can be readily determined.

Network Configuration Diagram

This document shall show the design of the local and wide area networks supplied by the Bidder as well as the communications network supplied by Purchaser. Both logical and physical depictions shall be provided for the network supplied by the Bidder. Only a logical depiction is required for the network supplied by Purchaser.

Interconnection List

The physical interconnections among the components, other than those shown on the network configuration diagram, shall be depicted. Each cable shall be identified, along with its terminations.

Site Installation Drawings and Procedures

The site drawings shall depict the physical arrangement of the components. References to the appropriate equipment manuals are acceptable. The drawings and procedures shall include:

- Equipment physical drawings showing dimensions, cabinet internal arrangements, and the size and weight of each enclosure
- Unpacking, moving, handling, and other installation details
- The location of external connections including types and sizes of connectors
- Input power and grounding requirements
- Environmental requirements

Equipment Manuals

Equipment manuals shall contain the following:

- A description of the function of the equipment
- Installation, setup, and operating instructions
- A block diagram showing the logical and physical interconnections among the major components
- Expansion and upgrade capabilities and instructions
- Preventative maintenance instructions
- Detailed functional, logical, electrical, and mechanical characteristics of all interfaces to the device, including protocol descriptions

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- Troubleshooting and repair guides including a description and instructions for the diagnostics furnished.

Hardware Maintenance Manuals

The hardware maintenance manual shall describe the preventive maintenance and restorative procedures required to maintain the equipment in good operating condition. The information in the manuals shall include:

- Operating details – This information shall include a detailed description of how the equipment operates and a block diagram illustrating each major assembly in the equipment. Descriptions of external data transfers with other equipment, including data patterns, security check-codes, and transfer sequences shall be included. The operational sequence of major assemblies within the equipment shall be described and illustrated by functional block diagrams and timing diagrams. Detailed logic diagrams shall also be provided as necessary for troubleshooting analysis and field repair actions.
- **Preventive maintenance instructions** – These instructions shall include all applicable visual examinations, hardware testing and diagnostic routines, and the adjustments necessary for periodic preventive maintenance of the equipment. Instructions on how to load and use any test and diagnostic program and any special or standard test equipment shall be an integral part of these procedures.
- **Corrective maintenance instructions** – These instructions shall include procedures for locating malfunctions down to the field-replaceable module level. These guides shall include adequate details for quickly and efficiently locating the source of an equipment malfunction. The instructions shall also include explanations for the adjustment or replacement of all items, including printed circuit cards. Schematic diagrams of electrical, mechanical, and electronic circuits, parts-location illustrations, photographs, cable routing diagrams, and sectional views giving details of mechanical assemblies shall be provided as necessary to replace faulty equipment. For mechanical items requiring field repair, information on tolerances, clearances, wear limits, and maximum bolt-down torque shall be supplied. Information on the loading and use of special off-line diagnostic programs, tools, and test equipment, as well as any cautions or warnings that must be observed to protect personnel and equipment shall be included.
- **Parts information** – This information shall include the identification of each replaceable or field-repairable module. All other parts shall also be identified. The identification shall be of a level of detail enough for procuring any repairable or replaceable part. Cross-references between the Bidder's part numbers, and the manufacturer's part numbers shall be provided.

Bidder shall submit equipment warranty details of all the supplied system/equipment with detailed inventory list with make, model, Serial number, Software versions.

Software Documentation

The following documents shall be provided for all software:

- List of Deliverable Software
- Software development standards

The Bidder or Sub-vendors shall provide the following documents for all software that has been produced for the offered solution. This shall include all the required OS and application software for the systems mentioned in the specification:

- Database definition and data flow, along with an explanation of stored procedures
- Interface Requirements Document
- Software functional description
- Installation images and source code

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

- e. Source code version control and revision control documentation.
- f. Software release / Patch details as consolidated document to be submitted by Bidder.
- g. Recommended update frequency of all the software should be submitted as consolidated document by bidder.

The following documents shall be produced for all software produced specifically for this contract:

- a. Software Requirements Matrix
- b. Detailed design documents

List of Deliverable Software

The list shall itemize each software item and include version and license information. The distribution media for each software item shall be identified. The list shall also indicate for each item whether source code is supplied.

Software Development Standards

The Bidder shall document the development standards used to develop the Substation Automation System and other systems software. Purchaser reserves the right to reject software that does not conform to the development standards. The standards shall define:

- Program design disciplines
- Cyber Security measures
- Resources under which the program must operate
- Basic services
- Interface definitions
- Linkage conventions
- Input and output specifications
- Database naming and access conventions
- Storage rules
- Quality assurance procedures
- Configuration design review methods
- Software configuration control schemes.

Database Definition

The database definition shall identify the characteristics of all systems databases. It shall include, but shall not be limited to, the following:

- The name or identification of the database
- A description of the intended use of the database. If the database is specific to a single application, the application shall be identified
- A description of the organization of the database (the database schema or model)
- A description of each field of each data item
- Instructions for generating and populating the database
- Details of programming interfaces. This shall encompass access methods, address schemes, and read, write, and modify actions
- Initialization description – How or by what software is the data initialized & to what value(s)
- Details of maintenance actions.

Purchaser encourages the use of "self-documenting" database technology, where the database definition is developed and stored with the data. The resulting documentation should be printable.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Interface Requirements Document

The Interface Requirements Document shall describe in detail the interfaces between the offered systems and Purchaser provided/existing systems and networks. The Interface Requirements Document will be used by both the Bidder and Purchaser as the definition of the interface between the Substation Automation System, SCADA/ADMS and all other systems, so that each system can be designed or modified to meet its requirements. Purchaser will provide all required information to the Bidder so that it can prepare the document accordingly.

As a minimum, the Interface Requirements Document shall cover the following aspects:

- Description of the hardware interface
- Description of the communication protocols and the options and parameters selected
- Data exchange requirements including timing, priority, volume, and security requirements. A specific list of data to be exchanged during factory and site testing shall also be included.
- Description of the performance requirements
- Exception (for example, error) processing
- Failover/Backup processing
- Alarm conditions
- Archiving requirements.

Software Functional Description

The intent of the software functional description shall be to describe the functions to be performed by each software module from the standpoint of a user. (Software functional descriptions are also referred to as user guides.) The functional operation of the Substation Automation System and other systems shall be clearly described so that it can be understood without understanding the detailed operation of each software module.

Software functional descriptions shall also be used as the first step in the design of a custom (for example, new functionality). Thus, it shall have enough information for Purchaser to determine that the new functionality will meet the requirements of the contract.

The software functional description shall include the following minimum content:

- Functional description – A narrative description of each program. Where appropriate, solution algorithms shall be described
- Performance requirements – The execution periodicity, processing capacity, and tuning and execution parameters that control or limit the capabilities of the software
- Resource requirement – The expected minimum requirements for main memory, auxiliary memory, processor capacity, and other resources required by the software
- User interface – A description of the interface used to control the software, including all user inputs and program responses
- Software interface requirements – A description of the logic interfaces with other programs
- Data requirements – A description of all data and databases accessed by the software, including execution parameters
- Error messages – A concise description of all error messages and possible corrective actions
- Diagnostic messages – Where the software generates a record of its internal operations, the messages shall be described
- Maintenance and expansion procedures – A description of either maintenance procedures or expansion procedures that is relevant to maintenance of the program or expansion of the program.

It is Purchaser's strong preference that software functional descriptions are provided as on- line documentation.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Installation Images and Source Code

All software shall be delivered in three forms:

- As a fully operational system installed on auxiliary memory
- As distribution images suitable for installation on the system

The distribution images shall include all operating system, platform software, application software, and library of modifications incorporated into the delivered software. All standard software shall be supplied on the original installation media used by the Bidder to build the system. All customized software shall be supplied as part of the code management library along with the source code or other distribution image against which the code changes are to be applied.

It shall be possible for Purchaser to completely generate, build, install, and configure the entire System from the distribution images, source code, and software utilities provided with the System. To this end, "make files" or other compilation, generation, and installation tools, scripts, and directives shall be delivered.

For the purposes of this requirement, "software" shall specifically include the databases supplied with the System. That is, enough definition and content images shall be supplied such that the System databases can be created and installed on the Sub-Station Automation System and other offered systems.

Software Requirements matrix

The Bidder shall provide a list of all software requirements, cross-referenced to show where each requirement is discussed in the relevant software document.

The Software Requirements Matrix shall list each of the requirements for the Sub-Station Automation and other systems stated in this specification, in numerical order, referenced by chapter, section, and paragraph number.

This list of specified requirements shall be supplemented by a list of all functions provided by the Bidder's software system that go beyond the specified requirements.

For each requirement on the list, a reference shall be given to the chapter and section where the requirement is described or covered in each of the following of the Bidder's documents:

- Item on the List of Software Deliverables
- Software Functional Description
- Operations Manual
- Factory Acceptance Tests
- Site Acceptance Tests.

Detailed Design Document

The detailed design documents are intended as a second level of detail to the software functional descriptions. In general, a detailed design document shall relate to a single software functional description. It is expected that, for customized software, the Bidder will first deliver a software functional description for approval by Purchaser. After approval, the Bidder will then produce a detailed design document for approval. Production of the software will proceed after approval of the detailed design document.

The detailed software design documentation shall include, but shall not be limited to, the precise design information needed for planning, analysis, and implementation of the software. It shall include a show the divisions of the software design entities; a dependency description specifying the dependent entities, their coupling, and required resources, an interface description providing details of external and internal interfaces not provided in the software functional description; and a detailed design description containing

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

the internal details of each design entity.

The detailed software design documentation shall provide a detailed description of how the software will support the functions described in the software functional description. Detailed software design documentation shall include a diagram of the software indicating major modules and an overview of the operation of each module. It shall describe data structures and flow, and a diagram or description of the way the modules interfaces with other modules.

System Maintenance Manual

The System Maintenance Manual shall describe all user procedures necessary to build and maintain the Substation Automation System and other supplied systems. It shall provide information on optimizing system performance.

It shall include details on Configuration upgrades, firmware and patch upgrades

The System Maintenance Manual shall also include documentation of the distributed system software supporting the configuration control function, data integrity, startup, restart, and the network management subsystem.

The manual shall provide a list of the Internet Protocol (IP) addresses of all devices in a manner compatible with Purchaser's security standards and shall describe the procedures for upgrading or adding additional devices. The System Maintenance Manual shall provide detailed information on troubleshooting all processors of the Substation automation and other supplied systems. It shall describe the use of error logs, the meaning of all program- generated error or informational messages, and the recommended response to these messages. It shall explain what the user should do to save information after a processor failure and shall describe the procedures to gather this information to allow the user to communicate in an informed manner with maintenance personnel. It shall include a description of the procedures to restore normal operation after a failure of the offered systems.

Operating Manual

The Bidder shall submit, for review and approval, operating manuals for all Substation Automation functions. The operating instructions associated with all features shall be incorporated into these manuals. Context sensitivity shall be used to go directly to the appropriate place in the manual.

The manuals shall be organized for quick access to each detailed description of the user procedures that are used to interact with the Substation Automation functions. The manuals shall present in a clear and concise manner all information that a user needs to know to understand and operate satisfactorily. The manuals shall make abundant use of screen snapshots to illustrate the various procedures.

System Administration Documentation

The Bidder shall submit, for review and approval, all system administration manuals. The system administration instructions associated with all features shall be incorporated into these manuals. Context sensitivity shall be used to go directly to the appropriate place in the manual.

Database Editor's Manual

The Database Editor's Manual shall describe the procedures to define, build, edit, archive, and expand all the databases of the delivered systems. It shall contain information describing how a user may define and add new attributes to an existing database entity. It shall also describe how to restore any database to a previously saved version if the database had been corrupted.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Acceptance Test Procedures

Acceptance test procedures (FAT & SAT) designed to test the specified requirements shall be provided. The procedures will comprise step-by-step instructions to verify that:

- a. The system hardware and software are fully present and fully integrated, and its documentation is complete.
- b. All the functional and performance requirements of the contract are met.

The test procedures shall be organized in the order that they are to be performed. Tests that require collection of data under controlled conditions shall be carefully planned with data collection procedures scheduled, as needed, before the tests themselves.

The test procedure shall be prepared in the format of step-by-step guides. Test descriptions, initial conditions, functions to be tested, expected responses, and recording areas are contained in the acceptance test procedures. The steps to achieve these functions may be provided as references to the user manuals or maintenance manuals. An attempt shall be made to cover all normal and abnormal circumstances in the procedures. The goal is to be able to rigorously test the system by strictly following carefully pre-planned procedures with minimum reliance on unstructured testing.

Following documents shall be prepared based on Tata Power Discoms specifications and statutory requirements with Drawing including complete BOM and shall be submitted with the bid:

- a) Signed & stamped copy of clause-wise compliance on Technical Specification
- b) General description & drawing of the equipment
- c) Type test Certificates with drawings
- d) Experience List
- e) Drawing with complete BOM
- f) Signed & stamped copy of pre-bid queries
- g) Signed & stamped copy of No deviation certificate

After the award of the contract, following documents shall be submitted by the successful Bidders before starting of manufacturing

- a) Signed & stamped copy of clause-wise compliance on Technical Specification
- b) complete equipment drawing with BOM
- c) Foundation Plan Details
- d) spare list
- e) compliances on undertaking provided during technical evaluation as applicable
- f) O&M/Instruction Manual
- g) QAP

DRAWING (General Arrangement shall be as per drawing. However, dimensions are subject to change as per Manufacturers type tested design while maintaining required clearances and relevant Specification)

Note: Degree of protection shall be IP 55 instead of IP 54 mentioned in drawing

*For Reference purpose only.

Dimensions may vary as per ACB rating and Manufacturer's type tested design.

18. GUARANTEED TECHNICAL PARTICULARS

Bidder shall have to comply & submit clause wise compliance of this specification.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

19. SCHEDULE OF DEVIATIONS

(TO BE ENCLOSED WITH TECHNICAL BID)

All deviations from this specification shall be set out by the Bidders, clause by Clause in this schedule. Unless specifically mentioned in this Schedule, the tender shall be deemed to confirm the purchaser's specifications:

S. No	Clause No.	Details of deviation with justifications

We confirm that there are no deviations apart from those detailed above.

Seal of the Company:

Signature
Designation

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

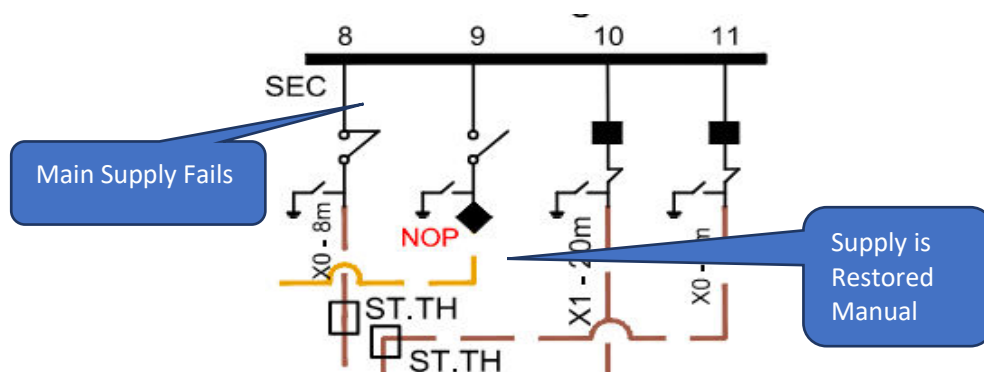
Annexure – 1: Preferred/Approved Make of Equipment/System

Sl. No.	Item Description	Preferred Make / Model
1	FRTU	ABB / SIEMENS / SCHNEIDER / GE / Synergy/ASHIDA Reputed Make for T&D function
2	4G Modem cum Router	Lantronix / Telktronics /XNet /Schneider/ Equivalent
3	Industrial Grade FRTU Panels	Rittal /Siemens/Pyrotech/Equivalent
4	Layer 2 Managed Ethernet Switch	Ruggedcom / Hirschman / MOXA/CISCO/ Equivalent
5	I/O Boxes	Systemax/Tyco/CommScope/ Equivalent
6	Armored SFTP CAT6 Cable	Systemax/Tyco/CommScope/Finolex/Polycab/Digisol/Any reputed OEM
7	Unarmored SFTP Cable	Systemax/Tyco/CommScope/Finolex/Polycab/Digisol/ Any reputed OEM
8	Patch Panel (RJ45) with Connectors, I/O boxes	Systemax/Tyco/CommScope/ Equivalent
9	CAT6 UTP Patch Chords	Systemax/Tyco/CommScope/ Equivalent
10	4P X 0.36 Sq.mm. Armored Communication Cable (Multistrand, individual pair and overall shielded)	Belden/LAPP/SATYAM/KEC/Digisol/Polycab/Parashield/ Equivalent
11	4P X 0.36 Sq.mm. Unarmored Communication Cable (Multistrand, individual pair & overall shielded)	Belden/LAPP/SATYAM/KEC/Digisol/Polycab/Parashield/ Equivalent
12	RS 232 / RS 485 converter	MOXA / Advantech/ Equivalent
13	Battery Charger	Delta/Amara raja/Mass tech/Chloride /Schneider/Go Gate/ Equivalent
14	Diode-Oring Unit	Paramount / Phoenix/ Equivalent
15	Droppable type Terminal Block for Digital Output, CT & PT	Connect well – CBT4U or equivalent
16	Disconnecting type (Knife edge) Terminal Block for Digital Input	Connect well – CKT4U or equivalent
17	Battery	Amaron, HBL, Coslight, Exide or equivalent
19	Multifunction Meter	SATEC/ Secure / Rishav / Accord /Equivalent
20	Auxiliary Relays	OMRON / ABB / Sulzer / OEN / Paramount/ Equivalent
21	Control Cable	CCI / FORT GLOSTER / FINOLEX / HAVELLS / Indian aluminum Cables / Universal Cables / Incab / Asian Cable / KEI / Polycab / Ruchika/ Any reputed OEM
22	MCB	Siemens / Schneider / Anchor / Havells/ Any reputed OEM

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Annexure-2 : Auto Changeover logic

Concept of Self-Healing via Auto Changeover



Self-Healing Logic Implementation

Primary (LBS1) and Secondary (LBS2) Sources: The system designates one LBS as the primary and another as the secondary source, enabling auto-switching between them based on supply status.

Step-by-Step Process:

1. When primary supply (LBS1) fails, LBS1 opens and LBS2 closes to restore supply from the secondary source after approximate 30 seconds (10 seconds delays for confirmation of each status)
2. Once primary supply is restored, the system reverts to the original configuration, with LBS1 closing and LBS2 opening, re-establishing the main source.

Each self-healing logic operation takes 30-34 seconds: 10 seconds for status confirmation and 7 seconds for each motor operation.

Conditions for Activation of Self-Healing Logic

The self-healing logic activates only when the following conditions are met:

1. FRTU Power Status: FRTU must be powered ON.
2. SF6 Gas Pressure: SF6 pressure must be at acceptable levels; low SF6 will disable the self-healing feature.
3. Switches in Remote Mode: Local/Remote switch status must be in Remote mode across LBS1, and LBS2 panels, however it should be independent of FRTU Local/Remote.
4. No General Trip or Fault Indicators: Fault Passage Indicators (FPI) or general trip indicators must be inactive; otherwise, the self-healing logic remains disabled.

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Logic matrix for operation

Event	Operation	SF6 GAS PRESSURE	Auto/ Manual Switch	LBS1 VPIS status	LBS2/ VCB2 VPIS status	LBS1 status	LBS2 /VCB2 status	FPI (E/F) (O/C)	MFM (V1) BUS VOLT.	General Trip	Self-Healing Logic (From Scada)	FRTU Local/ Remote Switch	LBS1 Panel Local/ Remote Switch	LBS2/VCB2 Panel Local/ Remote Switch
New RMU charged	LBS1 Close	Healthy	Auto	On	On/Off	Off	Off	Off	<10V	Off	Enable	Local/ Remote	Remote	Remote
Primary supply fail	LB1 Open	Healthy	Auto	Off	On	On	Off	Off	<10V	Off	Enable	Local/ Remote	Remote	Remote
Primary supply fail	LBS2 Close	Healthy	Auto	Off	On	Off	Off	Off	<10V	Off	Enable	Local/ Remote	Remote	Remote
Restoration of Primary Supply	LBS2 Open	Healthy	Auto	On	On/Off	Off	On	Off	Any	Off	Enable	Local/ Remote	Remote	Remote
Restoration of Primary Supply	LBS1 Close	Healthy	Auto	On	On/Off	Off	Off	Off	<10V	Off	Enable	Local/ Remote	Remote	Remote

Annexure-3 : Door layout of FRTU



Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Annexure-4 : Bidder's Technical Evaluation Criteria

Sl. No.	Description	Max Score
Technical Solution Score		100
1	Project Experience	45
a)	Number of FRTU Based Automation projects successfully completed in last 5 years. Similar to Technical Requirements as per the specification	15
	10 marks shall be awarded for a single project meeting the functionality as mentioned in the QR.	10
	In case multiple projects are submitted, 2 marks shall be awarded for each project subject to a ceiling of 10 marks.	
	Satisfactory performance certificates of the running projects	5
	5 marks shall be awarded for FRTU integration with multiple OEM's RMUs/ protection, control and condition monitoring devices on industry standard protocol.	
b)	Project experience in implementation of FRTU based Automation Systems having similar solution	30
	Bidder having experience in satisfying the following criteria:	
	Execution of Automation project in non-SCADA enabled Conventional Types of RMUs/Field Equipment (3 Marks)	3
	FRTU integration over IEC 60870-5-104 protocol with multiple OEM's SCADA Systems. (3 marks)	3
	Experience on implementation of Cyber Security measure in Field Automation (FRTU, IEDs etc.) (2 marks) and IOT based application for FRTU based Field Automation Systems (2 marks)	4
	Project experience in integration of Renewable Energy System (Solar, Battery Storage) (2 marks)	2
	IEC 61850 (ED1 & latest ED2), implementation of logic using GOOSE / IEC 104 (2 marks) and MODBUS (RTU, TCP/IP), integration of multiple OEM IEDs/RMUs (2 marks)	4
	GTP Compliance (10 marks)	10
	a) GTP compliance of FRTU /CMR/HDR (4 marks)	
	b) GTP compliance of Modem/Ethernet Switch (3 marks)	
	c) GTP compliance of Battery/Battery charger/ FRTU Panel (3 marks)	
	Panel Installation work, cable laying, termination, civil foundation works (4 marks)	4
	The bidder shall be awarded marks indicated for satisfying the above criteria in one project or multiple projects put together. For satisfying of single criteria, only indicated marks shall be awarded, irrespective of its implementation in number of projects.	
2	Presence in India	10
	a) Manufacturing in India as an initiative of Government of India "Make in India"; (3 Marks)	3
	b) The bidder with design / Engineering / Testing / Installation / Commissioning / Maintenance / Patch Management / Timely Upgradation facility in house (In India) as on date of release of RFP; (7 Marks)	7
3	Team Details (CVs)	10
	Experience minimum 5 years in area of FRTU based Automation Systems engineering and commissioning based on IEC 61850 (Ed.1 & Latest Ed.2), IEC60870-5-103, IEC 60870-5-104, Modbus RTU & TCP etc.	4

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Sl. No.	Description	Max Score
	For submission of CV, 1 mark shall be awarded per CV subject to ceiling of 4 marks that can be obtained in this category.	
	Experience minimum 5 years in area of Control and protection systems engineering and commissioning in power distribution application.	2
	For submission of CV, 1 mark shall be awarded per CV subject to ceiling of 2 marks that can be obtained in this category.	
	Experience minimum 5 years in area of FRTU integration with SCADA systems on IEC 60870-5-104, Cyber Security and Communication Networking.	2
	For submission of CV, 01 mark shall be awarded per CV subject to ceiling of 2 marks that can be obtained in this category.	
	Experience minimum 5 years in implementation of logic based FRTU systems like load shading, group control, control logic, reverse blocking, auto reclose & self-healing etc.	2
	For submission of CV, 01 mark shall be awarded per CV subject to ceiling of 2 marks that can be obtained in this category. Bidder to note that the CV submitted of the engineers for the above-mentioned criteria's, will only be permitted for the execution of project.	
4	Technical Know-How: The Bidder is expected to satisfy the following criteria for the proposed FRTU based Automation Systems for RMUs:	35
a)	Proposed product should be under life cycle growth (latest and having a life span under production for minimum next 10 years) as per Life Cycle of the product.	3
b)	FRTU shall be capable to import multiple SCD files generated by multiple OEM	2
c)	FRTU shall acts as SNTP Server & Client	3
	FRTU shall support SNMP for Network & Asset Management	
d)	Configuration Tools should be complete in all respect like configuration of all types of interfaces and application as per RFP and complied to the format of SCD file for integration of multi vendors substation protection and control IEDs with RTU.	2
e)	Hardware and software of the proposed FRTU shall be of the same OEM	3
f)	FRTU integration with multiple OEM's protection, control, condition monitoring devices and SCADA on industry standard protocol	2
g)	Upload and Download of the configuration file from FRTU to the engineering station.	3
h)	FRTU shall support web-based monitoring from remote as well as local	2
i)	FRTU systems implemented for applications such as load shading, group control, control logic, reverse blocking, auto reclose & self-healing etc.	3
j)	FRTU shall be complied to Cyber Security requirement for critical infrastructure.	3
k)	FRTU shall support Measurement Event storage capacity more than 10000	3
l)	FRTU panel have Ingress Protection of 65/67	3
m)	FRTU has I/O handling Capacity more than 1000 Physical Tags	3
n)	Hot-Swappable module replacement in FRTU	

Note: Bidder to score minimum 80 marks to qualify the Technical Bid evaluation Scoring

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Annexure-5 : Pin Configuration

H.C	SIGNALS	H1	LBS-1	H3	LBS-2 / VCB-3	H2	VCB-1	H4	VCB-2//LBS-3	H5	FRTU/COMMON
H-1	VCB/LBS CLOSE STATUS	H1-1	LBS-1 CLOSE STATUS	H3-1	LBS-2 / VCB-3 CLOSE STATUS	H2-1	VCB-1 CLOSE STATUS	H4-1	VCB-2//LBS-3 CLOSE STATUS	H5-1	AC FAIL
H-2	VCB/LBS OPEN STATUS	H1-2	LBS-1 OPEN STATUS	H3-2	LBS-2 / VCB-3 OPEN STATUS	H2-2	VCB-1 OPEN STATUS	H4-2	VCB-2//LBS-3 OPEN STATUS	H5-2	BATT LOW
H-3	DC CLOSE STATUS FPR VCB / MOTOR - SPRING STATUS FOR LBS	H1-3	LBS-1 MOTOR/SPRING STATUS	H3-3	LBS-2 MOTOR/SPRING STATUS// DC-3 CLOSE STATUS	H2-3	DC-3 CLOSE STATUS	H4-3	DC-3 CLOSE STATUS// LBS-3 MOTOR/SPRING STATUS	H5-3	BATT CHARGER FAIL
H-4	DC OPEN STATUS	H1-4	SPARE	H3-4	SPARE/ DC-3 OPEN STATUS	H2-4	DC-3 OPEN STATUS	H4-4	DC-3 OPEN STATUS	H5-4	FRTU DCOR OPEN STATUS
H-5	ES CLOSE STATUS	H1-5	ES-1 CLOSE STATUS	H3-5	ES CLOSE STATUS LBS-3//CB-3	H2-5	ES-2 CLOSE STATUS	H4-5	ES CLOSE STATUS CB-2//LBS-3	H5-5	FRTU LOCAL/REMOTE STATUS
H-6	ES OPEN STATUS	H1-6	ES-1 OPEN STATUS	H3-6	ES OPEN STATUS LBS-3//CB-3	H2-6	ES-2 OPEN STATUS	H4-6	ES OPEN STATUS CB-2//LBS-3	H5-6	SPARE/AUTO MANUAL SWITCH
H-7	L/R SWITCH	H1-7	L/R SWITCH - 1 IN REMOTE	H3-7	L/R SWITCH IN REMOTE LBS-3//CB-3	H2-7	L/R SWITCH IN REMOTE LBS-3//CB-3	H4-7	L/R SWITCH IN REMOTE CB-2//LBS-3	H5-7	DUMMY BREAKER CLOSE STATUS
H-8	RELAY/FPI-1 OPERATED	H1-8	FPI-1 OPERATED	H3-8	FPI-2//RELAY OPERATED-CB-3	H2-8	RELAY OPERATED-1	H4-8	RELAY OPERATED-2//FPI-3	H5-8	DUMMY BREAKER OPEN STATUS
H-9	VPS OPERATED	H1-9	VPS-1 OPERATED	H3-9	VPS OPERATED LBS-3//CB-3	H2-9	VPS-2 OPERATED	H4-9	VPS OPERATED CB-2//LBS-3	H5-9	SFG PRESSURE LOW
H-10	COMMON (+) VE	H1-10	COMMON (+) VE	H3-10	COMMON (+) VE	H2-10	COMMON (+) VE	H4-10	COMMON (+) VE	H5-10	COMMON (+) VE
H-11	FPI RESET COMMAND / MOTOR - SPRING STATUS FOR VCB	H1-11	FPI-1 RESET COMMAND	H3-11	FPI-2 RESET COMMAND/ VCB-3 MOTOR/SPRING STATUS	H2-11	VCB-1 MOTOR/SPRING STATUS	H4-11	VCB-2 MOTOR/SPRING STATUS// FPI-3 RESET COMMAND	H5-11	SPARE DC-3/PR-16/ MODERN REBOOT
H-12	COMMON (-) VE	H1-12	COMMON (-) VE	H3-12	COMMON (-) VE	H2-12	SPARE	H4-12	SPARE/COMMON (-) VE	H5-12	COMMON (-) VE
H-13	VCB/LBS CLOSE COMMAND	H1-13	LBS-1 CLOSE COMMAND	H3-13	LBS-2//VCB-3 CLOSE COMMAND	H2-13	VCB-1 CLOSE COMMAND	H4-13	VCB-2//LBS-3 CLOSE COMMAND	H5-13	DUMMY VCB CLOSE COMMAND
H-14	COMMON (-) VE	H1-14	COMMON (-) VE	H3-14	COMMON (-) VE	H2-14	COMMON (-) VE	H4-14	COMMON (-) VE	H5-14	COMMON (-) VE
H-15	VCB/LBS OPEN COMMAND	H1-15	LBS-1 OPEN COMMAND	H3-15	LBS-2//VCB-3 OPEN COMMAND	H2-15	VCB-1 OPEN COMMAND	H4-15	VCB-2//LBS-3 OPEN COMMAND	H5-15	DUMMY VCB OPEN COMMAND
H-16	COMMON (-) VE	H1-16	COMMON (-) VE	H3-16	COMMON (-) VE	H2-16	COMMON (-) VE	H4-16	COMMON (-) VE	H5-16	COMMON (-) VE

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Annexure-6 : BOM/Price Schedule

Sl. No.	Item	Description	UOM	HSN/ SAC Code	Qty/ RMU	Total Requir ed Quant ity (A)	Unit Rate (B)	GST (%)	Gross Price (E=A* D)
		Nos. of RMU Sites	100						
A	Pre-Wired FRTU Panel								
1	Pre-Wired FRTU Panel with FRTU	FRTU Modules with DI/DO/AI cards FRTU Redundancy: Optional I/O Requirement: with 80 DI, 32 DO, 8 AI with Auxiliary relay for each Digital Input & Output Communication Ports per FRTU : 2 Nos. Ethernet ports/CPU (Both the ports should support IEC 104, IEC 61850 & other standard protocols for Communication with Control center and substation IEDs), 2 Nos. RS 485 electrical ports for communication with serial devices over IEC60870-5-103, MODBUS (Serial) protocol in the FRTU. Dummy Breaker Relay-1 nos. Power supply: Redundant 18-72 VDC (24 V) Supply with MCBs with add-on NO contact Protocols: IEC60870-5-103, IEC 60870-5-104, IEC 61850 (ED1, ED2), RSTP, MODBUS (Serial & TCP/IP), SNMP (V1.0, V2.0, V3.0), NTP & SNTP, MQTT Software Licenses: RTU OS, Application Software, Configuration tools, Diagnostic tools. Logic building Application-Interlock logic, Calculation Package, Application Software Licenses with 1000 Physical I/O tags, 10 IEDs - IEC61850 (ED1, ED2), 10 IEDs - Serial Protocol, RTU shall Communicate to Eight Independent Remote SCADA Master on IEC 60870-5-104 Mounting: To be supplied with prewired panel (Reputed make panel, IP Class: IP55/65/67). Other Accessories: Interface Modules, Pre-fabricated cables for I/O modules, Auxiliaries Relays for Power Supply monitoring, MCBs for all type of Power Supplies // SPD for DC power-1 nos. //SPD for AC power-1 nos. //SPD for serial communication- 2 nos. // SPD for ethernet communication - 1 nos.	No. / Site		1	100			0
		Interposing Relay with Mounting Base for Digital Output - 32 nos. Auxiliary Power. : 24 V DC // 2. Input signal from field: 24 V //3. Input impedance: More than 50 K ohms 4. Output signal of the RTU: 24 V / 48 V DC //5. Contact mechanism: Self Rese 6. Contact Make & Carry : 30 A for 3 Sec. & 5A continuously at 660V // 7. Number of Contacts : 2 NO with LED Indicator + Free wheeling // 8. Operating time : Less than 15 msec. 9. Other Accessories: Necessary TB, Din rail channel and other accessories] Contact Multiplier Relay with Mounting Base- 32 nos. 1. Contact Material : Silver Alloy //2. Contact Rating : 5 Amps. @ 24 V DC // 3. Contact Resistance : 50 M ohms max. (Initial) // 5. Insulation Resistance : 500 M ohms @ 500 V DC, 250 C 4. Dielectric Strength : i) Between open contacts : 500 V RMS ii) Between Contact and Coil : 2000 V RMS //8. Ambient temperature : -40°C to +70°C // 9. Life expectancy : i)							

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Sl. No.	Item	Description	UOM	HSN/ SAC Code	Qty/ RMU	Total Required Quantity (A)	Unit Rate (B)	GST (%)	Gross Price (E=A*D)
		Mechanical : 20 million DC Relay ii) Electrical : More than 100,000 Operations //10. Coil Resistance at Nominal Voltage (DC) : 30,000 Ohms +10% at 250°C //11. Type of Contact Multiplier : 1 NO + 1 NC with LED Indicator + Free wheeling// 12. Type of mounting : DIN RAIL MOUNTING WITH SOCKET // 13. No. of Poles : 1 NO + 1 NC 14. Other Accessories: Necessary TB, Din rail channel and other accessories BatteryCharger-1 nos 1. Charger Input Voltage : Single phase (2 wire) voltage 250V AC +30% to -20%, Frequency 50Hz ± 5%. 2. Constant Voltage and Current limiting charger. Charger with inbuilt battery health monitoring is highly preferable. // 3. Battery & charger Alarms : Potential free contacts must be available to integrate with SCADA for abnormality if any. Most preferred alarms are like: AC supply fail , DC supply fail, Battery Low, Battery Fail, Battery Charger fail, Battery polarity reverse. Serial Communication is preferred. 4. Charger current : 10 Ampere // 5. Efficiency : Not less than 85% at full rated load 6. Current limit : 110% of rated load // 7. Regulation : ± 1% 8. Insulation : Not less than 5 mega Ohms. //9. Protection : AC input MCCB & ELBS with input ON/OFF switch and fuses/ contactor. DC output MCCB with output ON/OFF switch and fuses. Current limit protection, soft start feature, surge suppressor. Battery:-1Set 1. Voltage : 24 VDC specified at 27 deg.C. //2. Battery Type : SMF, VRLA with chargers of conventional type 3. Voltage/cell : 2 Volts // 4. Capacity of Batteries : 42 AH,10 Amps //5. Connecting cables Cable size selection should provide the lowest voltage Drop possible between battery system and operating Equipment. 6. Method of charging : Constant voltage method and current limit (variable Current) 7. Efficiency : Not less than 90% at full rated load							

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Sl. No.	Item	Description	UOM	HSN/ SAC Code	Qty/ RMU	Total Required Quantity (A)	Unit Rate (B)	GST (%)	Gross Price (E=A* D)
		4G Modem cum Router: 1 Nos. 1. 5G Fall back to 4G/3G/2G //2. Modem should support multiband connectivity with FDD 5G & TDD 5G 3. Support Band 1,3,5,8,40 and Band 48. // Cellular modem should have dual SIM provision for network redundancy /backup . Dual SIM operation ensures that the cellular connection is always available. It will automatically disconnect the 1st SIM card's low/weak cellular connection and will reconnect to establish a stronger connection using the 2nd SIM card. //5. Network Protocols TCP/IP ,UDP/IP, HTTP, ARP,DHCP, ICMP, SNMP, V1/V2 &V1, NTP, SSL/TLS //6. Routing : Astatic Routing, RIP 1 &2 ,OSPF V2 &V1 //7. VPN : Open VPN , IP Sec, L2TP, PPTP, GRE //8. Alarm Message : Device shall have alarm notification on SNMP trap // 9. Management /Monitoring : Cellular modem should shall support ocal / Remote management through web HTMLS , SSHP & Telnet-4. It shall support monitoring through system logs & SNMP version V1/V2 & V3. Notification & command shall be possible over SMS. Firmware upgradation through Web, backup & restore of configuration shall be possible.//10. SCADA Protocols : IEC 104 – 104 Master – Multi Slave Mode: The modem should be capable to reading FRTUs in IEC60870-5-104 protocol and communicate with SCADA system on IEC 60870-5-104 protocol up to 8 masters. Adequate data interlock mechanisms should be implemented to avoid data loss. 11. No Of Antenna : The 5G Cellular modem Should have two antenna connection (MIMO).One is primary cellular antenna & second is diversity antenna(MIMO). Cable should have Low loss RF Cable with minimum 5M. Antenna Should be Omni directional with high gain (High gain ≥5). Power Supply : 18-72 V DC 12. SMS based DO operation: Modem DO should operate based on SMS received & will regain its original position after 60 sections.							
Sub Total of FRTU Panel (Panel +FRTU+CMR+HDR+DC System+ Modem) with all accessories									-
B	Managed Layer2 Ethernet Switch								
1	Managed Layer2 Ethernet Switch (FRTU Panel)	Managed L2 Ethernet Switch for IED Communication & for SCADA Integration Communication Ports: 8 PORT (with 6 Copper ports and 2 Fibre Ports SM) 100/1000 MBPS Power Supply: Input power supply 18-72 VDC Supply Mounting Arrangement: To be mounted in FRTU Panel Preferred Make: Ruggedcom/Hirschman/MOXA/CISCO Software: Software for Local and Remote configuration of Ethernet Switches - Enabling Monitoring, Configuration, Maintenance and backup of configuration files Shall support: 802.1Q VLAN, 801.2p, 802.1d STP, 802.3ad (Port aggregation), 802.1w RSTP, 802.1s MSTP, 802.3ad LACP, IEEE 802.1ab Link Layer Discovery Protocol and also suitable for Ring Configuration, IEEE 1613 compliance, IEC 61850, MODBUS, Ethernet/IP Compliance, IEEE1588 V2, Suitable for PRP/HSR architecture, Web-based, Telnet & Command Line Interface (CLI) for quickly configuring major managed functions, SNMPv1/v2c/v3 for different levels of network management, SNTP.	No. / Site		1	100			-

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Sl. No.	Item	Description	UOM	HSN/ SAC Code	Qty/ RMU	Total Required Quantity (A)	Unit Rate (B)	GST (%)	Gross Price (E=A*B)
C Multi Function Meter									
1	Multi Function Meter	Multi Function Meter: 1 No Requirement : For all 33 & 11 KV Feeders, Bus Voltages (33 & 11 kV), Station Trf, ACDB Multifunctional 3-phase Power meter, four quadrant active and reactive energy polyphase static meter Form Factor: 96 X 96 mm // Accuracy Class: 0.2 S as per IEC62053:22 Voltage Inputs: Operating range : 690 V AC line-to-line, 460 V AC line-to-neutral // Current Inputs: 1A / 5A (User selectable CT secondary 1A / 5A, PT Secondary) // Wiring configurations: 3OP2, 4LN3, 3DIR2, 4LL3, 3OP3, 3LN3, 3LL3, 3BLN3, 3BLL3 (All wiring configurations selected via the front panel) // Communication Port: RS 485 Serial Port with removable connector // Protocols: MODBUS RTU, Device Address (User Configurable - (1-247)) // Auxiliary Supply: 18-72 V DC (24 V DC) // Other Accessories: Necessary TB, Din rail channel and other accessories for flash mounting in RMU	Nos./ Site		1	100			-
Sub Total of Ethernet Switch & MFM									-
D Instrumentation Cable for Status, Control & Power Supply									
1	Instrumentation Cable	Instrumentation Cable for Status and Indications and control 24C X 1.0 mm2, Armored, 1100 V Rated, Annealed Stranded Copper, PVC insulated, Overall shielded field cable	Meters/ Site		100	10000			-
2	LT power Cable	LT power Cable 4 C X 2.5 mm2, multistrand copper cable for extending CT & CVT inputs to the MFM in the CRP panel.	Meters/ Site		20	2000			-
E Communication Cable for MFM, IEDs Integration									
1	4P X 0.36 mm2, Communication Cable	Communication Cable: 4 P X 0.36 mm2 Armored multistrand Pair and Overall shielded, for Multifunction Meter looping.	Mtrs/ Site		20	2000			-
2	Armored CAT6 SFTP Cable	Armored CAT6 SFTP Cable	Mtrs/ Site		10	1000			-
Sub Total of Control /Instrumentation/Communication Cable									-
Grand Total Supply (A+B+C+D+E)									-

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Sl. No.	Item	Description	UOM	HSN/ SAC Code	Qty/ RMU	Total Required Quantity (A)	Unit Rate (B)	GST (%)	Gross Price (E=A* D)
F Services for FRTU Panel, Communication and Other Supplied System									
1	Services of FRTU Panel, Communication and Other Supplied System	Integration and Commissioning FRTU System a) Site Survey, Design, Engineering, Finalization of BOM, FDS //b) Transportation, Delivery, Unloading and Storage //c) Installation and Commissioning of Pre-wired FRTU Panel, Networking equipment & other Accessories //d) Civil Activities for Installation of FRTU panel //e) Cable laying, termination and continuity check of all cables (Instrumentation, Communication & Power cables) //f) Integration of all Protection, MFM, and other IEDs. // g) Powering up of all supplied materials // h) Configuration of FRTU and its accessories //i) I/O testing, Pre- SAT testing of Hardware and Software functionality //j) Integrated FAT & SAT for Hardware and Software //k) Integrated testing with Purchaser's SCADA System //l) Demonstration of System Capacity and Performance Guarantee Test //m) Submission of As-Built Drawings, FRTU Backup	Lump sum / Site		1	100			-
Total of Services (F)									-
Grand Total of Supply + Services									-
J Training (10 Man-days of Trainer)									
1	Training	On-site Training on Supplied equipment and Application Software	Man-days			10			-
Total of Training									-
Grand Total of Supply + Services+Standard Warranty + Trainning									-
G Mandatory Spares									
1	Mandatory Spares (Unit Cost to be utilised for addition/ deletion of quantity as per site requirement)	FRTU Chassis	No.		-	3			-
2		CPU Module of the FRTU	No.		-	5			-
3		Power Supply Module of the FRTU	No.		-	5			-
4		Memory Module of the FRTU	No.		-	5			-
5		Communication Module (Ethernet)	No.		-	5			-
6		Communication Module (Serial)	No.		-	5			-
7		DI Cards with Interface Module & Cables for Digital Inputs	Sets		-	10			-
8		DO Cards with Interface Module & Cables for Digital Output	Sets		-	10			-
9		AI Cards with Interface Module & Cables for Analog Inputs	Sets		-	5			-
11		Any Other Modules Specific to OEM Solution	Lot		-	1			-

Central Engineering Services		Specification Name: Technical Specification for FRTU for RMU Unit

Sl. No.	Item	Description	UOM	HSN/ SAC Code	Qty/ RMU	Total Required Quantity (A)	Unit Rate (B)	GST (%)	Gross Price (E=A* D)
12		Managed Ethernet Switch - FRTU	No.		-	5			-
13		CMR Relay with Base	No.		-	20			-
14		HDR Relay with Base	No.		-	20			-
15		Battery Charger	No.		-	5			
16		Multi-Function Meter	No.		-	10			-
Total of Mandatory Spares									-
Grand Total of Supply + Services+ Standard Warranty + Training + Mandatory Spares									-

	TP CENTRAL ODISHA DISTRIBUTION LIMITED	
	WORK INSTRUCTION /OPERATING GUIDELINES	
Doc. Title	GENERAL CONDITIONS OF CONTRACT- COMPOSITE ORDERS	
Rev. No	0	Page 1 of 104

CONTENTS	
CLAUSE NO.	DESCRIPTION
1.0	ORGANIZATIONAL VALUES
2.0	ETHICS
3.0	CONTRACT PARAMETERS
3.1	Issue/ Award of Contract
3.2	Contract Commencement Date
3.3	Contract Completion Date
3.4	Contract Period/Time
3.5	Contract Execution Completion Date
3.6	Contract Execution Period/Time
3.7	Contract Price /Value
3.8	Contract Document
3.9	Contract Language
3.10	Reverse Auction
4.0	SCOPE OF WORK
4.1	Technical Evaluation
4.2	Indemnity
4.3	Display of notice boards at work site
4.4	Disposal of waste at site
4.5	Deployment of workforce
4.6	Damage of Properties
4.7	Issuance of material
4.8	Company's right to use works
4.9	Rights of TPCODL to vary the scope work
5.0	PRICES/RATES/TAXES
5.1	For Supply part of Contract
5.2	For Service part of Contract
5.3	Changes in statutory Tax Structure

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 2 of 104

CONTENTS	
CLAUSE NO.	DESCRIPTION
6.0	TERMS OF PAYMENT
6.1	Pre-Requisites for Payment
6.2	Bills & Invoices
6.3	Payment & Statutory Deductions
6.4	Guidelines for Raising Running/Final Bills
6.5	Quantity Variation
6.6	Full and Final Payment
7.0	MODE OF PAYMENT
8.0	SECURITY CUM PERFORMANCE DEPOSIT
9.0	STATUTORY COMPLIANCE
9.1	Compliance to Various Acts
9.2	SA 8000
9.3	Affirmative Action
9.4	Compliance to Labour Laws
9.5	Compliance to C&D Waste Management Rules & Environment (Protection) Amendment Rules
10.0	QUALITY
10.1	Knowledge of Requirements
10.2	Material/Equipment/Works Quality
10.3	Adherence to Rules & Regulations
10.4	Specifications and Standards
11.0	SAFETY
12.0	INSPECTION/PARTICIPATION
12.1	Right to Carry Out Inspection
12.2	Facilitating Inspection
12.3	Third Party Nomination
12.4	Waiver of Inspections
12.5	Incorrect Inspection Call
13.0	MDCC & DELIVERY OF MATERIALS
13.1	Material Dispatch Clearance Certificate

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 3 of 104

CONTENTS	
CLAUSE NO.	DESCRIPTION
13.2	Right to Rejection on Receipt
13.3	Consignee
13.4	Submission of Mandatory Documents on delivery
13.5	Dispatch and Delivery Instructions
14.0	GUARANTEE
14.1	Guarantee of Performance
14.2	Guarantee period
14.3	Failure in Guarantee period (GP)
14.4	Cost of repairs on failure in GP
14.5	Guarantee Period for Goods Outsourced
14.6	Latent Defect
14.7	Support beyond the Guarantee Period
15.0	LIQUIDATED DAMAGES
15.1	LD Waiver Request
15.2	Material Recovery
16.0	ASSIGNMENT OR SUBCONTRACTING
17.0	UNLAWFUL ACTIVITIES
18.0	CONFIDENTIALITY
18.1	Documents
18.2	Geographical Data
18.3	Associate's Processes
18.4	Exclusions
18.5	Violation
19	INTELLECTUAL PROPERTY RIGHTS
20	INDEMNITY
21	LIABILITY & LIMITATIONS
21.1	Liability
21.2	Limitation of Liability
22.0	FORCE MAJEURE

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 4 of 104

CONTENTS	
CLAUSE NO.	DESCRIPTION
23.0	SUSPENSION OF CONTRACT
23.1	Suspension for Convenience
23.2	Suspension for Breach of Contract Conditions
23.3	Compensation in lieu of Suspension
24.0	TERMINATION OF CONTRACTS
24.1	Termination for default/breach of contract
24.2	Termination for convenience of associate
24.3	Termination for Convenience of TPCODL
25.0	Dispute resolution and Arbitration
25.1	Governing laws and jurisdiction
26.0	ATTRIBUTES OF GCC
26.1	Cancellation
26.2	Severability
26.3	Order of Priority
27.0	INSURANCE
28.0	ERRORS AND OMISSIONS
29.0	TRANSFER OF TITLES
30.0	SUGGESTIONS & FEEDBACK
31.0	CONTACT POINTS
32.0	LIST OF ANNEXURES

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 5 of 104

1.0 ORGANIZATIONAL VALUES

The Tata Group has always been a value driven organization. These values continue to direct the Group's growth and businesses. The Six core Tata Values underpinning the way we do business are:

Integrity - We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.

Understanding - We must be caring, respectful, compassionate and humanitarian towards our colleagues and customers around the world and always work for the benefit of India.

Excellence - We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of goods and services we provide.

Unity - We must work cohesively with our colleagues across the group and with our customers and partners around the world to build strong relationships based on tolerance, understanding and mutual co-operation.

Responsibility - We must continue to be responsible and sensitive to the countries, communities and environments in which we work, always ensuring that what comes from the people goes back to the people many times over.

Agility - We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 ETHICS

In our effort towards Excellence and in Management of Business Ethics at TPCODL, an Ethics Management Team is constituted.

The main objective of the Ethics Management Team is to:

1. Record, address and allay the issues and concerns on ethics raised by different stakeholders like employees, consumers, vendors, Associates etc. by initiating immediate corrective actions.
2. Ensure proper communication of the ethics policies and guidelines through prominent displays at all offices of TPCODL and through printed declarations in all concerned documents where external stakeholders are involved.
3. Ensure proper framework of policies as preventive measures against any ethics violation recorded by them.
4. Prepare and submit MIS of all issues and concerns, corrective and preventive actions on monthly basis to the top management for their information.

All members of Team TPCODL, Associates and Stakeholders are requested to submit any grievance on ethics violation to Mr. Rajeev Kharyal, Chief Ethics Counselor.

3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

TPCODL awards the contract to the Associate in writing in the form of Purchase order or Rate Contract (RC) hereafter referred as Contract, through in any or all of following modes- physical handover / post / e-mail / web document / fax with all the attachments/enclosures which shall be part of the contract document

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 6 of 104

On receipt of the contract, the associate shall return to TPCODL copy of the contract document duly signed by legally authorized representative of associate, within two days of Effective Date of Contract for contracts having contract execution time less than 30 days and within five days for all other contracts.

3.2 Contract Commencement Date

The date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.3 Contract Completion Date

The date of expiry of Guarantee Period (detailed in section 12 of this document) shall be deemed as the Contract Completion Date.

3.4 Contract Period/Time

The period from Contract Commencement Date to Contract Completion Date shall be deemed as the Contract Period/Time.

3.5 Contract Execution Completion Date

The stipulated date for completing the execution of all items in the schedule of quantities (Supply, Service and or both as applicable) shall be deemed as the Contract Execution Completion Date.

3.6 Contract Execution Period/Time

The Period from Contract Commencement Date to Contract Execution Completion Date shall be the Contract Execution Period/Time. Timely Completion of Works/Timely Delivery of Materials is the essence of the contract. The period from effective date of contract to the date stipulated for completion of delivery of all items/completion of all the works/services, as per schedule of quantities of the contract is defined as contract execution completion time. The Delivery of Materials /The Completion of Works, as applicable, should be achieved in all respects as per schedules of quantities and all the terms and conditions of the contract, in the contract execution time.

Any revision/amendment in the originally stipulated contract execution time has to be approved by authorized representative of TPCODL.

3.7 Contract Price /Value

The total all inclusive price/value mentioned in the LOI/PO/RC of the contract document is the Contract Price/Value and is based on the quantity, unit rates and prices quoted and awarded and shall be subject to adjustment based on actual quantities supplied/actual measurement of work done and accepted and certified by the authorized representative of the company unless otherwise specified in schedule of quantities or in contract documents.

3.8 Contract Document

The Contract Document shall mean and include but not limited to the following:

- NIT/Tender Enquiry, QR, Instruction to Bidders, Special Condition of Contract (SCC) of tender, GCC, Technical & Commercial Specifications including relevant annexure and attachments).
- Bids & Proposals Received from Associate including relevant annexure/attachments.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 7 of 104

- Letter of Intent (LOI/RC/PO) with agreed deviations from the tender/bid documents.
- All the Inspection and Test reports, Detailed Engineering Drawings.
- Material Dispatch Clearance Certificate (MDCC).
- Minutes of Meeting (MoM)

3.9 Contract Language

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language.

The Contract documents and all correspondence between the TPCODL, Third Parties associated with the contract, and the Associate shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi, and local languages.

3.10 Reverse Auction

TPCODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached in Annexure J. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form as mentioned in the Annexure J as a token of acceptance for the same.

4.0 SCOPE OF WORK

All the activities that are to be undertaken by the Associate to realize the contractual deliverables in completeness form Scope of Work. Following clauses list, but not limited to, major requirements of the scope of work.

The associate shall satisfy himself and undertake fully the technical/commercial requirements of items to be supplied as listed in the Schedule of Quantities together with the tests to be performed /test reports to be furnished before dispatch, arrangement of stage and final inspections during manufacturing as per terms and conditions of contract, technical parameters & delivery terms and conditions including transit insurance to be met in order to fully meet TPCODL's requirements.

Completeness: Any supplies and services which might have not been specifically mentioned in the Contract but are necessary for the scope mentioned in Special Terms & Conditions and/or completeness of the works at the highest possible level, including any royalties, license fees & compensation to be paid, whether incurred by the associates or by a third party for the work covered in the scope, regardless of when incurred, shall be supplied/provided by the associate without any extra cost and within the time schedule for efficient, smooth and satisfactory operation and maintenance of the works at the highest possible level under Indian conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this Contract.

TPCODL have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 8 of 104

Contract by submitting a request in writing to the Associate. The Associate shall, within fifteen days of receipt of such request from the TPCODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPCODL requests a change, the Contract price and time shall be adjusted upwards or downwards, as the case may be and shall be mutually agreed to. The associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes as requested till adjustment of contract price and time schedule where so applicable in terms of or otherwise directed by the TPCODL.

4.1 Technical Evaluation

TPCODL reserves the right to assign scores to different parameters including but not limited to the following while evaluating the bids. TPCODL reserves the right to change the parameters and score without prior information to the associates:

S. No.	Evaluation Parameter	Max. Score
A	Bidders already Registered with TPCODL	100
	Quality of the Products & Services	
	a. <u>For Supply Part:</u> No Material Rejections in last 2 years Deduction of 3 marks for each PO/ RO (for same product category) with major rejections in last 2 years. (Major rejection shall be considered when material is taken back by the vendor for rectification and the quantity of rejected material is more than 10%).	12
A.1.	b. <u>For Service Part:</u> No violation of statutory compliances in last 1 year. Deduction of 2 marks for each instance of violation in last 1 year.	12
	c. <u>Safety</u> Deduction of 2 marks for each instance of safety violation in last 1 year. Deduction of 4 marks for each reported Non-Fatal Accident in last 1 year. In case of any reported fatal accident: ZERO MARKS	16
A.2.	Timely Execution of Contracts Total Achieved Score = {30 – 3 x (Avg. %age LD deductions in last 2 years)}	30
A.3.	Legal Issues with TPCODL Zero instances of Arbitration procedures / Court Cases / PBG forfeitures in last 2 years: 30 marks else 'Zero' marks	30
B	Bidders new to TPCODL	100
	Visits <u>For Supply Part:</u> Factory Visit and Evaluation. <u>For Service Part:</u> Client Site Visit where the bidder is providing similar services.	30
B.1.	The visits as above shall be arranged by the bidder. However all costs towards conveyance, lodging, boarding etc. shall be borne by TPCODL. The score assigned by TPCODL based on the above visits shall be final and binding on the bidder.	
	Safety:	20

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 9 of 104

S. No.	Evaluation Parameter	Max. Score
	Score achieved against the BA safety Management System questionnaire.	
B.2.	Client Referrals At least 3 nos. Customer References for similar products/ services in last 3 years. All customer references shall be either of the following: - Govt. Organizations/ PSUs/ Power Distribution Utilities. - Private Organizations with an annual turnover of ≥ 500 cr. PO copies or Completion Certificates are admissible. Each reference: 10 marks	30
B.3.	Blacklisting Information Not blacklisted by any reputed organization / utility in last 2 years: 20 marks else 'Zero' marks.	20

- Bidder shall be considered as technically qualified if they are able to achieve a technical score of >70 marks on the above parameters. 'A' or 'B'.
- The bidder must have the PF and ESI registration. In case it is not there (provided the bidder is not exempted from the PF and ESI), bidder shall not be evaluated on the above parameters and will be considered as disqualified.

4.2 Indemnity

Associates shall undertake to fully indemnify TPCODL (also referred to as the Company in the GCC) against all kinds of liabilities or damages, of whatsoever nature, including compensation arising from any accident to the person or property of those in Associate's employment or to any other person or properties including those of TPCODL, arising due to reasons attributable to any, act, omission or negligence of the Associate the Associates, for the entire period of contract including period of guarantee.

Within 7 days of award of work, the Associates shall submit Indemnity Bond in the format as per Annexure-E to Order Issuing Authority.

Contract having value more than Rs 2 Cr per Annum, Associates shall submit Indemnity Bond on Rs 100/- Non Judicial Stamp Paper in the format as per Annexure- E to Order Issuing Authority.

4.3 Display of Notice Boards at Work Sites

The Associate shall put up display notice board at each project site where the works are in progress indicating the information given below:

- Name of the Project.
- Estimated Cost of Project.
- Date of Commencement.
- Expected date of completion.
- Name of Associate and his telephone number.
- Name of Engineer-in-Charge and his telephone number.

4.4 Disposal of Waste at Site

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 10 of 104

The associates shall follow the below criteria for disposal of waste at site during the execution of project.

- Associate shall ensure that the detailed project plan include the waste management, segregation of all designated waste material (Recyclable/ Non-Recyclable), collecting, storing, disposing and transferring the same to pre-arranged facility/destination in timely and safe manner as per environmental legislations during the execution of project. The project plan shall also include the innovative construction practice to eliminate or minimize waste, protect surface/ground water, control dust and other emissions to air and control noise during the execution of project. The copy of same shall be given to EIC before the commencement of project.
- The purchase policy of BA shall encourage the procurement of material with recycled and minimum packaging of goods during delivery. Associate shall provide the appropriate means for site to site transportation of materials to avoid damage and litter generation.
- Associate shall educate and inform to its project team about the requirement and responsibilities for waste minimization and disposal in general and provide training of practices that support this. Waste management should be treated like a safety program.
- In the event that area of contaminated or biological hazard is identified, Associate shall ensure that plant, equipment, personnel and any activity associated with the work is carried out in consultation with EIC of TPCODL.
- Associate shall ensure that the residents living near the site are kept informed about proposed working schedule and shall informed timings and duration of any abnormal noise full activity that is likely to happen.
- Associate shall ensure the regular maintenance and monitoring of vehicles and equipment for efficient fuel use so that emissions and noise are within acceptable limits to avoid air pollution.

4.5 Deployment of Work Force

Associate shall deploy adequate labour, as considered necessary by TPCODL for execution of the contract including Sundays and Holidays whenever required to do so with no extra cost to TPCODL. However, prior permission shall be taken from the site Engineer to carry out the work beyond normal working hours or on Sundays and Holidays. Female employees shall not be deployed beyond normal working hours/days and no child labour shall ever be deployed. Associate shall depute full time qualified and experienced engineers to supervise the work at site. All such staff shall be maintained from commencement to completion of all works to the entire satisfaction of the Engineer-in-Charge. Associate's employees deployed for the works under this contract will not be considered in Company's employment at any time. Associate shall continue to be responsible for all such employees, their safety, all types of statutory compliances related thereto and in any other manner whatsoever. The company will stand indemnified by the Associate in respect of all the above. At the same time Company upon noticing any breach or default on any statutory compliances, may at their sole discretion, decide to act in a manner as deemed fit at the risks and costs of the Associate.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 11 of 104

TPCODL shall have the right to instruct the Associate to change the Sub- Associates or skilled /unskilled workers in case the conduct, the workmanship or speed of the work is not satisfactory.

Associates shall submit duly signed undertaking regarding engagement of competent staff / employee commensurate to the nature of job to Engineer-in-charge in the format attached as Annexure – H.

4.6 Damages to Properties

The Associates shall take necessary steps to ensure that the equipment and installations of the Company, Third parties, including other utility services like water supply pipelines; open drains telephone cables etc. are not damaged during execution of the works. The Associates shall be responsible for all such damages and shall have to repair/ replace and/or compensate for the entire claims in respect of such damages at its own cost.

4.7 Issuance of Material

The material issued to the Associate shall be in the custody of the Associates who shall be fully responsible for the same. After completion of the works, the Associates will reconcile the material. Any cost of material which is short or damaged/lost will be deducted from Associate bill/ deposits.

4.8 Company's Right To Use Works

If Taking Over Certificate is delayed for any reason, for which TPCODL's decision shall be final and binding upon the Associate, the Company shall be entitled to use the works or portion thereof without affecting Associate's responsibility and liability to complete the balance works as per company's directives from time to time, though Associate shall be afforded reasonable opportunity by the company to enable Associates to complete all balance works required for issuance of 'Taking Over Certificate' by the company.

4.9 Rights of TPCODL to vary the scope work

TPCODL shall have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by communicating the intent to do so in writing to the Associate. On receipt of such communication the Associate shall, within the time frame specified in the contract shall provide TPCODL with a reasonably detailed estimate of the cost of the change in scope outlined in the TPCODL communication. The change in the Contract price and time shall be revised upwards or downwards, as the case may be, and shall be mutually agreed to. The Associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes in the scope of work till such time revision of Contract price and time schedule are approved and communicated to the associate by TPCODL.

Any change in the Scope of Work and/or Terms & Conditions of the order shall be intimated by TPCODL through an amendment to the contract. The amendment shall be treated valid only if signed by the authorized signatory of the original contract.

5.0 PRICES/ RATES/ TAXES

5.1 For Supply part of Contract

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 12 of 104

Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPCODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPCODL store/site & unloading & delivery at TPCODL stores/TPCODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices/rates shall remain firm till actual completion of entire supply of goods/material/equipment as per contract is achieved and shall remain valid till the completion of the contract.

The prices shall remain unchanged irrespective of TPCODL making changes in quantum in all or any of the schedules of items of contract.

5.2 For Service part of Contract

The Prices and Rates are inclusive of cost of materials supplied as per contract terms and for which MDCC is issued by TPCODL and to the extent required for completion of works, cost of service executed as per schedule of quantities, cost of testing as per contract terms, cost of documentations including all relevant test certificates and other supportive documents to be furnished as per contract terms. The rates shall remain firm till actual completion of contract.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices shall remain unchanged irrespective of TPCODL making changes in quantum in all or any of the schedules of items of contract.

5.3 Changes in Statutory Tax Structure

If rate of any or all of the statutory taxes and duties applicable to the contract changes, such changes shall be incorporated by default if the changes occur within the contract execution time and shall be applicable if the contract is executed by the Associate within the Contract Execution Time.

For execution of contracts beyond contract execution time, where the delay is not attributable to TPCODL no upward revision in tax /duties shall be considered irrespective of changes in the statutory tax structure either within the contract execution time or beyond. However, in such cases, benefits due to any downward revisions in statutory tax rates shall be passed on to TPCODL.

6.0 TERMS OF PAYMENT

- A. 5% of the Release Order/ Purchase Order price shall be paid as initial interest free advance on fulfillment of the following by the Associate:
 - a) Acceptance of PO/ LOI.
 - b) Submission of advance payment BG of 15% of the Release Order/ Purchase Order price which shall remain valid till the advance is fully adjusted.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 13 of 104

- c) Submission of Contract Performance Bank Guarantee of 5/10% of the RC/ PO price valid till 30 days after taking over of the works.
- B. 10% of the Release Order/ Purchase Order price shall be paid as interest free advance against approval of drawings under Category-1 of major drawings, Quality Plans, Pert Chart, Field Quality Plan, posting of Project Manager and commencement of the first mile stone of the work mutually agreed including C-3 Form, and submission of a true copy of 'Erection All Risk Insurance Policy' taken for the awarded jobs. The drawing list shall be mutually agreed at the time of award of work.
- C. 50% on account payment of the total of item wise cost of material Release Order/ Purchase Order shall be paid against receipt of material at site in good condition and certification by TPCODL along with bills complete in all respects viz. MDCCs etc.
- D. 20% on account payment of the actual executed value shall be paid against mechanical completion of erection on prorata basis against monthly bills and 70% on account of the actual executed value shall be paid against the service line item including composite line item. In case this milestone is not completed beyond 120 days for reasons attributable to TPCODL, the payment corresponding to supply part shall be released subject to submission of BG of equivalent amount by the BA valid for a period of further 12 months. If required, it shall be extended by the BA on request of TPCODL.
- E. 15% payment of the actual executed Release Order/ Purchase Order shall be paid after completion of acceptance test and Taking Over of the complete systems specified in the enquiry, including clearance of Electrical Inspection, compliance of final punch point and after reconciliation & adjustment of payments, if any, towards Quantities of materials issued from purchaser's stock and consumed by the contractor for expeditious completion of the job. In case this milestone is not completed beyond 120 days beyond schedule for reasons attributable to TPCODL, the payment corresponding to supply part shall be released subject to submission of BG of equivalent amount by the BA valid for a period of further 12 months. If required, it shall be extended by the BA on request of TPCODL.

The Contractor shall submit all Operation & Maintenance manuals and "As Built Drawings" etc. and shall also submit Equipment Warranty Bank Guarantee (EWBG) equivalent to 5/10% of actual executed contract price before the release of this last payment and return of CPBG. The validity of EWBG shall be for a period of 15 months from the date of taking over of the works or specified guarantee period in drawing/tender/technical specification documents etc. whichever is later. The associate shall also submit 'No Demand Certificate' at the time of receipt of full and final payment.

6.1 Pre-Requisites for Payment

- Associate should have completed execution of that part of contract, for which payment is sought, to the satisfaction of TPCODL's Engineer-in-Charge responsible for the contract and obtained certification for execution of the work.
- Associate has undertaken joint measurement of the work executed along with TPCODL's Engineer-in-charge

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 14 of 104

- Associate's bills/invoices submitted have been certified by Engineer-In-Charge.

6.2 Bills & Invoices

Unless specified otherwise in the special conditions of contract, Associate shall raise not more than one invoice/contract per month for the services rendered in the prescribed Tax Format and the invoice shall be submitted within 15 days of the following month at Bill Inward Receipt Desk (BIRD) located at IDCO Towers, Janpath, Bhubaneswar.

All Bills shall be supported by joint measurement of work done, quality test report and a copy of wage sheet, if applicable (showing proof of having disbursed wages as per applicable law) and a copy of statement substantiating that statutory payments having been affected.

Bills/ invoices shall mention Associate's 'Sales, Service, WCT Tax Registration Number, PAN number as applicable.

Final bill submission after completion of project or execution of job must be within 30 days from the actual date of completion/execution of work awarded.

6.3 Payment & Statutory Deductions

Payment shall be released within 30 days from the submission of the bills. The associate shall submit "No Demand Certificate" in the format as per Annexure-D at the time of receipt of full and final payment. In case any non-compliance to contract conditions comes to TPCODL's notice, TPCODL will be entitled to deduct 30% of estimated wages plus 20% of wages as TPCODL's overheads. Associates would be obliged to provide the copy of monthly wage sheet in any case, failing which no payment shall be made. TPCODL at their sole discretion may deposit the PF etc. with statutory authorities. TPCODL will deduct the amounts of TDS as per statutory requirement under the income tax act and the DVAT Act and certificates (wherever applicable) will be issued to associate accordingly.

In case of non-submission of PAN No TDS @ 20% shall be deducted from all payable amounts for which no TDS certificate shall be issued. TDS once deducted as above shall not be revised in any condition.

6.3.1 Statutory Deductions

TPCODL will deduct the amounts of TDS, TCS as per statutory requirement under the income tax act, the Goods and Services tax act, BOCW Act, or any other applicable tax act and certificates (wherever applicable) will be issued to associate accordingly. For consumption of TPCODL's Water and Electricity by Associate for execution of Contract, Associate shall pay 0.5% & 1.0% respectively of contract value and it shall be deducted from the running bills. The Engineer-in-Charge as stated in the Order shall be responsible for certification of the work executed and the bills. Bills (including original) shall be submitted in triplicate at Bill Inward Receipt Desk (BIRD) located at IDCO Towers, Janpath, Bhubaneswar.

6.4 Guidelines for Raising Running/Final Bills

Contract Value Up to 5 Lakhs	One Final Bill
Contract Value More than 5 lakhs	Monthly Running Bill & One Final Bill

All Bills shall be processed only when all bank Guarantees are in place and before payments of Final Bill Associate have to furnish NDC.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 15 of 104

6.5 Quantity Variation

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by TPCODL and not on the basis of contract quantity.

6.6 Full and Final Payment

Full & Final Payment in all contracts shall be made subject to the associate submitting "No Demand Certificate" in the format as per Annexure-D.

7.0 MODE OF PAYMENT

Payment shall be made through RTGS mode for which Business Associated shall submit the details of Bank Account and other details as per annexure K. Further, for any payments made, TPCODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate.

The quantities of items indicated are estimated and preliminary. However, payments shall be made on the basis of actual quantity of work carried out and measured jointly by the Company and the Associate. Associates shall be responsible to organize joint measurements of works with TPCODL Engineer-in-Charge before raising any bill of work done. In the event Associate fails to do so, TPCODL at their sole discretion, may take measurements of work done and proceed as deemed fit and in such an event Associate's right to lodge any subsequent claim shall stand forfeited.

8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 15 days from the effective date of issue of PO/RC, Security cum Performance Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPCODL for:

(a) 5% of the PO value if purchase order value is more than Rs 5 Crores.

(b) 10% of the PO value if purchase order value is less than Rs 5 Crores.

This shall remain valid till the end of the Guarantee Period of contract, plus one month.

(c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.

- For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by TPCODL while processing the invoice and shall be released after completion of Guarantee Period plus one month.
- For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable.
- In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPCODL. Alternatively, Associate may extend the

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 16 of 104

validity of original SPBG only till the requisite period, i.e. Guarantee Period plus one month.

9.0 STATUTORY COMPLIANCE

9.1 Compliance to Various Acts

Associate should ensure adherence to all applicable laws, rules and regulation applicable under this contract from time to time. In case of violation any risk, costs etc shall be in associates account and keep TPCODL indemnified always till completion of contracts.

9.2 Social Accountability

TPCODL expects its Associates to follow guidelines of best practices on the following aspects

1. Child Labour
2. Forced or Compulsory Labour
3. Health & Safety
4. Freedom of Association & Right to Collective Bargaining
5. Discrimination
6. Disciplinary Practices
7. Working Hours
8. Remuneration
9. Management System

9.3 Affirmative Action

TPCODL appreciate and welcome the engagement/employment of persons from SC/ST community or any other deprived section of society by their business associates.

Relaxation in Contract Clauses under Affirmative Action for SC/ ST Business Associates**

TPCODL believes that inclusive growth is the key to sustainable development, and to promote the same Policy on Affirmative Action for Scheduled Caste & Scheduled Tribe Communities has been adopted across the company.

Under the same pre-text, and to promote entrepreneurship among SC/ST community TPCODL has taken initiative by proposing relaxations in contract clauses as per below:

S. No.	Initiative	for SC/ ST BA's	Guideline Document
1	Tender Fees	100% waiver for SC/ST community	All Open Tenders
2	Earnest Money Deposit	50 % relaxation of estimated EMD value	All limited and Open Tenders
3	Performance Bank Guarantee	25% relaxation in PBG for order value above 50 lacs else 50% relaxation	All limited and Open tenders
4	Turnover	25% relaxation in company turnover under qualifying requirement criteria	All Open Tenders

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 17 of 104

****Classification of BAs under SC/ST shall be governed under following guidelines:**

- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be duly audited balance Sheet for the last FY bearing the name of proprietor.
- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and audited balance sheet/ ITR for last FY.
- Private limited company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Certification from SC/ST commission shall be required for deciding upon SC/ST status of a person.

9.4 Compliance to Labour Laws

Bidder needs to ensure compliance to applicable labour laws including timely disbursement of wages. In case wages are not disbursed as per the stipulated timelines, then TPCODL shall pay the wages to BA employees on behalf of BA. Apart from deducting the amount of wages paid, TPCODL shall deduct an additional service charge equivalent to 25% of the wages paid from the payment due to BA.

9.5 Compliance to Construction and Demolition Waste Management Rules & Environment (Protection) Amendment Rules

BA is liable to follow the Construction and Demolition Waste Management Rules- 2016, Environment (Protection) Amendment Rules- 2018 and Guidelines on dust mitigation measures in handling construction material and C&D wastes issued by CPCB.

Following are some main points of above Rules/Guidelines for Construction work, cable laying jobs etc.

1. Barricading to be provided at site to cover complete area.
2. Construction material and waste should be inside the closed area made by using barricading.
3. Water sprinkling/fine spray from nozzles to be done to suppress the dust.
4. The board of Dust mitigation measures shall be displayed at site for public viewing with required details.
5. Loose sand or soil and construction material that causes dust shall be covered.
6. Transport material that are easily wind borne need to be covered by a sheet made of either jute, tarpaulin, plastic or any other effective material.
7. All areas for storing C&D waste/construction material to be demarcated and preferably barricaded particularly those materials that have potential to be dust borne.
8. Grinding and cutting of building materials in open area shall be prohibited.
9. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
10. No uncovered vehicles carrying construction material and waste shall be permitted.
11. Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures to be notified at the site.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 18 of 104

10.0 QUALITY

10.1 Knowledge of Requirements

The Associate shall be deemed to have carefully examined and to have knowledge of the equipment, the general and other conditions, specifications, schedules, drawings, etc. forming part of the Contract and also to have satisfied himself as to the nature and character of the work to be executed and the type of the equipment and duties required including wherever necessary of the site conditions and relevant matters and details. Any information thus procured or otherwise obtained from TPCODL/Consultants shall not in any way relieve the Associate from his responsibility and executing the works in accordance with the terms of contract.

10.2 Material/Equipment/Works Quality

The items / works under the scope of the Associate shall be of the best quality and workmanship according to the latest engineering practice and shall be manufactured from materials of best quality considering strength and durability for their best performance and, in any case, in accordance with the specifications set forth in this Contract. All material shall be new. Substitution of specified material or variation from the process of fabrication/construction/manufacture may be permitted but only with the prior written approval of the TPCODL.

10.3 Adherence to Rules & Regulations

The Associate shall procure and/or fabricate/erect all materials and equipment in accordance with all requirements of Central and State enactment, rules and regulations governing such work in India and at site. This shall not be construed as relieving the Associate from complying with any requirement of TPCODL as enumerated in the Contract which may be more rigid than and not contrary to the above mentioned rules, nor providing such construction as may be required by the above mentioned rules and regulations. In case of variance of the Technical Specification from the laws, ordinance, rules and regulations governing the work, the Associate shall immediately notify the same to the TPCODL. It is the sole responsibility of the Associate, however, to determine that such variance exists. Wherever required by rules and regulations, the Associate shall also obtain the statutory authorities' approval for the plant, machinery and equipment to be supplied by the Associate.

10.4 Specifications and Standards

The Associate shall follow all codes and standards referred in the Contract Document. Codes and standards of other may be followed by the Associate with the prior written approval of TPCODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name and qualities of the bought out items without the prior written approval of the TPCODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPCODL. In any

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 19 of 104

circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

11.0 SAFETY

All Associates shall strictly abide by the guidelines provided in TPCODL's Contractor Safety Management System (CSMS) as applicable at all stages during the contract period. Associate shall execute the contracts ensuring the following in and as order of priority:

- Safety of Human Beings.
- Safety of equipment/Assets.
- Timely Completion of Contract.

Safety related requirements as mentioned in our Contractor Safety Management System is attached as annexure L and is an integral part of this GCC.

12.0 INSPECTION/PARTICIPATION

12.1 Right to Carry Out Inspection

TPCODL reserves the right to send its representatives for inspection or participation at various stages of contract execution listed below, applicable as per contract construction.

- During basic design and detail engineering of material/ Equipment carried out by Associate /Outsourced Agencies.
- During manufacturing stages of the product at Associate's/Associate's Outsourced Agency's Plant/Facility.
- During Pre-dispatch Inspection and Testing of finished/manufactured product at Associate's/Associate's outsourced Agency's Plant/Facility.
- During Installation & Commissioning Activities/Stages.
- Prior to Clearing of the completed installation for commissioning.
- Any other stage as find appropriate by TPCODL during contract execution time.

All inspections and participations shall be carried out within maximum of two weeks of TPCODL giving written intimation to the Associate or receiving appropriate advance written inspection call from the Associate, unless otherwise specified elsewhere in the contract document.

12.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TPCODL's engineers to get acquainted with the technical know-how and the methods and practices adopted by the Associate in basic and detail engineering. The Associate shall provide documents, drawings, calculations etc. as may be required by TPCODL's Engineers.

The Associate shall provide free of charge office accommodation, office facilities, secretarial services, communication facilities, general and drawing office stationary, etc. as may be reasonably required by the TPCODL's engineers. Similarly, facilities shall also be provided by Associate's outsource agencies/partners/authorized dealers (collectively termed as sub-associates) if such basic and detail engineering activities are carried out in the design offices of sub-Associates.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 20 of 104

The Associate shall be responsible for the safety of employees of TPCODL/Third Party Agency when they are at the Associate's /Associate's outsource agency's plant or facility for carrying out/witnessing inspection/testing. All statutory safety precautions as applicable shall be followed by the Associate during Inspection Testing. If TPCODL inspectors are not satisfied with the safety arrangements at the plant, TPCODL have the right to call off inspection till such time corrective action is taken by the Associate.

Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc-as specified in the contract document and submit copies of the test certificates to TPCODL along with the inspection call, for scrutiny of TPCODL.

The Associate and TPCODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to provide compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TPCODL for receiving clearance for dispatch of materials.

12.3 Third Party Nomination

TPCODL also may nominate a third party for the purpose of carrying out the inspection and such an agency shall be entitled to all the rights and privileges of TPCODL as far as conducting the inspection.

12.4 Waiver of Inspections

TPCODL on its own discretion shall chose to waive off any inspection and ask the Associate to submit all the test reports as applicable as per contract specifications, related to inspection and testing of the goods ordered for scrutiny and clearance for dispatch.

12.5 Incorrect Inspection Call

In case it is observed that the material offered for inspection is not ready at the time of TPCODL inspection visit rendering it as futile, all costs towards such inspection shall be recovered from the BA. Taxes as applicable on such recoveries shall be borne by the BA.

13.0 MDCC & DELIVERY OF MATERIALS

13.1 Material Dispatch Clearance Certificate

Associate shall deliver material/goods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate (hereafter termed as MDCC) issued by designated authority of TPCODL. Material delivered at TPCODL stores or at project site without a valid MDCC issued by the designated official of TPCODL shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documented during pre-dispatch inspection and testing at Associate's/ Sub-Associate's plant/ facility. In case Pre-dispatch inspection is waived at the discretion of TPCODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.

The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, sea, rail and road or any other means.

All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall take special precautions to prevent rusting of steel and iron parts during

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 21 of 104

transit by sea. Gas seals or other materials shall be utilised by the associate for protection against moisture during transit of all Plant and Equipment.

Each Equipment or parts of Equipment shall be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the associate, item description, quantity, item / package identification.

All packing cases, containers, packing and other similar materials shall be new and supplied free by the associate and it shall not be required to be returned to the associate.

Notwithstanding anything stated in this clause, the associate shall be entirely responsible for loss, damage or depreciation or deterioration to the materials and supplies due to faulty and/or insecure packing or otherwise during transportation to the Site until otherwise provided herein.

In case of the consignments dispatched by road, the associate shall ensure that it or its sub-contractors:

- i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.
- ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

Timelines for inspection and MDCC is as below:

S. No.	Inspection	MDCC issuance time including inspection time (max.)
1	Outside Bhubaneswar	12 days
2	Within Bhubaneswar	5 days
3	Waiver*	3 working days

* Associate is expected to raise the inspection call assuming that Inspection shall be carried out by TPCODL. The decision for waiver of inspection shall be on sole discretion of TPCODL.

13.2 Right to Rejection on Receipt

Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPCODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPCODL.

If delivery of the material is beyond the agreed time, Liquidated damage clause, mentioned in this GCC separately shall be applicable; but the period for levy of LD shall be considered as per the original delivery schedule and not from the agreed timelines for material rectification.

13.3 Consignee

Unless otherwise specified in the Contract Document, Materials/Goods/Equipment shall be consigned to "Stores-In-Charge", TPCODL Bhubaneswar.

13.4 Submission of mandatory documents on Delivery

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 22 of 104

Following documents shall be mandatorily submitted by BA along with supply of material to TPCODL stores/site:

S. No.	Documents	Requisite
1	Invoice copy in original	With all consignments
2	LR copy	Wherever required
3	Packing list	With all consignments
4	MDCC	With all consignments
5	Purchase order / Release order	Signed copy
6	Test certificates	With all consignments
7	Inspection/JVR report	In case pre-dispatch inspection is conducted
8	Device data in CD as per template for metering items	Wherever applicable

13.5 Dispatch and Delivery Instructions

S. No.	Instructions
1	Purchase order/ Release order no. shall be mentioned on invoice and on material
2	TPCODL material code and material description shall be mentioned in invoice and on material.
3	"Property of TPCODL" shall be embossed on material.
4	The material shall be properly sealed and packed in standard packing as per purchase order terms & conditions.
5	The weight and quantity of material shall be mentioned wherever applicable
6	The material supplied shall be co-related with the packing list.
7	The name plate detail on equipment shall include Material code, Material description, specification detail of material [as applicable], Serial No. Year of manufacturing, PO/RO no. and date, "PROPERTY OF TPCODL, Bhubaneswar", Guarantee period and Associate's name.
8	In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at TPCODL central store. For heavy item(s), crane will be provided by TPCODL [unloading cost will be recovered from the associate].
9	The driver should have valid License and one helper in truck. All the documents of truck like registration papers, PUC etc. should be available in Truck.
10	BA representative should accompany the material and get it unloaded / stacked in his presence wherever possible.

14.0 GUARANTEE

14.1 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied/service or work rendered under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract. for a specific period termed as Guarantee Period(as elaborated elsewhere in this clause) The

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 23 of 104

Associate should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

14.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TPCODL for the equipment/material/service/work and where standard specifications are not part of contract documents or guarantee period is not specified in the standard specifications,, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC, Guarantee Period will be 15 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

14.3 Failure in Guarantee Period (GP)

If the equipment and material supplied/service or work rendered under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied/service or work rendered under the contract within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied/service or work rendered under the contract, failed in Guarantee Period, TPCODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPCODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.

If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/ damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by TPCODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPCODL within 7 days of reporting the issue by TPCODL. Thereafter, the total time for supply of new equipment/ material shall be equal to the original delivery period of that equipment/ material as specified in the Contract. In case the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.

14.4 Cost of repairs on failure in GP

The cost of repairs/rectification /replacement, apart from the actual cost of repairs/rectification/replacement is also inclusive of all associate costs of required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable, to be borne by the Associate. The Associate has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 24 of 104

14.5 Guarantee period for Goods Outsourced

If the Associate outsources partly equipment/materials/services from third party as mutually agreed upon at the pre award stage of contract, TPCODL shall have the benefit of any additional guarantee period if provided by the third party for the part supplied/executed by them.

14.6 Latent Defect

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

14.7 Support beyond the Guarantee Period

The Associate shall ensure availability of spares and necessary support for a period of at least 10 years post completion of guarantee period of equipment supplied against the contract.

15.0 LIQUIDATED DAMAGES

Liquidated damages @1% of the total executed contract value per week or part thereof, for the period of delay in integrated completion, subject to maximum 10% of the value of the contract shall become leviable without prejudice to other rights of the TPCODL. This amount shall be recoverable from any amount due or becoming due to the Business Associates under this or any other contract. In specific cases, TPCODL reserves the right to apply LD only on the unexecuted portion of the supply and works for standalone use, provided full quantity is executed within a maximum 30% additional time. Deduction of LD shall be on landed cost i.e contract value inclusive of taxes and in pursuant statutory compliance GST would be applicable at the stipulated rate and the same shall be borne by Business Associate. In case of LD deduction, a GST invoice shall be issued by TPCODL as a proof of deduction/ recovery.

15.1 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD. Request submitted beyond the timeline shall not be entertained.

15.2 Material Recovery

In case of any recoveries for materials or services (for material free issued by TPCODL and not reconciled by BA or for services claimed and paid in excess at the time of running bills), the total cost which shall be recovered from the BA, shall be the gross amount of material or services (i.e. including taxes) plus applicable taxes as prevailing at the time of such recoveries.

16.0 ASSIGNMENT OR SUBCONTRACTING

Associates shall not assign/subcontract/outsourced the schedule of activities of contract TPCODL enters with the associate, in part or full, without TPCODL's prior written approval.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 25 of 104

However outsourcing of materials/equipment/services by Associate to make the integrated product for which TPCODL's has placed the contract with the associate from suppliers, makes and agencies which have been mutually agreed upon during contract pre-award stage is permitted subject to following conditions.

In such cases where outsourcing is done by the Associate

- Shall ensure that outsourced suppliers comply with the technical and financial qualification requirements specified by TPCODL in the contract document
- Shall furnish all particulars about the proposed outsourcing agencies and the details of the goods/services/work outsourced to the Associate while seeking approval of TPCODL for inclusion for outsourcing. The Associate shall give approval or shall refuse approval in writing within thirty (30) days of receipt of such request. However the Associate shall not be entitled for any additional contract execution time whatsoever in lieu of the process for approval for outsourcing agencies, and shall be held responsible for any delay in the project execution time.
- Shall remain jointly and severally liable for any action, deficiency, and/or negligence on the part of his outsourcing agencies. The approval extended by the Associate to outsourcing agencies recommended by the Associate shall not discharge the later from his Contract obligations.

Shall submit to the Associate unpriced copies of purchase orders with technical specifications included in the orders, placed on outsourcing agencies as soon as the respective orders have been placed by the Associate.

17.0 UNLAWFUL ACTIVITIES

The Associate shall have to ensure that none of its employees are engaged in any unlawful activities (whether covered under the scope of the present GCC or not) subversive of the TPCODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPCODL, in accordance with the terms of the present GCC.

18.0 CONFIDENTIALITY

Associate and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

18.1 Documents

All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Associate by the TPCODL in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TPCODL and shall not be used or disclosed to third parties by the Associate for any purpose other than for which they have been supplied or prepared. The Associate may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the TPCODL.

18.2 Geographical Data

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 26 of 104

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPCODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TPCODL and upon execution of confidentiality agreements satisfactory to the TPCODL with such third parties prior to disclosure.

18.3 Associate's Processes

Title to secret processes if any developed by the Associate on an exclusive basis and employed in the design of the equipment shall remain with the Associate. TPCODL shall hold in confidence such processes and shall not disclose such processes to the third parties without prior approval of the Associate and execution by such third parties of secrecy agreements satisfactory to the Associate prior to disclosure. Upon completion of contract, such processes shall become the property of the TPCODL. Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPCODL under the Contract shall be passed on to the TPCODL. The TPCODL shall have the right to use these for construction, erection, start-up, Trial Run, operation, maintenance, modifications and/or expansion of the works including for the manufacture of spare parts.

18.4 Exclusions

The provision of Clauses 16.1 to 16.3 shall not apply to information:

- Which at the time of disclosure are in the public domain which later on become part of public domain through no fault of the party concerned, or
- Which were in the possession of the party concerned prior to disclosure to him by the other party, or
- Which were received by the party concerned after the time of disclosure without restriction on disclosure or use, from a third party who did not acquire such information directly or indirectly from the other party or has no obligation of confidentiality for such information.

18.5 Violation

In case of violation of this clause, the Associate is liable to pay compensation and damages as may be determined by the competent authority of TPCODL.

19.0 INTELLECTUAL PROPERTY RIGHTS

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Associate acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark, copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with the TPCODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPCODL.

Moreover, the Associate undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Associate shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 27 of 104

arising from any legal proceeding/s, or otherwise. No liability of TPCODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPCODL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

20.0 INDEMNITY

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPCODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPCODL is held liable for by any court judgement. In this connection, the TPCODL shall pass on all claims made against him to the Associate for settlement.

The Associate assumes responsibility for and shall indemnify and save harmless the TPCODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPCODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under the Contract or for which the Associate has assumed responsibilities under the Contract including those imposed under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract. The Associate shall execute, deliver and shall cause his Sub-Associate and suppliers to execute and deliver, such other further instruments and to comply with all the requirements of such laws and regulation as may be necessary there under to conform and effectuate the Contract and to protect the TPCODL.

The TPCODL shall not be held responsible for any accident or damages incurred or claims arising, due to the Associate's error there from prior to completion of work. The Associate shall be liable for such accidents and after completion of work for such accidents as the case may be due to negligence on his part to carry out Work in accordance with Indian laws and regulations and the specifications set forth herein.

21.0 LIABILITY & LIMITATIONS

21.1 Liability

Except for any specific liability which may be identified in the Contract and which may be payable hereunder, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or in connection with the Performance of the Work or supply of Goods ***unless caused by Associate's negligence, willful misconduct or breach of contract.***

TPCODL shall have no liability or any special, incidental, indirect or consequential Damages for any loss of Business Contracts, revenues or other financial loss arising out of this Contract.

21.2 Limitation of Liability

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 28 of 104

The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.

22.0 FORCE MAJEURE

Force Majeure applies if the performance by either Party ("the Affected Party") of its obligations under Contract is materially and adversely affected.

"Force Majeure" shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

- Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, embargo, blockade, revolution, riot, bombs, religious strife or civil commotion, etc.
- Politically motivated sabotage, or terrorism, etc.
- Action or Act of Government or Governmental agency for which remedy is beyond the control of the affected parties.
- Any act of God.

Note: Causes like power breakdown/ shortages/fire/strikes, accidents etc do not fall under Force Majeure.

Time being the essence of the Contract, if either party is prevented from the performance of its obligations in whole or in part due to an event of Force Majeure, then provided Notice of happening of any event by the Affected Party is given to the other party within seven (7) days from the date of occurrence of such event, which DIRECTLY has impact on works and submitted details and quantum of resulting effect, but at the same time had made all possible efforts to mitigate and overcome effects thereof, the Affected Party's performance under this Contract shall be suspended until such event ceases and the Scheduled Completion shall be delayed accordingly.

If Force Majeure event(s) continue for a period of more than three months, the parties shall hold consultation to discuss the further course of action.

Neither party shall be considered to be in default or in breach of its obligation under the Contract to the extent that performance of such obligation by either party is prevented by any circumstances of Force Majeure which arise after effective date of Contract.

Neither party can claim any compensation from the other party on account of Force Majeure.

23.0 SUSPENSION Of CONTRACT

23.1 Suspension for Convenience

TPCODL may, at any time and at its sole option, suspend execution of all or any portions of the schedule of items of contract to be supplied/work to executed by Associate under the contract by providing to the Associate at least two business days written notice for contracts having contract completion period less than sixty days and at least seven business days' notice for all other contracts.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 29 of 104

Upon receipt of any such notice, the Associate shall respond as follows as applicable as per contract construction.

- Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts
- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPCODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.
- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

On receipt of resumption notice from TPCODL, the Associate shall resume execution of contract as specified in the resumption notice, within the time frame specified in the resumption notice,

23.2 Suspension for Breach of Contract conditions.

TPCODL shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 27 for breach/default of contract conditions.

23.3 Compensation in lieu of Suspension

If the suspension of the contract in whole or in part is for convenience of TPCODL and not due to any breach of contract conditions by the associate, TPCODL at its discretion shall consider compensating all reasonable additional costs incurred by Associate in lieu of suspension of whole or part of contract, on representation of the Associate providing justified estimates of such additional costs and such estimates are found acceptable and approved by competent authority of TPCODL.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 24.3) by the Associate, Associate shall not be entitled for any compensation for any cost incurred in lieu of suspension of whole or part of contract and also shall be liable for compensating all the losses arising to TPCODL in lieu of suspension of contract. Resumption notice shall be subject to the Associate taking corrective action for the breach of contract conditions within the time frame and as per the terms specified in the suspension notice.

24 TERMINATION OF CONTRACTS

24.1 Termination for Default/Breach of Contract

The contract / PO shall be subject to termination by TPCODL in case of breach of the contract by the Associate which shall include but not be limited to the following:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 30 of 104

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution / completion of the contracted work /PO or failure in ensuring adherence to any delivery schedules, in deviation of the contract/ PO.
- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPCODL and within the timeframe as specified in the contract document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.
- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.
- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPCODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPCODL.

If the default or breach as specified under clause 24 (except sub clause g thereof) be committed by the associate for the first time, TPCODL shall issue, along the with notice of default or breach, a warning notice instructing the associate to take remedial/corrective action within the time frame stipulated in the warning notice and not to repeat the same in future. The timeframe for corrective action by the associate shall be specific to the nature of breach of contract and the same shall not be objected to by the Associate. If the Associate fails to comply with the instructions in the warning notice or in taking corrective action to the satisfaction of TPCODL then TPCODL may terminate the entire or part of contract at its discretion by issuing termination notice without incurring any liability on this ground.

In case the contract is terminated for any breach of the nature specified in clause 24 g stated above, TPCODL shall have the right to terminate all the contracts TPCODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPCODL available to it under law.

Without prejudice to its right to terminate for breach of contract, TPCODL may, without assigning any reason, terminate the Contract in whole or in part at any time at its discretion while the contract is in force by serving a written notice of two weeks to the Associate.

In the event of TPCODL having proceeded with termination of the contract the associate shall comply and proceed further in the following manner:

- i) Associate shall discontinue the supply, on the expiry of the said period of two weeks.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 31 of 104

ii) Associate shall ensure that no further steps are being taken towards discharge of the obligations, terms and conditions as contained in the contract/PO. This shall include initiation of actions not limited to discontinuation of other allied and associated arrangements which the associate might have entered into with third parties for due discharge of its obligations under the contract with TPCODL.

iii) The Associate shall perform thereafter such tasks as may be necessary to preserve and protect the terminated portion of the material/service/work in progress and the materials and equipment at TPCODL sites or in transit thereto. However the associate shall continue to fulfill its contractual obligations with regard to the part of contract not terminated.

iv) It shall be open for TPCODL to conduct a joint assessment with the associate of the material ,supplies, equipment ,works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.

v) It shall be open to TPCODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested against by the associate.

In case of termination of the contract the parties agree to be governed inter alia by the following:

a) In case TPCODL exercises its right of termination as stated above the associate shall not dispute or object to the same.

b) The Associate shall be entitled to receive and claim only such payments OR sums of money from TPCODL as may be found payable to it in regard to works executed by it under the terms of the contract and no other claim of any nature whatsoever shall be made by the Associate.

c) All such provisions which the parties have agreed to survive and prevail even after termination of the contract shall remain effective despite the termination.

In the event of such termination, TPCODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPCODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPCODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPCODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPCODL under law against the associate.

Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct , TPCODL shall be entitled to bar the associates its agents , affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPCODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPCODL.

24.2 Termination for convenience of Associate

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 32 of 104

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPCODL has full right to accept, reject or partially accept such request. This convenience will be available to associate only after one year from the contract effective date. For this purpose, associate will provide a notice period of 90 days to TPCODL, Associate will have to pay TPCODL a 'termination convenience fee' equivalent to 5% of unexecuted contract value.

24.3 Termination for Convenience of TPCODL

TPCODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPCODL shall pay the Associate for all the supplies/ services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

25.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavor to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Bhubaneswar. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the arbitration proceedings unless otherwise directed in writing by TPCODL or suspended by the arbitrator. Further, TPCODL shall continue making such payments as may be found due and payable to the associate for such works.

25.1 Governing law and jurisdiction

The parties shall be subject to the jurisdiction of the courts of law in Bhubaneswar and any matter arising here from shall be subject to applicable law in force in India.

26.0 ATTRIBUTES OF GCC

26.1 Cancellation

The Company reserves the right to cancel, add, delete at its sole discretion, all or any terms of this GCC or any contract, order or terms agreed between the parties in pursuance without assigning any reasons and without any compensation to the Associates.

26.2 Severability

If any portion of this GCC is held to be void, invalid, or otherwise unenforceable, in whole or part, the remaining portions of this GCC shall remain in effect.

26.3 Order of Priority

In case of any discrepancies between the stipulations in General Conditions of the Contract (GCC) and Special Conditions of Contract (SCC), the GCC shall stand superseded by the SCC to the extent stipulated hereinabove while balance portion of respective clauses of GCC shall continue to be applicable.

27.0 INSURANCE

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 33 of 104

The Associate shall arrange accident insurance policy for his foreign experts/specialists/personnel deputed to Site and Associate's/his sub-Associates' manufacturing works as well as for his Indian engineers and supervisory staff. The Associate shall also take out for his Indian workmen, where applicable, a separate policy as required under Workmen's Compensation Act.

Associates shall be responsible to suitably insure their entire work-force (to the extent of at least meeting requirements under Workmen Compensation Act) Tools, Plant, Third party liability at the project site, All Risk comprehensive insurance for the entire works (insurance for free issue items will be in TPCODL scope) for total contract (PO/RO) value or any other such risks during execution of works, till the works are handed over to the company, in consultation with TPCODL and shall submit copies of such insurances to the Engineer-in-Charge for review / acceptance before commencing the work. Engineer-in-charge must ensure compliance to insurance requirement by Associate before commencement of works. TPCODL shall stand fully indemnified in this respect.

28.0 ERRORS AND OMISSIONS

The Associate shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the TPCODL or not. However any error in design/drawing arising out of any incorrect data/written information from TPCODL will not be considered as error and omissions on part of the Associate.

29.0 TRANSFER OF TITLES

The title of ownership and property to all equipment, installations, erections, constructions materials, drawings & documents shall pass to the TPCODL after Commissioning and complete handing over-taking over.

However, such passing of title of ownership and property to the TPCODL shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract including loss or damages and all risks, which shall vest with the Associate.

The Associate shall take all corrective measures arising out of discrepancies, errors and omissions in drawings and other information within the time schedule and without extra cost to the TPCODL.

The Associate shall also be responsible for any delay and/or extra cost if any, in carrying out engineering, and site works by other agencies arising out of discrepancies, errors and omissions stated in as well as of any late revision/s of drawings and information submitted by the Associate.

30.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TPCODL; be it our Company, our services or our people. Each and every concern, issue, query and suggestion from you will help us to become a better company to work with and shall help us develop a strong bonding of trust and a long term relationship with you.

You may send your feedback by filling up our Business Associate Feedback Form enclosed herewith as Annexure-I. You can also log on to our website www.tpcentralodisha.com to provide your feedback according to the guidelines mentioned below:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 34 of 104

31.0 CONTACT POINTS

In case Business Associate needs information with respect to payments or has any grievances, same may be lodged by log on to our website www.tpcentralodisha.com

32.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
1.	Performa for Bid Security Bank Guarantee	A
2.	Performa for Advance Payment Bank Guarantee	B
3.	Performa for Performance Bank Guarantee (CP cum EP)	C
4.	Performa for No Demand Certificate by Associate	D
5.	Performa for Indemnification on Statutory Compliance	E
6.	Performa For Application For Issuance of Consolidated TDS Certificate	F
7.	HR Service Level Agreement	G
8.	Under taking for competence of workmen	H
9.	Business Associate Feedback Form	I
10.	Acceptance Form For Participation In Reverse Auction Event	J
11.	NEFT or RTGS payment request form	K
12.	Contractor Safety Management System	L
13.	Vendor Appraisal Form	M
14.	Manufacturers Authorization Form	N

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 35 of 104

ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

TP Central Odisha Distribution Limited

Bhubaneswar

WHEREAS, (Name of the Bidder) _____ (hereinafter called "the BIDDER") has submitted his bid dated _____ for the (Name of Contract) _____ (hereinafter called "the BID").

KNOW ALL men by these presents we (Name of the Bank) _____ of (Name of the Country) _____ having our registered office at _____ (hereinafter called "the BANK") are bound unto TP Central Odisha Distribution Limited (TPCODL) in the sum of _____ for which payment well and truly to be made to the TPCODL the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20_____.

The CONDITIONS of this obligation are:

i) If the Bidder withdraws his Bid during the period of bid validity specified in the Proforma of Bid

or

ii) If the Bidder having been notified of the acceptance of his Bid by the TPCODL during the period of bid validity fails or refuses to furnish the Contract Performance Bank Guarantee, in accordance with the Instructions to Bidders.

We undertake to pay the TPCODL upto the above amount upon receipt of its first written demand, provided that in its demand the TPCODL will note that amount claimed by it is due to it owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force upto and including the date (No of days as mentioned in tender enquiry) days after the closing date of submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

DATE.....

SIGNATURE

OF

THE

BANK.....

WITNESS.....

SEAL.....

(Signature, Name & Address)

(At least 2 witnesses)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 36 of 104

ANNEXURE-B

PROFORMA FOR ADVANCE PAYMENT BANK GUARANTEE

(On Rs.100/- Stamp Paper)

Note:

- (a) Format shall be followed in toto
- (b) Claim period of six months must be kept up
- (c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Central Odisha Distribution Limited

Bhubaneswar

Advance Payment B.G.No.....

Contract No.....dated.....

1. You have entered into a Contract No _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the supply and delivery of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, you have agreed to make an advance payment of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on "the Vendor" furnishing you with an irrevocable, unconditional and acceptable bank guarantee to be valid till the date of receipt of "the said equipment" covered by your above mentioned contract. For this purpose you have agreed to accept our guarantee.
3. In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a further period of three months from the date of expiry.
5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 37 of 104

not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Bhubaneswar branch and claim will also be payable at Bhubaneswar Branch **(to be confirmed by Bhubaneswar Branch by a letter to that effect)**
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____
(Rupees _____ only) and the guarantee will remain in force upto and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within one month from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 200_____

Witness

1. _____

Bank's rubber stamp

Banks full address

2. _____

Designation of Signatory

Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 38 of 104

ANNEXURE- C

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

(On Rs.100/- Stamp Paper)

Note:

- (a) Format shall be followed in toto
- (b) Claim period of one month must be kept up
- (c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Central Odisha Distribution Limited

Bhubaneswar

CP cum EP BG No.....

Order/Contract No.....dated.....

1. You have entered into a Contract No _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the supply cum erection / civil work of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for 10% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose you have agreed to accept the guarantee.
3. In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____ % (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a **further period of three month** from the date of expiry.
5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 39 of 104

available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Bhubaneswar branch and claim will also be payable at Bhubaneswar Branch (to be confirmed by Bhubaneswar Branch by a letter to that effect in case BG is from the branch outside Bhubaneswar)
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____ (Rupees _____) only and the guarantee will remain in force upto and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within one months from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 200__

Witness

1. _____	Bank's rubber stamp
	Banks full address
	Designation of Signatory
2. _____	Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 40 of 104

ANNEXURE-D

PROFORMA FOR “NO DEMAND CERTIFICATE” BY ASSOCIATE

(On Company's Letter head or with Company Seal)

(To be submitted by the Associate to TPCODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project

Order/ Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

We, M/s. _____ (Associate) do hereby acknowledge and confirm that we have received the full and final payment due and payable to us from TPCODL, in respect of our aforesaid Order No _____ dated _____ including amendments, if any, issued by TPCODL to our entire satisfaction and we further confirm that we have no claim whatsoever pending with TPCODL under the said contract / W.O.

Notwithstanding any protest recorded by us in any correspondence, documents, measurement books and / or final bills etc., we waive all our rights to lodge any claim or protest in future under this contract.

We are issuing this “NO DEMAND CERTIFICATE” in favour of TPCODL, with full knowledge and with our free consent without any undue influence, misrepresentation, coercion etc.

Dated

Signature

Place

Name

Designation

(Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 41 of 104

ANNEXURE – E

PROFORMA FOR “INDEMNIFICATION ON STATUTORY COMPLIANCES”

(To be submitted by the successful Bidder within seven days of award of work)

(Certificate No. CCP/001)

Name of the Project

Letter of Award / Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

By this confirmation we, _____
(Associate) are formally bound to M/s. TPCODL towards any sum which may be imposed, levied or hereinafter recovered by the Provident Fund Organization under the provisions of the Employees of the Provident Fund and Miscellaneous Provisions Act 1952 in respect of employees employed by us.

We well and truly bind ourselves and our heirs executors administrators and representatives jointly severally and respectively for the above payment only to be paid to M/s. TPCODL.

AND WHEREAS we, _____ (Associate)
is making compliance of the Employees Provident Fund and Miscellaneous Provisions Act 1952, have entered into the above written bond for the indemnity to M/s. TPCODL against all losses from the acts or default of the said Associate in respect of compliance of the Provident Fund Act.

Similarly we hereby confirm that we have complied with all statutory and local laws and nothing is outstanding with regard to Local Sales Tax, Labour Laws, Local Municipal dues, Electricity dues etc. We have entered into the above written bond for the indemnity to M/s. TPCODL against all losses from the acts or default of the said Associate in respect of compliance of the Local Sales Tax Laws, Local Laws, Labour Laws, Local Municipal Dues, Electricity dues etc.

NOW THE CONDITION, of the above written bond is as such that if the Associate during the period of this contract commits any default or fails to make payment of Contributions in respect of his employees to the Employees Provident Fund Organization, he shall indemnify the Principal Employer M/s. TPCODL from all and every loss and damage caused to them from any act, omissions or negligence of the said Associate in respect of compliances under the Employees Provident Fund and Miscellaneous Provisions Act, 1952.

IN WITNESS to the above written bond we have here to set our hands, with our free consent.

Dated

Place

Signature

Name

Designation (Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 42 of 104

ANNEXURE-F

PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS CERTIFICATE

To be printed on the letterhead

To,

TP Central Odisha Distribution Limited,

Bhubaneswar

Sub: Application for issuance of Consolidated TDS Certificate for the FY _____

Dear Sir,

I / we hereby request / authorize you to issue me / us a consolidate TDS Certificate for the financial year _____ against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961.

For and on behalf of

Signature

Name

Address

Contact No. (Land Line)

(Mobile)

PAN #

Assessing authority

ATTACH THE COPY OF PAN CARD

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 43 of 104

ANNEXURE - G

SERVICE LEVEL AGREEMENT

(To be adhered to by Business Associates (BAs) in TPCODL on Human Resource Issues)

1.0 The following shall be adhered to by the Business Associates during his / its association with TPCODL:

Shall Abide by Tata Core Values:

- a) **Integrity** – We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.
- b) **Understanding** – We must be caring, show respect, compassion and humanity to our colleagues and customers and always work for the benefit of the communities we serve.
- c) **Excellence** – We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of services we provide.
- d) **Unity** – We must work cohesively with our colleagues across the group and with our customers and partners to build strong relationships based on tolerance, understanding and mutual co-operation.
- e) **Responsibility** – We must continue to be responsible and sensitive to the communities and environments in which we work and always ensuring that what comes from the people; goes back to the people many times over.
- f) **Agility**- We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 The Business Associate / his manager / supervisor who is responsible for managing the project site / performance contract etc. in TPCODL would also ensure adherence of these values by his employees / persons deployed by him in connection with his works undertaken in TPCODL.

3.0 The Business Associates are required to:

- a) Support and respect the protection of human rights and make sure that they are not complicit in human right abuses.
- b) Respect freedom of association and effective recognition of the right to collective bargaining.
- c) Not to resort to any form of forced and compulsory labour.
- d) Shall ensure abolition of child labour in his area of work.
- e) There is no discrimination in respect of employment and occupation in respect of his employees.
- f) Support precautionary approach to environmental challenges.
- g) Promote greater environmental responsibility by himself and his employees in his areas of work.
- h) Deploy and defuse environmental friendly technologies while carrying out the works.
- i) Work against corruptions in all its form including extortion and bribery by himself and his employees.

4.0 The Business Associates are required to adhere to all applicable Labour Laws with special reference to the following:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 44 of 104

- a) No person below the age of 18 years and no child labour will be engaged directly or indirectly for executing the work connected with the business of TPCODL.
- b) Minimum wages along with other statutory dues like PF, ESI, etc. as applicable to the workers shall be made within the prescribed period of 7th / 10th day of the following month.
- c) Deduction / deposit / record keeping and all other requirements under Employees PF Act 1952, Employees State Insurance Act 1948 and other applicable acts (if any) shall be adhered to.
- d) Only statutorily authorized deductions (if any) shall be made in accordance with the relevant statutes.
- e) All the provisions of Contract Labour (R&A) Act 1970 shall be complied with in respect of the workers engaged for TPCODL work. The work will be commenced only after completing necessary formalities for obtaining Labour License (if applicable).
- f) Necessary registers / records, filing of returns etc. shall be maintained for verification by Statutory / TPCODL authorities.
- g) Payment of wages shall be made only in presence of and with certification of authorized representative of TPCODL or shall be made in the form of cheque / bank transfer to the employee.
- h) During the period of contract, the Business Associate will arrange for deployment of his supervisor / manager for total supervision and control of the work and their manpower. All the activities related to their manpower e.g. attendance, leave, wage disbursement etc. will be done under the supervision & control of Business Associates, While adhering to the prescribed standard / norms of production / productivity & quality. During execution of the work, Business Associate shall engage only such qualified / skilled manpower as may be envisaged / required for ensuring level of production / service into the contract / work order.
- i) Clearances as follows shall be obtained from IR & Welfare Group:
 - i. Clearance for commencement (before start of the work).
 - ii. No Objection Certificate (after completion / before final settlement).
 - iii. Copies of PF / ESI Challans shall be deposited with IR & Welfare Group every month
- j) The Business Associate shall indemnify TPCODL from any liabilities under applicable Labour Statutes.
- k) The Business Associate shall ensure safety and health of his employees and shall also maintain hygienic working environment / condition in his area of work.
- l) The Business Associate and his employee shall abide by Laws of Land and shall not violate any applicable provisions.
- m) The Business Associate appreciates with and acquiesces to the right of TPCODL as principal employer to fulfil any of his legal obligations, if he fails to do so under applicable labour laws and deduct the same from his running bills / final payments / encashing security deposit / Bank Guarantee as the case may be. If there is any further shortfall TPCODL has the right to recover the same from the Business Associate.
- n) The Business Associate ensures that person employed by him adhere to the moral and legal conduct and shall not violate any standard conduct envisaged in the premise of

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 45 of 104

TPCODL by all such as, Transparency, Safety, Discipline, Integrity etc. The Business Associate or his employees should refrain from corrupt practices, giving or taking bribe in connection with any TPCODL business.

5.0 The 'Statutory Compliance Enforcement System' in TPCODL is detailed below for adherence by all concerned. Business Associate Cell (BA Cell) will be the process owner for implementation of the system with the help of concerned Engineer I/c or Officer I/c.

- a) Statutory Compliance being a professed value in TPCODL Code of Conduct, the concerned Engineer / Officer in charges are requested to adhere to the provisions and advise respective Business Associates in their domain to comply in letter and spirit.
- b) Immediately after issuance of letter of intent, the authorized representative of the Business Associate will report to BA Cell for completion of statutory requirements.
- c) Normally, the work will be started only after 'Clearance for Commencement of Work (CCW)' is issued by BA Cell to the Business associate. However in exceptional exigencies in engineer I/c / Officer I/c may direct the Business Associate to start the work and inform BA Cell about the same. Statutory requirements in this case may be completed in parallel.
- d) First monthly bill will be released only after producing CCW to the finance department. Similarly closure of work and final settlement will be affected after issuance of no objection certificate from BA Cell group.

6.0 Requirements for 'Clearance for Commencement of Work' (CCW):

- a) Submission of filled up Form 'A' for database (Annexure-1).
- b) Copy of PF Code allocation letter.
- c) Copy of ESI Code allocation letter.
- d) Submission of duly filled up Form IV CL(R&A) act (In case more than or equals to 20 workers during the period of contract).
- e) Submission of duly filled up Form VI A (Notice of Commencement).
- f) Copy of insurance cover note under WC Act 1923 (if applicable).
- g) Copy of Contract Agreement.
- h) Copy of indemnity bond (if applicable).
- i) Affidavit with regard to payment of wages through cheque / bank transfer only.

7.0 Requirements during execution of work:

- a) Copy of receipt of application for license / license (if applicable).
- b) Copy of PF Challan (latest by 26th day of every Month).
- c) Copy of ESI Challan (latest by 26th day of every Month).
- d) Copy of Wage disbursement sheet / Bank statement.
- e) Filing / Maintenance of all statutory registers / reports / returns for inspection by Statutory/TPCODL authorities.
- f) Certification of wage disbursement by authorized representative of TPCODL.
- g) Copy of 'Labour Welfare Fund' deposit certificate / Challan.
- h) Insuring safe working practices at the work place.

8.0 Requirements for 'No Objection Certificate' (NOC) for closure of work:

- a) Submission of duly filled up Form VI A (Notice of Completion).
- b) Copy of Half yearly / Annual return for ESI / PF / CL(R&A).

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 46 of 104

- c) Consolidated copy of wage sheet of last month indicating full & final settlement of all dues like retrenchment benefit, bonus, leave encashment etc. Copy of individual declaration by employees in Form X regarding termination of employment.
- d) Confirmation certificate regarding filling up of form for transfer / withdrawal of PF by the concerned workers.

In case any of the above are deviated / not complied with the Letter of Award/Order shall be liable to be withdrawn / cancelled.

Enclosure:

- 1) Form A
- 2) Form X
- 3) Form XI
- 4) Form VI A
- 5) Form XXIV

GENERAL CONDITIONS OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 47 of 104

FORM (A)

[To be submitted by the Business Associate to the Principal Employer within a week from LoA issuance]

A. Details of the Agency

1. Name of Agency :
2. Nature of work :
3. Local Address with Ph.No. :
(With Father's name) :
4. Permanent Address (Full) :
5. PF code no. & Place :
6. ESI Code no. & Place :
7. Name and address of :
Sub-contractor (if any)

B. Details of Work

8. Name of work (as specified in LOI/LOA) :
9. LOI/LOA Nos. & Dates :
10. Period of contract (Specify Dates) :
[Including Extension period, if any] :
11. Work Area [Department / Location] :
12. Name / Cell no. of Officer I/c :
13. Maximum No. of workers and staff to be engaged on any day during the year.
 - Supervisory Staff :
 - Workers :
14. Do you have any other contract in TPCODL : Yes/No
If yes, furnish details:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 48 of 104

15. Details of Workmen's compensation Policy, if applicable

Name of Insurance Company
.....Policy No Number of persons
covered Period of coverage: From To

If no, I hereby undertake the liability arising out of Workmen's Compensation Act and Rules made there under.

C. Details of workers to be engaged

No. of Workers

S. No.	Unskilled*	Semi-skilled*	Skilled*	Clerical / Supervisory

*** Number to be indicated**

I/We shall fulfill all obligations arising from and under all relevant law in force from time to time. I/We undertake to keep the TPCODL indemnified against any loss or liability arising out of failure of my / our abiding the relevant laws.

The name of my / our representatives is to enter the TPCODL Premises on my behalf.

Date:

**(Signature of the Business Associate
or his Authorized Representative)**

This Business Associate is / will be engaged in TPCODL.

(Signature and seal of

Officer I/c of the Work)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 49 of 104

Form X

Undertaking

I _____ hereby undertake that all the dues in respect of my employment with M/s _____ for the period of _____ to _____ have been settled and final payments including retrenchment benefit have been made to me in full.

(_____)

Date:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 50 of 104

Form XI

Undertaking

With reference to the contract job awarded by M/s TP Central Odisha Distribution Limited to M/s _____ vide work order No. _____ dated _____

I _____ on behalf of

M/s _____ hereby undertake:

1. that the dues in respect of the workmen/ employee(s) engaged by us for the said contract, payable as per the provisions of relevant statute pertaining to
 - i. wages/ salary
 - ii. PF & ESI, Bhubaneswar Labour Fund
 - iii. All other statutory obligation
 has been paid /settled in full and no amount/ compliance is due/ pending.
2. That in case any dispute / claim is raised by the concerned workers i.r.o. any dues / payments, M/s _____ will settle the same on it's own and such liability will be borne by M/s _____
3. That M/s _____ hereby indemnify M/s TPCODL from any future liability i.r.o. any statutory obligation in respect of said contract.

Date:

()

Authorized Signatory

For M/s _____

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 51 of 104

FORM- VI A

Notice for Commencement /Completion of contract work

I/We, Sh. / M/s _____ (Name and Address of the Contractor) hereby intimate that the contract work _____ (name of work) in establishment of the _____ (name and address of the Principal Employer) for which License No. _____ dated _____ has been issued to me/us by the Licensing Officer _____ (name of the Headquarters), has been commenced / completed with effect from _____ date / on date.

Signature of Contractor

With Office Seal

The Inspector

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 52 of 104

FORM XXIV

[See Rule 82(1)]

Return to be sent by the Contractor to the licensing Officer (in duplicate)

Half -Yearly Ending _____

1. Name and address of the Contractor
2. Name and address of the Establishment
3. Name and address of the Principal Employer
4. Duration of Contract: From _____ to _____
5. No. of days during the half year on which
 - (a) the establishment of the principal employer had worked
 - (b) the contractor's establishment had worked
6. Maximum No. of contract labour employed on any day during the half –year:

Men	Women	Children	Total

7.
 - (i) Daily hours of work and spread over
 - (ii) (a) whether weekly holiday observed and on what day
 - (b) if so, whether it was paid for
 - (iii) No. of man – hours of overtime worked

8. No. of man days worked by

Men	Women	Children	Total

9. Amount of wages paid

Men	Women	Children	Total

10. Amount of deductions from wages, if any

Men	Women	Children	Total

Whether the following have been provided –

- (i) Canteen : _____
- (ii) Rest rooms : _____

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 53 of 104

(iii) Drinking water : _____

(iv) Crèches : _____

(v) First Aid : _____

Signature of contractor

Place _____

Date _____

GENERAL CONDITIONS OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 54 of 104

ANNEXURE – H

UNDERTAKING FOR COMPETENCE OF WORKMEN

Name of Associate :

Tender No. :

Item :

With reference to the tender mentioned above, I/We _____,
 hereby undertake that the workmen/ employee(s) engaged by M/s
 _____ for the job against said tender shall be competent in all
 respect, commensurate to the nature of job.

Date:

 ()

Authorized Signatory

For M/s

Seal

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 55 of 104

ANNEXURE-I

BUSINESS ASSOCIATE FEEDBACK FORM

With an objective to improve our internal processes and systems, and serve you better, we solicit your valuable feedback & suggestions. It is estimated that it will take about 10 minutes to complete this survey. We assure you that your feedback shall be kept confidential. Please send the duly filled feedback form in the "TPCODL addressed - attached envelop"

You are associated with us as

☐ OEMs
 ☐ Service Contractor
 ☐ Material Suppliers
 ☐ Material & Manpower Supplier

You are associated with us for

☐ Less than 1 year
 ☐ More than 1 year but less than 3 years
 ☐ More than 3 years

Your office is located at

☐ Bhubaneswar
 ☐ Within 200 kms from Bhubaneswar
 ☐ More than 200 kms from Bhubaneswar

Your nearly turnover with TPCODL

☐ Less than 25 Lacs
 ☐ 25 Lacs to 1 Crore
 ☐ More than 1 Cr.

Additional information

Your Name	
Your Designation	
Your Organization	
Contact Nos.	
Email	

We once again thank you for your participation in this survey. Please spare 10 minutes to give your feedback on following pages (Section A to E)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 56 of 104

SECTION - A

(Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.).

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
1	You receive all relevant queries / tenders from us in timely manner.						
2	We provide you enough lead time to respond to our queries / tenders.						
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.						
4	All following elements of our contract / purchase order are rational :						
4.1	Scope of Work						
4.2	Delivery / Execution Schedule						
4.3	Payment Terms						
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	TPCODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	TPCODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPCODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	TPCODL Engineer-in-Charge timely certifies the jobs executed/ material supplied						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 57 of 104

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
11	TPCODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job						
12	BIRD (Bill Inward Receipt Desk) initiative has improved payment disbursement process						
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?						
14	TPCODL never defaults on contractual terms						
15	In TPCODL Contracts closure is done within set time limit						
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience						
17	Bank Guarantees are released in time bound manner						
18	Our processes related to payment / account settlement are effective.						
19	You get payments on time						
20	TPCODL Employees follow Ethical behaviour						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 58 of 104

SECTION - B

(Please rate the following parameters on a scale of 1 to 5, where 1 - Minimum; 5 - Maximum)

SN	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of TPCODL employees you interact with from following team?						
1.1	Project Engineering						
1.2	Division / Sub-Division						
1.3	Projects/HOG						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing						
1.7	Accounts / Finance						
1.8	Administration						
1.9	IT & Automation						
2	How would you rate TPCODL in comparison to your other clients in terms of fairness of treatment and transparency with its Business Associates?						
3	How would you rate TPCODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates						
4	How would you rate TPCODL in comparison to your other clients in terms of building long term & mutually relationship with its Business Associates						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 59 of 104

SECTION-C

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

SNo	Parameters	Certainly NO	Probably NO	Probably YES	Certainly YES	Remarks/ Suggestion
1	Based on your experience with TPCODL, would you like to continue your relationship with TPCODL?					
2	If someone asks you about TPCODL, would you talk "positively" about TPCODL?					
3	Would you refer TPCODL name to others in your community, fraternity and society as a professional & dynamic organization?					

SECTION - D

If we ask you to rate us on a scale of 1 to 10, how will you rate TPCODL, that truly represents your overall satisfaction with us (please tick appropriate box) -

1	2	3	4	5	6	7	8	9	10

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 60 of 104

SECTION – E

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

Please spare your thoughts for TPCODL's improvement in particular areas of weaknesses, particularly relating to some great practices, attitudes that you have seen elsewhere in Indian and International Organizations, which you recommend TPCODL to adopt. Please give your valuable salient recommendations.

Please spare your thoughts for TPCODL's improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, altitudes that you have observed / experienced elsewhere in Indian/ International organization.

Recommendation	Please tick (✓) your top 5 expectations out of the following 10 points listed below -	
(Please list down improvement you expect from TPCODL)	Timely payment	
1	Flexibility in Contracts/PO	
	Clarity in PO,s & Contracts	
2	Timely response to quarries	
	Timely certification of works executed	
3	Clarity in Specs, drawings, other docs etc.	
	Adequate information provided on website for tender notification, parties qualified etc.	
4	Timely receipt of material at site for execution	
	Performance Guarantee/EMD released in time	
5	Inspection & quality assurance support for timely job completion	

We thank you for your time and courtesy!!

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 61 of 104

ANNEXURE-J

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process more fair and transparent, TPCODL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. TPCODL shall provide the user id and password to the authorized representative of the bidder. *(Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).*
2. TPCODL will make every effort to make the bid process transparent. However, the award decision by TPCODL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPCODL, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPCODL.
6. In case of intranet medium, TPCODL shall provide the infrastructure to bidders. Further, TPCODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be outrightly rejected by TPCODL.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPCODL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by TPCODL.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 63 of 104

send payment information)

Name of the Authorized Signatory :

Contact Person's Name :

Official Correspondence Address :

We confirm that we will bear the charges, if any, levied by our bank for the credit of NEFT/RTGS amounts in our account. Any change in above furnished information shall be informed to TPCODL well in time at our own. Further, we kept TPCODL indemnified for any loss incurred due to wrong furnishing of above information.

Thanking you,

For _____

(Authorized Signatory)

(Signature with Rubber Stamp)

Certification from Bank:

We confirm that we are enabled for receiving NEFT/RTGS credits and we further confirm that the account number (specify Bank a/c no.) of (Please mention here name of the account holder), the signature of the authorized signatory and the MICR and IFSC Code of our branch mentioned above are correct.

This also is certified that the above information is correct as per Bank record

(Manager's/ Officers Signature under Bank Stamp)

ANNEXURE-L

CONTRACTOR SAFETY MANAGEMENT SYSTEM

1. OBJECTIVE

The objective of the Contractor Safety Management System is to lay down clear guidelines for all Business Associates (including their associates, staff and agents) which would facilitate them to observe all statutory rules and regulations, comply with applicable standards of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010 & (safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations, 2011, TPCODL Safety Manual and Guidelines and thus, ensure creation of safe working environment for all stakeholders of our network.

2. SCOPE

All contracts (minor and major) will be subject to the provisions of this document.

Minor Contracts: Contracts which satisfy all the criteria listed under the head “Minor Contracts”.

Major Contracts: Contracts which satisfy any two or more criteria listed under the head “Major Contracts”

Criteria	Minor Contracts	Major Contracts
Value of Contract	< Rs. 1500000/- (less than Rs. Fifteen Lac)	>= Rs. 1500000/- (Equal or more than Rs. Fifteen Lac)
Period	Period less than 1 year	Any period
Working on energized electrical equipment	No	Yes
Working on height (above 1.8 Mtrs from ground)	No	Yes
Work involving construction activity	No	Yes
Working with hazardous goods or chemicals	No	Yes
Work involving danger to general public	No	Yes

Note: Exceptions for major and minor contract are – in house software development, supply of material or equipment but no direct or indirect installation of the same material, administration contracts (courier, water supply, printing, security, transport, etc.), minor civil work like plastering at ground level or flooring, etc. The facility management (housekeeping) contract will always be treated as a minor contract.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 65 of 104

3. INFORMATION REQUIRED AT TIME OF VENDOR REGISTRATION OR BEFORE COMMENCEMENT OF CONTRACT

- 3.1 Business Associate is required to fill the Safety Management System Questionnaire as per *annexure 1* and submit along with the vendor registration process / bid / tender document. The filled questionnaire will be scrutinized by Engineer In-charge / indenting group and recommend suitability of the BA with respect to safety requirements. The fulfilment of statutory requirements for vendor registration pertaining to labour laws etc. shall be done by BA Cell on being referred to it.
- 3.2 Business Associate is required to take suitable risk control measures mentioned against the identified Hazards and Risk document provided for all contracts as per *annexure 2*. The primary objective of this is to evaluate the understanding of the BA towards risk mitigation and employment of safe work procedures. BA is required to conduct the Hazard identification and Risk Assessment study as per the procedure and deploy more or other measures if deemed necessary.
- 3.3 Business Associate shall comply with **Statutory Requirements related to Safety and Occupational Health** and submit the "Safety Undertaking" as per *annexure 4*.

4. GENERAL SAFETY CONDITIONS REQUIRED TO BE FULFILLED BY BUSINESS ASSOCIATES

The requirements of the contractor safety management system applicable to the minor or major contracts related to various groups are as following –

- 4.1 Maintenance of Distribution Network – *Annexure 3.1*
 - 4.2 Distribution Projects – *Annexure 3.2*
 - 4.3 EHV Projects – *Annexure 3.3*
 - 4.4 Maintenance of Sub transmission network – *Annexure 3.4*
 - 4.5 Civil / Generation Projects – *Annexure 3.5*
 - 4.6 Meter Management Group (MMG), Revenue Recovery Group (RRG), Energy Auditing Group, AML, MRG, etc. – *Annex3.6*
 - 4.7 Maintenance and Operation of Street Light. – *Annexure 3.7*
1. *Please note that hydra cranes used by any dept should be ACE Model No. FX 150 ACE SX 150, Escorts Model No. TRX 1550 or contemporary. Use of old generation hydra cranes like ACE 14XW or ACE 12 XW, etc are prohibited.*

(Details as per Annexure attached)

Note: For minor contracts, the BA shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver all duties and responsibilities of Safety Supervisor as detailed in this document.

The Business Associate (BA) having major contract will appointing Safety supervisor, engineer / manager for the TPCODL work. The BA shall make all necessary arrangements for getting their workforce safety trained and competency checked from the concerned official of TPCODL before deployment in the field. BA Cell shall recommend the suitability after competency checked by Engineer In-charge and SAFETY group (or his representative) of TPCODL. After getting the clearance from concerned official, BA cell and receiving temporary I-card issued by TPCODL, Business Associate shall commence the working.

Safety Representative of Business Associates will formally become the nodal point for safety concerns for TPCODL. **BA shall not frequently transfer or terminate the services of any of the safety representatives appointed for TPCODL work site. BA needs to ensure**

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 66 of 104

that Safety representative is available at all points of time; failing which the work being carried out in the interim (period when Safety representative is not available) shall be treated as working under improper supervision and due penal provisions shall be initiated against the BA. BA will be required to provide all applicable infrastructure and power to ensure smooth working of the safety representative to maintain a sound safety management system. **In all contracts safety representative will not be assigned any other activity at site apart from the works related to safety management. The duties are detailed in clause 5.5 of this document.** TPCODL will be auditing the facilities provided to the BA's safety team time to time.

The Safety Representative of the BA shall be required to meet and follow the instructions of the Engineer In-charge and SAFETY Group of TPCODL. He shall be responsible for providing the MIS and/or any other relevant information, as and when desired, within the stipulated time frame as per the requirements of TPCODL. Any non-conformance to safety will lead to the negative marking or issue of safety violation challan/ tokens which shall affect the monthly evaluation and performance of BA.

All contracts where BA has to depute vehicle for their staff and equipment to move from one location to other, the BA shall ensure that vehicle complies all required statutory clearances and requirement as per The Motor Vehicle Act, 1988 as well as TPCODL Road Safety Policy and are in good & safe state of working.

5. QUALIFICATION AND EXPERIENCE OF THE SAFETY AND SITE PERSONNEL

Qualification and experience required for the safety and site personnel are as following:

5.1 Safety Supervisor: It is mandatory that educational qualification of safety supervisor be ITI (of relevant trade) / Diploma (Any branch of engineering) and he has a working experience on electrical system / relevant field of work at least 5 yrs for ITI and 3 years for Diploma holder. Having formal experience of the safety systems will be an added advantage

5.2 Safety Engineer: It is mandatory that educational qualification of safety engineer be at least Diploma (relevant branch) and he has working experience on electrical system of at least 3 yrs. Having the formal experience of the safety systems will be an added advantage.

5.3 Safety Manager: The educational qualification of safety manager should be graduate engineer with working experience on electrical system / network of at least 3 yrs. OR Diploma in Industrial Safety with working experience of 05 years including at least 02 years on electrical network.

However, clause 5.1, 5.2 and 5.3 are not applicable for minor contracts. In such cases, BA shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver required duties of Safety Representative (as per clause 5.5) in addition to other duties without diluting the importance of safety.

5.4 Site Skilled Personnel: For all responsibility related to site activities and operations, the BA shall employ only qualified and skilled persons and shall comply the provisions of section 19 & 29 of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010. Persons holding valid approvals only by any Government approved agency or a competency assessment panel or a team set up by TPCODL

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 67 of 104

shall be allowed to perform the High Risk / High Hazard activities (refer page 1). The skill / qualification required for the electrician and electrical supervisor are given in *annexure 5*. The contracts related to maintenance of Distribution Network, Distribution Projects, EHV Projects, maintenance of Sub-Transmission Network, MMG & EAG, maintenance and operation of street lights, shall preferably have at least 20 per cent of ITI qualified electricians in the first year of the contract. This figure shall preferably be incremented by 15 per cent every subsequent year.

Note: For the competency assessment may please refer the work instructions. An employee shall have to necessarily undergo the competency assessment check once in every eighteen months.

5.5 Requirements from the Safety Representative(s) of the Business Associate:

- 5.5.1 Safety training of 2 hrs/employee/month and one day of safety induction training to all new employees joining the BA will be conducted by the BA as per Safety training modules of TPCODL.
- 5.5.2 Safety Talk / tool box talk before start of shift to BA employees.
- 5.5.3 Ensuring the availability & proper usage of the standard safety equipment (PPE)
- 5.5.4 Periodic inspection of PPE to ensure their serviceability and maintaining the 10% buffer stock of standard PPEs.
- 5.5.5 Ensuring the adherence to standard operating procedures of TPCODL as mentioned in TPCODL Safety standard and O & M and concerned function's manual.
- 5.5.6 Safety inspections / audits as per the process of TPCODL
- 5.5.7 Working in close coordination SAFETY Group of TPCODL.
- 5.5.8 Reporting of unsafe acts, unsafe conditions, near miss, incident or accident to Engineer In-Charge and SAFETY Group of TPCODL immediately after its occurrence.
- 5.5.9 Regular HIRA at site and comply the control measures as stated in the detailed HIRA as per the *annexure 2*. Also deployment of JSA based checklist shall be ensured.
- 5.5.10 Ensuring compliance with safety and other laws as may be applicable and providing for safety assurance.

5.6 Training and Syllabus: The BA shall not deploy any person at work place / site or send newly recruited personnel directly to concerned official for competency assessment without Safety Induction Training.

5.6.1 All new BA employees have to necessarily undergo one and half days Safety training and Competency assessment at training centre of BA cell. This training will be conducted once in a week. After the completion of Safety training & Competency assessment I-card will be issued to all competent BA employees

5.6.2 BA is expected to initially train and judge the capability of the workman at his own end before further recommending the workmen for Competency assessment. If any BA workman sent for competency assessment. In case any BA workman fails in the Competency test at concerned official, it will be deemed that BA has not imparted sufficient training at his end and actual cost of training ₹ 7500/ BA employee/ failed attempt will be recovered.

5.6.3 The workers who have imparted Safety Training and issued I-Cards of TPCODL, are not deployed at TPCODL worksites/ voluntarily left the job by workers/ used somewhere else other than TPCODL by the BA, in that case Management reserves the rights to intervene and recover the actual cost of training i.e. ₹ 7500/BA employee. (*Exempted for attrition rate of BA workers less than or equal to 10% of total workforce deployed at TPCODL*)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 68 of 104

- 5.7 It is desired that Safety representative of the BA to impart the general safety training to each employee of duration 2 hrs per month. The training will be organized at BA level and the record to be sent to engineer in-charge and SAFETY group of TPCODL every month. Please refer schedule and syllabus in *annexure 6*.

List of Personal Protective Equipment (PPE) and Maintenance schedule: BA shall commence the project or any work only when the required PPE are made available to the team of employees involved in the work. Each PPE of BA shall be checked / inspected by the safety representative / supervisor at zone before the work start or as prescribed in the list. Safety representative shall regularly check the healthiness of each PPE allocated to lineman. Suitable record shall be maintained at zone. Defective PPE shall be immediately replaced or within 24 hours by the BA. In no case linemen or any other official of BA may be allowed to work with defective PPE. It is preferred that BA ensures minimum stock of each PPE at zone for immediate replacement with defective one. The PPE shall be IS / BS / CE marked and exactly as per the standard or specification mentioned in the *annexure 7*. Working without PPE / non-standard PPE shall be treated as safety violation and penalty as stated in section 6.0 of this document. If TPCODL finds that BA has not provided the adequate / appropriate PPE to their staff, TPCODL reserves the rights to stop the work and call the BA to provide appropriate PPEs at the risk. If the BA fails to provide the required PPEs at the risk then the same shall be provided by TPCODL at the actual cost of the PPE. The amount shall be charged to BA and same shall be first recovered from the current bill of BA or any future payment to be made to BA. In the event of any balance amount still left for recovery, the same shall be adjusted against retention amount or by invoking bank guarantee submitted by BA.

- 5.8 **Safety Audit / Inspection & HIRA:** The BA shall get the required safety inspection / audit conducted by his technical team comprising of safety representative as per the *annexure 8*. The safety representative will be required to conduct the HIRA (Hazard Identification and Risk Assessment) as per *annexure 2* of the process and work undertaken at least two times in a year or every time if a new process / activity / machine is introduced or whenever an accident take place. The risk identified to be addressed suitably with –

- Engineering Control
- Management Control, and
- Personal Protective Equipment.

The safety representative of BA shall inform and educate for the identified risk and hazard control methods to employees, supervisor and engineer as well as the engineer in-charge and SAFETY group of TPCODL.

- 5.9 **Safety Performance and Safety MIS:** The BA shall maintain good practice of safety all through the contract duration. Safety shall always be of paramount importance during the contract period. Safety performance will be monitored on yearly basis throughout the period and no relaxation will be given for bad performance. BA with good track record and excellent performance will be rewarded suitably as per clause 6.0 of this document. The BA has to provide monthly "Performance Report – Safety" to engineer in-charge and SAFETY group TPCODL this shall be part of monthly bill along with training details. Performa of the report is enclosed as *annexure 9*.

- 5.10 **Pre – Employment Medical Check-up and Fitness of employees engaged for the critical works:** The BA shall submit the health fitness certificate for all those workers involved in climbing the pole or working at height for following diseases:

5.10.2 Epilepsy

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 69 of 104

- 5.10.3 Colour blindness
- 5.10.4 Deafness
- 5.10.5 Vertigo & height phobia

Every year BA will give an undertaking stating that all the employees are fit to work and have not developed aforesaid diseases. The Record of such medical check-ups shall be submitted to BA Cell before issue of temporary identity card. The records shall be maintained at BA Cell. All such medical check-ups shall be repeated once in a year for all workers involved in climbing the pole or working on electrical network.

6. REWARD AND PUNITIVE MEASURES

6.1 To support the enforcement of good SHE & DM practices by the Business Associate and to eliminate repeated or continuing safety violations, use of appropriate reward and punitive measures shall be made. Each unsafe act or violation of the safety guidelines as described in the Safety Manual of the TPCODL will be audit criteria of this system. Broadly the measures identified are following:

- 6.1.1 Working without PPE/ Safety Gadgets
- 6.1.2 Working without proper tools and tackles, barricading, Poor condition of Crane / Hydra / Vehicle, using without certification / Licence, Incompetent driver/ Helper
- 6.1.3 Working without creation of effective safety zone
- 6.1.4 Improper Supervision at worksite, Lineman/ Supervisor working without competency
- 6.1.5 Working without adherence to PTW process or authorization/ not adherence to SOPs / W.I. of TPCODL.
- 6.1.6 Improper Working at height equal to or above 1.8 mtrs without taking proper fall protection measures/ Poor condition of Ladder

6.2 Measures of Reward and Punitive Measures

The Engineer In-Charge, NSO, SC, ASOs, CSI / SIs and SHE &DM group will conduct the surprise audits of the work / project and if any non-conformance is found the same will be booked and entered in the format "Safety Violation Record" *annexure 10*. The flow of the information is given below:

Safety Violation Escalation & Monitoring process	
Action	Responsibility
Safety Violation form has been filled and counter foil sent to SAFETY team for information. The main form is to be given to BA supervisor / Engineer in-charge. <i>(Automatically generated if Site audit done through Mobile App.)</i>	Engineer In-charge/ NSO / SC / SAFETY Group /CSI/ ASO/ Any authorised TPCODL official.
↓	
Entry of the violation in the master record and sending the information to concerned Manager, HoG, HoD, Head and Chief (O &S). <i>(Automatically generated if Site audit done through Mobile App.)</i>	SAFETY Group
↓	
Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA,	Engineer In-charge

if any.	
↓	
HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted.	SAFETY Group
↓	
The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees.	SAFETY Group with approval of CFO/Chief (O & S) /CEO&MD

The safety violations have been rated from 1 to 5 (figure 6.3) as per the gravity of the violation. If the same violation is repeated it may escalate into a higher penalty. If a particular Business Associate employee violates safety norms three times, he shall not be allowed to work in TPCODL for a period of one year from the date of the 3rd violation.

6.3 Safety Violation Escalation Matrix

6.3.1

Consequence of Safety Violation Observed (Not related to Incident/ Accident)		Violation				
S.No.	Safety Violation	1st	2nd	3rd	4th	Subsequent Violations
1	Working without PPE (Helmet/Gloves/Safety Harness/ Safety Shoes etc.)	A	B	C	D	Will attract the same penalty as applicable in the 4th violation.
2	Improper Working at Height	A	B	C	D	
3	Working without proper tools and tackles	A	B	C	D	
4	Poor condition of Crane/Hydra/ Vehicle/Incompetent driver/ Helper	A	B	C	D	
5	Violation of SOP/ WI	B	C	D	E	
6	Working without adherence to PTW process or authorization/ Safety Zone	C	D	E		
Legend	Action to be taken	Responsibility		Penalty Amount (in Rs.)		The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
A	Warning letter	Engineer Incharge		Nil		
B	Levy of Penalty	Engineer Incharge		2,000		
C	Memo to BA & Levy of Penalty	Head of Group		4,000		
D	Memo to BA & Levy of Penalty	Head of Department		10,000		
E	Memo to BA, Levy of Penalty and termination of Contract	Head of Department		1,00,000		
Figure 6.3 (1a)-Penalty Matrix for Safety violation (Applicable for Minor Contracts)						

Figure 6.3 (1a)-Penalty Matrix for Safety violation (Applicable for Minor Contracts)

Consequence of Safety Violation Observed (Not related to Incident/ Accident)		Violation				
S.No.	Safety Violation	1st	2nd	3rd	4th	Subsequent Violations
1	Working without PPE (Helmet/Gloves/Safety Harness/ Safety Shoes etc.)	B	C	D	D	Will attract the same penalty as applicable in the 4th violation.
2	Improper Working at Height	B	C	D	D	
3	Working without proper tools and tackles	A	B	C	D	
4	Poor condition of Crane/Hydra/ Vehicle/Incompetent driver/ Helper	B	C	D	E	
5	Violation of SOP/ WI	C	D	E		
6	Working without adherence to PTW process or authorization/ Safety Zone	C	D	E		

Legend	Action to be taken	Responsibility	Penalty Amount (in Rs.)	The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
A	Levy of Penalty	Engineer Incharge	5,000	
B	Memo to BA & Levy of Penalty	Engineer Incharge	10,000	
C	Memo to BA & Levy of Penalty	Head of Group	25,000	
D	Memo to BA & Levy of Penalty	Head of Department	50,000	
E	Memo to BA, Levy of Penalty and termination of Contract	Head of Department	1,00,000	

Figure 6.3 (1b)-Penalty Matrix for Safety violation (Applicable for Major Contracts)

Figure 6.3 (1b)-Penalty Matrix for Safety violation (Applicable for Major Contracts)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 71 of 104

Once the BA reaches the “BLACK” (color – “5”) category, i.e. highest level of safety violation, “Termination” notice to BA will be issued from the office of the Head of Department (equivalent to GM/ Sr. GM level) and further, *if required*, continuation / extension of contract will only be initiated by Functional Chief / Head of the department (equivalent to Sr. GM / Chief level) and approved by CEO & MD. Till the extension, the contract will remain suspended.

TPCODL encourages the reportage of the safety violation during the contract work by BA. Any TPCODL employee can register a safety violation against the BA in the “Safety Violation Form” *annexure 10*. Initially the observer has to fill the form and handover the counterfoil (lower portion) of the document to the supervisor of the BA, inform the site engineer of TPCODL and send the top portion of the Safety Violation Form to SAFETY group for the further necessary action against the BA. **The cumulative nos. of Safety Violations pertaining to any particular BA shall be calculated on yearly basis.**

Safety violations resulting in incident / accident will be treated as per gravity of the injury / fatality and its impact as well as type i.e. minor or Major. Consequences of incident / accident are shown in the matrix (figure 6.3(2) for major and 6.3(3) for minor) below. In case of any accident, findings and recommendations of Accident Enquiry Committee will be final and binding and will supersede the arbitration clause of GCC.

Consequence Of an Incident / Accident (In case of MAJOR contract)		Incident / Accident				Action Required
Sl. No	Type of the injury	1st	2nd	3rd	4th	
1	Slight injury (First Aid Case)	F (Strengthening of process through continuous improvement in the w work procedure)				Take risk reduction measures
2	Minor injury (No or Hospitalization less then 48 Hrs)	F	G	G	H	
3	Major injury (Bone injury or burn or Hospitalization more then 48 Hrs)	G	G	H	I	
4	Single fatality	J	K			Intolerable
5	Multiple fatalities (Two or more fatalities during one event)	K				
Legend	Action to be taken	Responsibility		Penalty (in Rs.)		The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
F	Memo to BA and levy of penalty	Engineer Incharge		5,000/-		
G	Memo to BA and levy of penalty	Head of Group		20,000/-		
H	Memo to BA and levy of penalty	Head of Group		50,000/-		
I	Memo to BA and levy of penalty	Head of Department		2,00,000/-		
J	Memo to BA and levy of penalty	Head of Department		5,00,000/-		
K	Memo to BA, levy of penalty, termination of contract and black listing of BA	Functional Head		10,00,000/-		
Figure 6.3 (2) - Penalty Matrix for Incident / Accident in Major Contracts						

Figure 6.3 (2) - Penalty Matrix for Incident / Accident in Major Contracts

(For example: In major contracts, if there is first incidence of major injury say bone injury (Cat. 3) where worker was hospitalized for more than 48 hrs then a penalty of amount Rs.20000/- will be deducted from the current bill produced for the payment. This penalty will be similar for first two incidents. However, it will increment to next higher category i.e. Rs. 50,000/- on subsequent incidents as per the above matrix)

Consequence Of an Incident / Accident (In case of <u>MINOR</u> contract)		Incident / Accident				Action Required
Sl. No	Type of the injury	1st	2nd	3rd	4th	
1	Slight injury (First Aid Case)	L (Strengthening of process through continuous improvement in the work procedure)				Take risk reduction measures
2	Minor injury (No or Hospitalization less than 48 Hrs)	L	M	M	N	
3	Major injury (Bone injury or burn or Hospitalization more than 48 Hrs)	M	M	N	O	
4	Single fatality	P	Q			Intolerable
5	Multiple fatalities (Two or more fatalities during one event)	Q				
Legend	Action to be taken	Responsibility		Penalty (in Rs.)	The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.	
L	Memo to BA and levy of penalty	Engineer Incharge		5,000/-		
M	Memo to BA and levy of penalty	Engineer Incharge		10,000/-		
N	Memo to BA and levy of penalty	Head of Group		25,000/-		
O	Memo to BA and levy of penalty	Head of Department		1,00,000/-		
P	Memo to BA and levy of penalty	Head of Department		3,00,000/-		
Q	Memo to BA, levy of penalty, termination of contract and black listing of the BA	Functional Head		5,00,000/-		
Figure 6.3 (3) - Penalty Matrix for Incident / Accident in Minor Contracts						

(For example: In minor contracts, if a worker meets with a non-fatal accident say bone injury (Cat. 3) where he was hospitalized for more than 48 hrs then a penalty of amount Rs. 10,000/-, will be charged from the current bill produced for the payment. This penalty will be similar for first two incidents. However, it will increment to next higher category i.e. Rs. 25,000/- on subsequent incidents as per the above matrix.)

In case of single or multiple fatalities described under legends J&K of 6.3(2) and P&Q of 6.3(3), the concerned BA may be debarred from extension of contract or participate in new contract. In such event the approval of Chief (O & S) will be necessary for extension or award of new contract to concerned BA.

6.3.2 COMPENSATION FOR BA PERSONNEL

In the event of any untoward incident/ accident, the Business Associate shall ensure prompt medical assistance such as treatment, sickness benefit, etc. is provided to the victim(s) as per the Employees' Compensation Act, 1923 or Employees' State Insurance Act, 1948, as applicable. Also, the BA will be required to take adequate measures for compensating the victim(s) or his/her/their kin as follows:

I. For Death or Permanent / Total Disablement

The BA shall take an insurance coverage of at least Rs. 15 lakhs for each engaged employee, to cover any incidence of Death or Permanent / Total Disablement (Permanent/Total Disability shall be considered as defined under Employees' Compensation Act, 1923). In the event of any such unfortunate incident, the BA would ensure that adequate compensation is paid immediately to the family of the victim(s) from his own resources. This compensation shall be covered under the insurance policy subscribed by the BA mentioned earlier and the arrangement should be such that it would get reimbursed to the BA by the insurance agency subsequently.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 73 of 104

II. For Permanent Partial Disablement and Temporary Total Disablement

The compensation in this case will be as per provisions of the Employees' Compensation Act, 1923 or Employees' State Insurance Act, 1948, as applicable.

Accordingly, the BA shall obtain a suitable Insurance Policy on award of Contract and submit documentary evidence of the policy to the BA Cell before commencement of work. The BA shall ensure that the Insurance policy is active at all times and all employees are covered in all respects till the conclusion of contract period or till working with TPCODL. The BA shall submit a copy of the policy after periodic renewals to the BA Cell.

However, on occurrence of such unfortunate incident, if it is found that the victim(s) is/are not covered under any insurance policy, the BA shall be liable to pay the entire sum of Rs. 10 lakhs from his own resources.

Further, in case of an accident resulting in Death or Permanent / Total Disablement while on duty, the appointed BA Nodal Officer will ensure that the BA complies with all statutory provisions and benefits i.e. PF, Compensation, Gratuity etc., and that all these are made available to the employees' nominee(s) as per the stipulated timelines.

6.3.3 TPCODL rewards the BA with good track record of safety management. It is proposed that BA complying with Contractors Safety Management, Safety Manual and Safety process will be rewarded suitably as per the procedure, rule and regulations of the TPCODL. In any case major accident is reported during an assessment period BA will not be eligible for this reward scheme. Assessment of contracts will be once in year. Generally the assessment cycle is calendar year and guidelines will be declared time to time.

Abbreviations Used in the Document

TPCODL	TP Central Odisha Distribution Limited
BA	Business Associate
HIRA	Hazard Identification & Risk Assessment
JSA	Job Safety Analysis
EHV	Extra High Voltage
SAFETY	Safety, Occupation Health, Environment & Disaster Management
MMG	Meter Management Group
EAG	Energy Audit Group
PPE	Personal Protective Equipment
SOP	Standard Operating Procedures
CSI/SI	Circle Safety In-charge / Safety In-charge
ASO	Area Safety Officer
NSO	Nodal Safety Officer
SC	Safety Coordinator
HoG / HoD	Head of Group / Head of Department
AGM / GM / VP	Assistant General Manager / General Manager / Vice President

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 74 of 104

CFO / Chief (O & S)/ CEO & MD	Chief Finance Officer / Chief (Operating & Safety) / Chief Executive Officer & Managing Director
COS	Corporate Operation Services
CAP	Centralized Account Payable System
PTW	Permit To Work
GCC	General Conditions of Contract.

- END -

GENERAL CONDITIONS OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 75 of 104

Annexure 1 (Refer Para 3.1)

Business Associate Safety Management System Questionnaire

Certification				
The information provided in this questionnaire is a summary of the company's occupational health and safety management system.				
Company Name:				
Turnover and experience:		Name of top officer:		
Date:		Position		
Contract Details				
Contract Name			Contract Number:	
Business Associates Safety Management System Questionnaire	Marks	Yes	No	Score achieved
<i>Safety Policy and Management</i>				
- Is there a written company Safety policy? - If yes provide a copy of the policy, if No please refer Note 1.	1			
- Does the company have an Safety Management system - If yes provide details, if No please refer Note 1.	1			
- Is there a company Safety Management System manual or plan? - If yes provide a copy of the content page(s), if No please refer Note 1.	2			
- Are Safety and occupational health responsibilities clearly identified for all levels of Management and staff? - If yes provide details, if No please refer Note 1.	2			
<i>Safe Work Practices and Procedures</i>				
- Has the company prepared safe operating procedures or specific safety instructions relevant to its operations and relevant work as per contract? - If yes provide a summary listing of procedures or instructions, if No please refer Note 2.	1			

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS		
Rev. No	0	Page 76 of 104	

Certification				
- Comments				
- Is there a register of injury or accident? - If yes provide a copy (format)	1			
- Is there a documented incident or accident investigation procedure? - If yes provide a copy of a standard incident report form, if No please refer Note 2. - Comments	1			
<i>Safety Training</i>				
- Describe how occupational health and safety training is conducted in your company If No please refer Note 1.	2			
- Is a record maintained of all training and induction programs undertaken for employees in your company? - If yes provide examples of safety training records, if No please refer Note 2.	1			
- Are regular safety inspections / audits are undertaken at worksites? -If yes provide details (formats), if No please refer Note 3.	1			
- Is there a procedure by which employees can report hazards at workplaces? - If yes provide details if No please refer Note 1.	1			
<i>Safety Monitoring</i>				
- Is there an officer / supervisor responsible for monitoring workplace / worksite safety?	1			

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS		
Rev. No	0	Page 77 of 104	

Certification				
- If yes provide details				
<i>Safety Performance Monitoring</i>				
- Are employees regularly provided with information on company health and safety performance?	1			
- If yes provide details				
- Has the company ever been convicted of an occupational health and safety offence?	NO Marks (Negative mark ONE for each case)			
- If yes provide details				
- Has there been any major accident of employee at TPCODL site in past	NO Marks (Negative mark ONE for each case)			
- Has there been any fatal accident of employee at TPCODL site in past. - (Note: Bid evaluation committee has to take cognizance of the incident and shall evaluate the bid only after formal approval of competent authority i.e. CTO. - In case of yes please refer Note 4.	NO Mark (Negative mark FIVE for each case)			
Minimum of 75% marks is required for qualification.		Total Marks achieved		
<i>Company Reference</i>				
1. Name of company 2. Name of company				

Note

1: If company does not have formal procedure on Safety Management System than vendor may submit proposed Safety road map along with safety action plan and brief safety policy on his letter head signed by head of the organization.

2: The vendor may submit the same in the Safety Action Plan.

3: The vendor may utilize the same format of TPCODL or on request SAFETY group will assist the vendor in developing the audit system. For other points also vendor may take the assistance of SAFETY group for development of Safety management system.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 78 of 104

4: The vendor may submit the Safety Improvement Plan and Safety Action Plan for his employees based on following points.

- i. Action plan for enhancing safety awareness*
- ii. Action plan for safety training of employee*
- iii. Action plan for increasing safety audit in field*
- iv. Action plan for provision and utilization of safety PPE.*
- v. Action plan for fatality reduction.*
- vi. Action plan for enhanced supervision at site*
- vii. Action plan for making employee more responsible and accountable for safety.*
- viii. Action plan for availability and utilization of all required tool and equipment.*
- ix. Safety Improvement done in last two years, specially highlighting those which have been taken after the fatal accident along with results.*
- x. Safety initiatives planed or started recently.*
- xi. Any other point.*

Based on above points and documentary evidences vendor will be required to submit a detailed report in support of his bid. The bid evaluation committee and competent authority will scrutinize the facts and the evidence submitted. If found satisfactory competent authority i.e. CTO may accord his approval for bid opening otherwise his tender shall be disqualified.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 79 of 104

Annexure 2 (Refer Para 3.2 and 5.8)

Risk Assessment Form

Business Associate:
Scope of the work:
BA's Representative:
Telephone:
Signature:
Date:

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures
Working at Height	Fall from height	2	1. Mandatory usage of JSA checklist prior to start of work 2. Use appropriate ladder 3. Use full body safety harness having double lanyard. 4. Use Electrical Safety Shoes if working on electrical network otherwise use safety shoes. 5. Use Safety helmet. 6. Use PPE as per the annexure 7 of this CSM document 7. Refer Work instruction related to Working at Height for other details 8. Use of metal scaffold to be ensured in height work (cup lock type) 9. Deploy competent workforce who are medically fit

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 80 of 104

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures
Working on electrical equipment / network	Electric flash / electrocution	3	1. Mandatory usage of JSA checklist prior to start of work 2. Use Electrical Safety Shoes while working on electrical network. 3. Use Electrical Safety gloves of appropriate voltage rating. 4. Use face shield / visor attached with helmet. 5. Use Safety helmet. 6. Use PPE as per the annexure 7 of this CSM document 7. Mandatory usage of Insulated tools & tackles on electrical system 8. Mandatory compliance for Lock Out & Tag out system. Refer Work instruction related to Working on electrical equipment / network for other details
Excavation / Civil work	Collapse of soil, Fall in excavated pit leading to Injury	2	1. Use safety shoes. 2. Use Safety helmet. 3. Use PPE as per the annexure 7 of this CSM document 4. Hard Barricading of the worksite. 5. Refer Work instruction related to excavation / civil work for other details
Material lifting & Mechanical Erection work	Fall of material/object, Topple of crane,	2	1. Mandatory compliance of crane checklist 2. Visual condition check of lifting tools and tackles such as wire rope sling, belt sling, chain, pulley block, D-shackles, etc. shall be ensured. 3. The operator's physical fitness and alertness should be judged by sup. / EIC. 4. Use PPE as per the annexure 7 of this CSM document 5. Refer Work instruction related to Material lifting & Mechanical Erection work
Road Safety	Road Accidents	3	1. Mandatory compliance of TPCODL Road Safety policy W07(COR-P-12)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 81 of 104

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures

Note: This information for the general indication purpose. The detailed risk assessment shall be conducted before start of the work by the authorized representative of the BA. The report of same shall be submitted to engineer in-charge along with annexure 4 of the CSM document.

Guidelines for filling the Risk Assessment Form

- *Specific Task/Activity* - The documentation of each major task associated with the contract.
- *Potential Hazards* - The identification of hazards associated with each activity or task to be carried out.
- *Class of Risk* - Each hazard should be evaluated as a level of risk, described as Risk Class 1, 2 or 3 defined above.
- *Control Measure* - The identification and documentation of actions required to eliminate or reduce the hazards that could lead to accident or injury.

Hazard / Risks shall be classified according to the following schedule:

- Class 1: Potential to cause injury treatable with first aid
- Class 2: Potential to cause death or permanent injury
- Class 3: Potential to cause more than one or more lost time injuries.

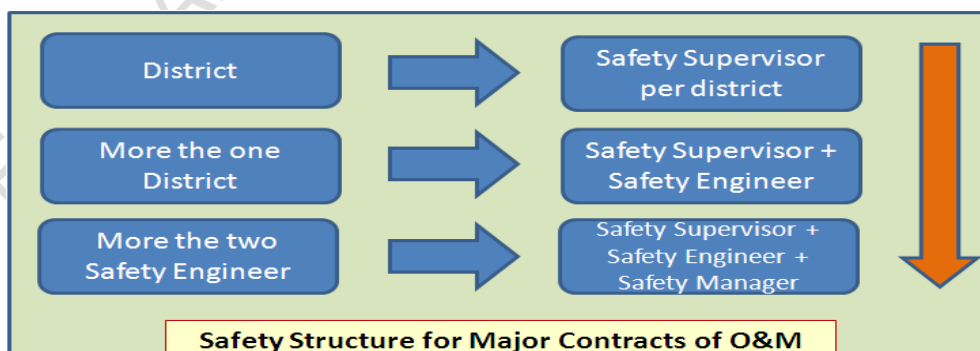
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 82 of 104

Annexure 3.1 (Refer Para 4.0)

General Safety Conditions for the Maintenance of Distribution Network Contracts:

A BA awarded a contract (O&M) work of maintenance of distribution network will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in *annexure 7*.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in a district. In case the BA has been awarded work in more than one district, then the following safety structure will be adopted.



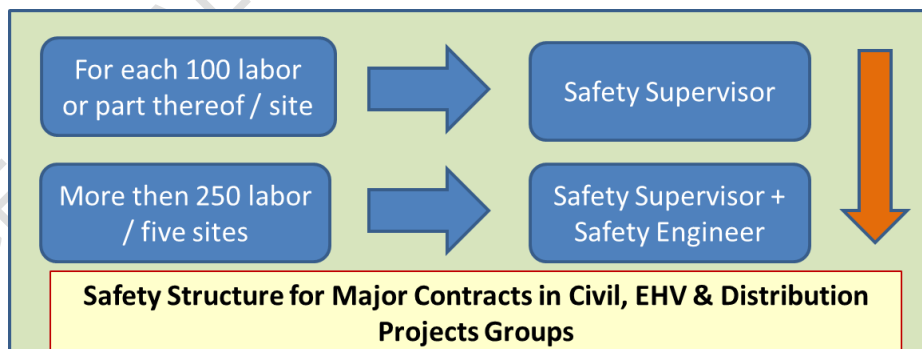
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 83 of 104

Annexure 3.2 (Refer Para 4.0)

General Safety Conditions for the Distribution Projects Major Contracts:

A BA awarded a major contract work of TS&P in area of a circle will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1.
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in the area. In case the BA has been awarded work in more than one circle, then the following safety structure will be adopted.



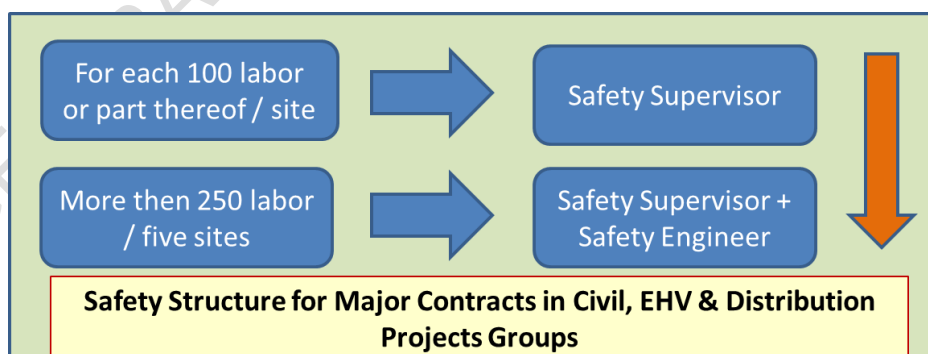
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 84 of 104

Annexure 3.3 (Refer Para 4.0)

General Safety Conditions for the major EHV Projects Contracts:

A BA awarded a major contract work of EHV projects will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in the area. In case the BA has been awarded work in more than one circle, then the following safety structure will be adopted.
- BA shall refer Construction Safety Manual in TPCODL Safety Manual for details.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 85 of 104

Annexure 3.4 (Refer Para 4.0)

General Safety Conditions for the Maintenance of Sub – Transmission Network Contracts:

A BA awarded a major contract work of maintenance of sub – transmission network in area of a power system will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Coordinator for managing a complete safety management system in the area. In case the BA has been awarded work in more than one area power system, then the following safety structure will be adopted.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 86 of 104

Annexure 3.5 (Refer Para 4.0)

General Safety Conditions for the major contract work in Civil / Generation Projects:

A BA awarded a major contract work of / in civil or Generation project will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor (for workforce upto 100 at site) / a safety engineer (for workforce upto 250 at site) / safety manager (for more than two safety engineers) for managing a complete safety management system at the project site. In case the BA has been awarded more than one major contracts, then the following safety structure will be adopted.
- BA shall refer Construction Safety Manual in TPCODL Safety Manual for details.



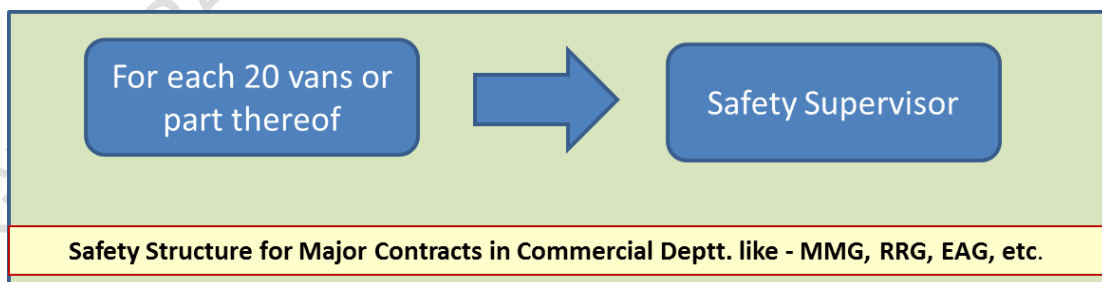
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 87 of 104

Annexure 3.6 (Refer Para 4.0)

General Safety Conditions for the major contract work in Commercial Department like - MMG, RRG, EAG, etc.:

A BA awarded a major contract work in meter management group & energy auditing group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system for the work as per the following safety structure.
- The BA for the RRG work shall depute one Safety supervisor.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 88 of 104

Annexure 3.7 (Refer Para 4.0)

General Safety Conditions for the major contract work in O&M of street light group:

A BA awarded a major contract work in operation and maintenance of street light group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment PPE as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- Each BA shall ensure to depute a Safety Supervisor for managing a complete safety management system for the work awarded as per the below structure.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 89 of 104

Annexure 4 (Refer Para 3.3)

Safety Undertaking by way of Affidavit

I _____ s/o _____ R/o _____ (AUTHORIZED REPRESENTATIVE/PARTNER/DIRECTOR/PROPRIETOR) of M/S _____ (name of company/firm)___ having its office at (Complete address of Company), authorized vide power of attorney dated -----/Board resolution dated----/letter of authority dated----, hereinafter referred to as **Contractor [or Business Associate (BA)]** which expression shall, unless it be repugnant to or inconsistent with the meaning or context thereof, be deemed to include its heirs, executors, administrators, and assigns do hereby affirm and undertake as under :

1. The present undertaking shall remain in force from the date of execution of contract awarded by TPCODL and shall be valid till the date of termination of the said contract by either parties. The undertaking is binding on me (contractor) as well as my sub-contractor and its employees, representatives etc.
2. That I(the contractor) will be responsible and liable to comply and abide by all the safety rules, instructions and regulations as may be specified and laid down by The TP Central Odisha Distribution Limited (TPCODL) so as enable TPCODL to achieve its goal of Zero On site incidences.
3. That the Contractor shall be fully responsible for ensuring occupational health and safety of its employees, representatives, agents as well as of its subcontractor's employees, at all times during the discharge of their respective obligations under the contract including any methods adopted for performance of their tasks / work.
4. That Contractor shall ensure ,at its own expense to arrange for and procure, implement all requisite accident prevention tools, first aid boxes, personal protective equipment, fire extinguisher, safety training, Material Safety Data Sheet, pre-employment medical test, etc. for operations & activities including as & when so specified by TPCODL specifically. , failing which TPCODL shall be entitled, but not obliged, to provide the same and recover the actual cost thereof from the Contractor's payments.
5. That the Contractor shall engage adequate and competent Safety – Supervisor / Engineer / Manager / Skilled persons at site as per the Para 5 (Qualification and experience of safety personnel) and Annexure 3 of Contract Safety Management.
6. That the Contractor shall engage the competent Site – Supervisor with each group of workers for safe and correct workmanship, proper co-ordination of material and site work as per contract.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 90 of 104

7. That the Contractor shall immediately replace supervisor in case it is found to be not up to the level of skill and experience required as in skill and experience required in *annexure 5* of this document, but any such replacement shall be only with the prior concurrence of TPCODL .
8. That the Contractor and its subcontractors shall abide by all the safety guidelines as per Safety Manual, Contract Safety Management and other guidelines issued from time to time by TPCODL during the contract period.
9. That in case the Contractor and/or any of its Subcontractor fail to ensure the compliance as required in terms of this undertaking the Contractor shall keep and hold TPCODL / its directors / officers / employees indemnified against any / all losses / damage / expense / liability / fines / compensation / claims / action / prosecutions or the like which might be suffered by TPCODL or to which TPCODL might get exposed to as a result of any breach /wilful negligence /deliberate default on the part of the Contractor /Subcontractor in complying with the same. Contractor shall also furnish any press release, clarification etc. if sought by TPCODL for any near miss or safety violations, accidents, which are attributable to fault of Contractor.

DEPONENT

VERIFICATION

Verified at Bhubaneswar on this _Day of _____20__ that the contents of the above affidavit are true and correct and nothing material has been concealed therefrom

DEPONENT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 91 of 104

Annexure 5 (Refer Para 5.4)

SKILL / QUALIFICATION REQUIRED FOR ELECTRICIAN AND ELECTRICAL SUPERVISOR

Skill / Qualifications Required for Electrician (*Certificate of Competency Class-II*):

1. Formal education in ITI – Wireman/ Electrician trade.

OR

2. Working experience of minimum three years of practical wiring.

OR

3. Have completed three years apprenticeship course through Apprenticeship Advisor, Govt. of Odisha / other state Govt. in the trade of Lineman / Wireman / Electrician.
4. A candidate must have attained the age of Eighteen years.

Skill / Qualifications Required for Electrical Supervisor (*Certificate of Competency Class-I*):

1. Have at least five years' experience of practical wiring after passing the certificate of competency class-II i.e. electrician.

OR

2. Recognized Degree or Diploma or equivalent qualification in Electrical Engineering from any Technical institute / College or University recognized by the Board.

AND

Must have completed the training/job in rectifying the common defects in electrical line and power installation for a period of one and three years after passing Degree or Diploma respectively

OR

3. Possessing the valid certificate of certificate of competency class – 1 (Electrical Supervisor)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 92 of 104

Annexure 6 (Refer Para 5.6)

Training Module for BAs Worker & Supervisor

Training for BA Supervisor

Duration – 02 Hrs / Month

Methodology: Lecture and Practical Demonstration of Safety Zone Creation

Session: 1

Topic: Electrical Safety Aspects

Sub Topics:

1. Learning specifics of HT & LT Network of zone
2. Major type of HT / LT / service lines / street light maintenance works
3. Understanding the need of Safety
4. Understanding the safe process of maintenance :
 - Planning of the maintenance job
 - Availability of men, material & machine, PPEs, Safety gear and approved PTW
 - Briefing of the job by the supervisor of the TPCODL
 - Identification of Risks associated with the maintenance work and planning for controlling measures by TPCODL supervisor
 - Creation of safety zone by TPCODL supervisor and satisfying that the network is dead – Use of Neon Tester, Shorting Chain and Safety Tagging
 - Start of the work – Right person for the right job
 - Alert supervision
 - Completion of the job – Check points
 - Energization of network
 - Actions to be taken in case of some accident

Session: 2

Topic: Use of Electrical Testing Equipment

Methodology: Lecture and Practical Demonstration

Sub Topics:

1. Meggar, Hi Pot, Clamp On Meter, Neon Tester, Discharge Rod, Line tester etc.

Session: 3

Topic: Awareness of Electrical Safety Aspects

- A. Understanding the need of this Training and Safety
- B. Learning specifics of HT & LT Network
- C. Major type of work to be carried out in zones
- D. Switching Operations (Do's & Don'ts) including Street Light Switching
- E. Working on Height (*practical demo also*)
- F. Understanding the Safe Process of Maintenance / Working:
 - Planning of the job
 - Availability of men, material & machine, PPEs, Safety gear and approved PTW
 - Briefing of the job by the supervisor
 - Permit to Work
 - Safety Tagging and Lock Out Tag out

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 93 of 104

- Identification of Risks associated with the work to be carried out and planning for controlling measures by proper supervision
- Concept of “**Safety Zone**”
- Identification and use of Neon Tester, Shorting Chain, Clamp On Meter, Hi Pot, Meggar etc.
- Completion of the job – Check points
- Accident Theory & Incident Reporting
- Actions to be taken in case of some accident

Session: 4

Topic: Identification, Demonstration and Usages of Tools, PPEs and other Safety Gears and demonstration of working on HT pole

Session: 5

Topic: Practical demonstration of Safety Zone creation

FREQUENCY

Regular Safety Training Program

- It will be conducted for all field & supervisor staff of BA in such a manner that all BA Personnel attend at least two hours safety training during every month.

One Day Induction Safety Training Programs:

- This training will be for the new BA's personnel, who have been cleared by the Cross Functional Panel to undergo Safety training and who are likely to be deployed at various work sites of TPCODL by the BA, as a part of AMC / Work Contract.

Duration / Periodicity:

- Duration and periodicity has been defined above. However, this is subject to change at the discretion of TPCODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 94 of 104

Annexure 7 (Refer Para 5.7)

LIST OF PERSONAL PROTECTIVE EQUIPMENT AND TESTING FREQUENCY

Sl. No.	Name of PPE	IS / EN Standard	Testing Frequency	Remarks	Ref Brand & Model
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298 (Part-2)	Monthly and visual check every day for any crack or damage in the leather or sole.		BATA (Model No.- Endura L/C) Liberty (Model No. – 7198-01 HT Barton Black – Warrior)
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	Monthly and visual check every day for any crack in shell.		Karam (PN Safetech) Joseph Leslie Accent Industries Honeywell
03	Full body harness (Safety belt)	EN 361	Monthly and visual check every day of the bends and the harness.		Karam (PN Safetech) Joseph Leslie Accent Industries
04	Electrical Safety Gloves	EN: 60903 CE marked	Weekly and visual check for any crack and blow test before every work.	Manufactured not beyond 12 months.	Make Sparian / Sumitech / CATU supplied with inner cotton glove with over glove of split leather.
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	Monthly and visual check every day for any crack in shell.	Clear acrylic visor attached with safety helmet.	Karam (PN Safetech) Joseph Leslie Accent Industries Honeywell
06	Fire Proof jacket for chest protection		Monthly and visual check every day.		
07	Safety Chain for shorting cum earthing.	As per TPCODL standard	Weekly and visual check before every work.	Made of brass, Total length – 5.5 meters and made of 12 SWG.	

Note:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 95 of 104

1. Any other Personal Protection Equipment required beyond above list will be according to BIS or EN Standards.
2. All Personal Protection Equipment will be checked by the engineer in-charge or SAFETY group of TPCODL.
3. Safety Representative of the BA has to maintain the record of the availability, condition and checking of the PPEs.
4. All tools required as per the contract must be according to respective IS / EN standards.
5. TPCODL may revise or add the above list of PPE and their specifications as and when feel necessary. The information about new specifications /models will be circulated by the Engineer In-charge (EIC), which shall adhere by the business associated in the shortest possible time. The EIC shall issue a memo / instruction to BA with timeline for implementation. Any delay will be treated as non- compliance / safety violations. Refer picture of each PPE given in next page.

Pictures of PPE for reference purpose.

Sl. No.	Name of PPE	IS / EN Standard	Picture
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298(Part-2) and with test report of electrical resistance.	
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	
03	Full body harness (Safety belt) The straps at shoulder and thigh shall have full pad for comfort. The back shall be so designed that harness straps do not tangle with each other.	EN 361:2002 EN 358 : 2000 IS: 3521:1991/2002	

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 96 of 104

04	Electrical Safety Gloves – Composite type Soft electrical gloves as per size of individual.	EN: 60903 CE marked	
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	
06	Fire Proof jacket for chest protection		
07	Safety Chain for shorting cum earthing.	As per TPCODL standard	
08	Reflective jacket to each workmen	As per TPCODL standard	

Note : Picture shown are for indicative purpose only. Actual product may differ.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 97 of 104

Annexure 8 (Refer Para 5.8) LIST OF AUDITS TO BE CONDUCTED

Audits	Responsibility	Freq.	Ref. Doc.
Permit to Work & Field Audit	BA Safety Representative	Weekly	F04 (COR P - 12)
Tool Bag & PPE's Audit		Weekly	F06 (COR P - 12)
First Aid Box Maintenance Record		Fortnightly	F08 (COR P - 12)
Fire Extinguisher Record <i>(Applicable for the BA involved in major construction works and have storage of flammable material at worksite)</i>		Monthly	F09 (COR P - 12)
Safety Talk Register		Weekly	F18 (COR P - 12)
Site Safety Audit		Daily	F29A (COR P - 12)

Note:

1. (BA Safety Representative has to use the formats as per Safety process COR – P – 12 of TPCODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 98 of 104

Annexure 9 (Refer Para 5.9)

PERFORMANCE REPORT – SAFETY

FOR THE MONTH OF.....

Name of BA :

Name of the Project and Purchase order No:

Date of commencement of work:

Man Hour Worked in this month (No. of employees X 8 Hrs + Overtime):

Cumulative Man Hour worked:

Total Number of Minor Injury (this month): Minor Injury (Total)

Major Injury (this month): Major Injury (Total):

Detail of the Incident / Sub Standard Acts and Condition

Activity	This Month	Cumulative (Total)	Day Lost (this month)	Days Lost (Cumulative)
No. of the Incident				
No. of lost time injuries				
No. of dangerous occurrences				
No. of near miss reported				
Substandard Act/Conditions observed			Attach details of observation of this month	
Safety Violation Notice received (from TPCODL) (both in numbers and in Rs.)	No.	No.	No. of violation letter received and compliance report for the TPCODL.	
	Rs.	Rs.		

Note: Cumulative means total from date of commencement of work according to the contract.

Detail of the Accident / Near Miss Incidents:

Date and Time	Type of the incident	Name of Employee	Brief Description	Corrective and Preventive actions recommended

Details of the Safety Violations:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 99 of 104

Date and Location	Brief Description	Name of employee involved	Action Taken

Detail of the Safety Talk / Tool Box Talk / Safety Training

Date and Location	Topic (s)	Total Number of employees (Worker / Supervisor)	Number of participants (Worker / Supervisor)

Detail of the Safety Meeting

Date and Location	Number of participants	Topics discussed	Major Observations / Innovation

Detail of the Safety Inspection /Audit: (as per TPCODL site audit checklist F29A(COR-P-12)

Date	Area / Location	Major Observations	Recommendations	Action Taken

Any other Safety, Occupational Health, Environment & Disaster Management Promotional Activity (During this month):

Date	Location	Activity	Level of Participation	Number of participation

Signature of the BA Safety Representative
HoG

Signature of ZM /

Name, E. No. and Date

Name, E. No. Date.

Note: The original form to be deposited with Engineer in-charge and a copy to SAFETY group on or before 5th of every month along with bill. List of training of the current month and status of PPE to be also mentioned individual wise.

BA may include additional lines if required. The TPCODL may revise the format as and when deemed required.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 100 of 104

ANNEXURE-M
VENDOR APPRAISAL FORM

TO BE SUBMITTED BY VENDOR (To be filled as applicable)			
VENDOR:			
1.0	DETAILS OF THE FIRM		
	1.1	NAME (IN CAPITAL LETTERS)	:
	1.2	TYPE OF CONCERN (PROPRIETORY) Partnership, Pvt. Ltd., Public Ltd. etc.	:
	1.3	YEAR OF ESTABLISHMENT	:
	1.4	LOCATION OF OFFICE POSTAL ADDRESS TELEGRAPHIC ADDRESSES, TELEX NO. FAX NO.	:
	1.5	LOCATION OF MANUFACTURING UNITS	:
		i) UNITS 1	:
		ii) OTHER UNITS	:
2.0	PRODUCTS MANUFACTURED		:
3.0	TURNOVER DURING THE LAST 3 YEARS (TO BE VERIFIED WITH THE LATEST PROFIT & LOSS STATEMENT).		:
4.0	VALUE OF FIXED ASSETS		:
5.0	NAME & ADDRESS OF THE BANKERS		:
6.0	BANK GUARANTEE LIMIT		:
7.0	CREDIT LIMIT		:
8.0	TECHNICAL		
	8.1	NO.OF DESIGN ENGINEERS (INDICATE NO.OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	8.2	NO.OF DRAUGHTSMEN	:
	8.3	COLLABORATION DETAILS (IF ANY)	:
		8.3.1 DATE OF COLLABORATION	:
		8.3.2 NAME OF COLLABORATOR	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 101 of 104

		8.3.3 RBI APPROVAL DETAILS	:
		8.3.4 EXPERIENCE LIST OF COLLABORATOR	:
		8.3.5 DURATION OF AGREEMENT	:
	8.4	AVAILABILITY OF STANDARDS / DESIGN PROCEDURES / COLLABORATOR'S / DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT	:
	8.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	8.6	QUALITY OF DRAWINGS	:
9.0	MANUFACTURE		
	9.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	:
	9.2	POWER (KVA)	:
		MAINS INSTALLED	:
		UTILISED	:
		STANDBY POWER SOURCE	:
	9.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENT AS APPLICABLE)	:
		9.3.1 MATERIAL HANDLING	:
		9.3.2 MACHINING	:
		9.3.3 FABRICATION	:
		9.3.4 HEAT TREATMENT	:
		9.3.5 BALANCING FACILITY	:
		9.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:
	9.4	SUPERVISORY STAFF	:
	9.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	:
	9.6	NO. OF SHIFTS	:
	9.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 102 of 104

	9.8	WORKMANSHIP	:
	9.9	MATERIAL IN STOCK AND VALUE	:
	9.10	TRANSPORT FACILITIES	:
	9.11	CARE IN HANDLING	:
10.0	INSPECTION / QC / QA / TESTING		
	10.1	NUMBER OF PERSONNEL (INDICATE NO.OF YEARS OF EXPERIENCE)	:
	10.2	INDEPENDENCE FROM PRODUCTION	:
	10.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:
	10.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:
	10.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:
	10.6	STAGE INSPECTION AND DOCUMENTATION	:
	10.7	SUB-ASSEMBLY & DOCUMENTATION	:
	10.8	FINAL INSPECTION AND DOCUMENTATION	:
	10.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	:
	10.10	TYPE TEST FACILITIES	:
	10.11	ACCEPTANCE TEST FACILITIES	:
	10.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	:
	10.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC.(AS APPLICABLE)	:
	10.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:
	10.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNISED LABORATORIES	:
	i)	FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	:
	ii)	CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:
11.0	EXPERIENCE (INCLUDING CONSTRUCTION / ERECTION / COMMISSIONING) TO BE FURNISHED IN THE FORMAT INDICATED IN APPENDIX)		:
12.0	SALES, SERVICE AND SITE ORANISATIONAL DETAILS		:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 103 of 104

13.0	CERTIFICATE FROM CUSTOMERS (ATTACH COPIES OF DOCUMENTS)	:
14.0	POWER SITUATION	:
15.0	LABOUR SITUATION	:
16.0 *	APPLICABILITY OF SC/ST RELAXATION (Y/N) IF YES, SUPPORTING DOCUMENTS TO BE ATTACHED	
17.0	ORGANIZATIONAL DETAILS 1. PF NO 2. ESI NO 3. INSURANCE FOR WORK MAN COMPENSATION ACT NO 4. ELECTRICAL CONTRACT LIC NO 5. ITCC / PAN NO 6. SALES TAX NO 7. WC TAX REG. NO	:
18.0	DOCUMENTS TO BE ENCLOSED: 1. FACTORY LICENSE 2. ANNUAL REPORT FOR LAST THREE YEARS 3. TYPE TEST REPORT FOR THE ITEM 4. PAST EXPERIENCE REPORTS 5. ISO CERTIFICATE –QMS, EMS, OHAS, SA 6. REGISTRATION OF SALES TAX 7. COPY OF TIN NO. 8. COPY OF SERVICE TAX NO. 9. REGISTRATION OF CENTRAL EXCISE 10. COPY OF INCOME TAX CLEARANCE. 11. COPY OF PF REGISTRATION 12. COPY OF ESI REGISTRATION 13. COPY OF INSURANCE FOR WORK MAN COMPENSATION ACT NO 14. COPY OF ELECTRICAL CONTRACT LIC NO 15. COPY OF PAN NO 16. COPY OF WC TAX REGISTRATION 17. DOCUMENTS IN SUPPORT OF SC/ST RELAXATION AT S.NO.16.0 18. GST Registration No	

* Classification of BA s under SC/ST shall be governed under following guidelines:

- **Proprietorship/ Single Ownership Firm:** Proprietor of the firm should be from SC/ST community. Governing document shall be Proprietorship Deed.
- **Partnership Firm:** Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed.
- **Private Limited Company:** Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

NOTE: Certification from SC/ST Commission shall be required for deciding upon SC/ST status of a person.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 104 of 104

ANNEXURE-N

MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:

Tender Enquiry No.:

To,

Chief (Procurement & Stores)

TP Central Odisha Distribution Limited,

Bhubaneswar

Sir,

WHEREAS M/s. [name of OEM], who are official manufacturers of having factories at [address of OEM] do hereby authorize M/s [name of bidder] to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us

.....

and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the Special Conditions of Contract or as mentioned elsewhere in the Tender Document, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

We hereby confirm that in case, the channel partner fails to provide the necessary services as per the Tender Document referred above, M/s [name of OEM] shall provide standard warranty on the materials supplied against the contract. The warranty period and inclusion / exclusion of parts in the warranty shall remain same as defined in the contract issued to their channel partner against this tender enquiry.

Yours Sincerely,

For

Authorized Signatory

TPNODL	TP NORTHERN ODISHA DISTRIBUTION LTD	
	WORK INSTRUCTION /OPERATING GUIDELINES	
Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORK	
Rev. No	01 (dated 01.12.2021)	Page 1 of 78
Prepared By Imran Ahmad/ Swetaraj Parida	Reviewed By Vipin Chauhan VIPIN CHAUHAN Digitally signed by VIPIN CHAUHAN Date: 2021.12.04 15:09:53 +05'30'	Approved By Sunil Bhattar SUNIL BHATTAR Digitally signed by SUNIL BHATTAR DN: c=IN, o=Personal, postalCode=122018, st=Haryana, serialNumber=F53CC68A7C5989A74 C119998C838A38E97C01F84A3FFED9E 1358838297F0F38, cn=SUNIL BHATTAR Date: 2021.12.04 15:24:27 +05'30'

CONTENTS	
CLAUSE NO.	DESCRIPTION
1.0	ORGANIZATIONAL VALUES
2.0	ETHICS
2.1	Tata Code of Conduct
3.0	CONTRACT PARAMETERS
3.1	Issue/ Award of Contract
3.2	Contract Commencement Date
3.3	Contract Completion Date
3.4	Contract Period/Time
3.5	Contract Execution Completion Date
3.6	Contract Execution Period/Time
3.7	Contract Price /Value
3.8	Contract Document
3.9	Contract Language
3.10	Reverse Auction
4.0	SCOPE OF WORK
4.1	Bid Evaluation- Commercial, Technical & Safety Evaluation
4.2	Indemnity
4.3	Display of notice boards at work site
4.4	Disposal of waste at site
4.5	Deployment of workforce
4.6	Damage of Properties
4.7	Issuance of material
4.8	Company's right to use works
4.9	Rights of TPNODL to vary the scope work
5.0	PRICES/RATES/TAXES
5.1	For Supply part of Contract

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 2 of 78

CONTENTS	
CLAUSE NO.	DESCRIPTION
5.2	For Service part of Contract
5.3	Changes in statutory Tax Structure
6.0	TERMS OF PAYMENT
6.1	Pre-Requisites for Payment
6.2	Bills & Invoices
6.3	Payment & Statutory Deductions
6.4	Guidelines for Raising Running/Final Bills
6.5	Quantity Variation
6.6	Full and Final Payment
6.7	All-Risk Insurance Policy
7.0	MODE OF PAYMENT
8.0	SECURITY CUM PERFORMANCE DEPOSIT
8.1	Relationship Bank Guarantee
9.0	STATUTORY COMPLIANCE
9.1	Compliance to Various Acts
9.2	SA 8000
9.3	Affirmative Action
9.4	Compliance to Labour Laws
9.5	Compliance to C&D Waste Management Rules & Environment (Protection) Amendment Rules
9.6	MSME Development Act 2006
9.7	ISO 14001
10.0	QUALITY
10.1	Knowledge of Requirements
10.2	Material/Equipment/Works Quality
10.3	Adherence to Rules & Regulations
10.4	Specifications and Standards
11.0	SAFETY
12.0	INSPECTION/PARTICIPATION
12.1	Right to Carry Out Inspection

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 3 of 78

CONTENTS	
CLAUSE NO.	DESCRIPTION
12.2	Facilitating Inspection
12.3	Third Party Nomination
12.4	Waiver of Inspections
12.5	Incorrect Inspection Call
13.0	MDCC & DELIVERY OF MATERIALS
13.1	Material Dispatch Clearance Certificate
13.2	Right to Rejection on Receipt
13.3	Consignee
13.4	Submission of Mandatory Documents on delivery
13.5	Dispatch and Delivery Instructions
14.0	GUARANTEE
14.1	Guarantee of Performance
14.2	Guarantee period
14.3	Failure in Guarantee period (GP)
14.4	Cost of repairs on failure in GP
14.5	Guarantee Period for Goods Outsourced
14.6	Latent Defect
14.7	Support beyond the Guarantee Period
15.0	LIQUIDATED DAMAGES
15.1	LD Waiver Request
15.2	Material Recovery
16.0	ASSIGNMENT OR SUBCONTRACTING
17.0	UNLAWFUL ACTIVITIES
18.0	CONFIDENTIALITY
18.1	Documents
18.2	Geographical Data
18.3	Associate's Processes
18.4	Exclusions
18.5	Violation

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 4 of 78

CONTENTS	
CLAUSE NO.	DESCRIPTION
19	INTELLECTUAL PROPERTY RIGHTS
20	INDEMNITY
21	LIABILITY & LIMITATIONS
21.1	Liability
21.2	Limitation of Liability
22.0	FORCE MAJEURE
23.0	SUSPENSION OF CONTRACT
23.1	Suspension for Convenience
23.2	Suspension for Breach of Contract Conditions
23.3	Compensation in lieu of Suspension
24.0	TERMINATION OF CONTRACTS
24.1	Termination for default/breach of contract
24.2	Termination for convenience of associate
24.3	Termination for Convenience of TPNODL
25.0	Dispute resolution and Arbitration
25.1	Governing laws and jurisdiction
26.0	ATTRIBUTES OF GCC
26.1	Cancellation
26.2	Severability
26.3	Order of Priority
27.0	INSURANCE
28.0	ERRORS AND OMISSIONS
29.0	TRANSFER OF TITLES
30.0	SUGGESTIONS & FEEDBACK
31.0	CONTACT POINTS
32.0	LIST OF ANNEXURES

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 5 of 78

1.0 ORGANIZATIONAL VALUES

The Tata Group has always been a value driven organization. These values continue to direct the Group's growth and businesses. The Six core Tata Values underpinning the way we do business are:

Integrity - We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.

Understanding - We must be caring, respectful, compassionate and humanitarian towards our colleagues and customers around the world and always work for the benefit of India.

Excellence - We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of goods and services we provide.

Unity - We must work cohesively with our colleagues across the group and with our customers and partners around the world to build strong relationships based on tolerance, understanding and mutual co-operation.

Responsibility - We must continue to be responsible and sensitive to the countries, communities and environments in which we work, always ensuring that what comes from the people goes back to the people many times over.

Agility - We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2. Tata Code of Conduct

The Business Associate and TPNODL shall be bound by the provisions/ clauses mentioned in Tata Code of Conduct (TCoC) in all their dealings with stakeholders. The Associate is advised to go through the TCoC document available as Annexure-P.

3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

TPNODL awards the contract to the Associate in writing in the form of Purchase order or Rate Contract (RC) hereafter referred as Contract, through in any or all of following modes- physical handover / post / e-mail / web document / fax with all the attachments/enclosures which shall be part of the contract document

On receipt of the contract, the associate shall return to TPNODL copy of the contract document duly signed by legally authorized representative of associate, within two days of Effective Date of Contract for contracts having contract execution time less than 30 days and within five days for all other contracts.

Note- In case of RC though, further Release Orders (RO) shall be issued by TPNODL on RC rates and terms & Conditions as per the requirement of TPNODL.

3.2 Contract Commencement Date

The date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.3 Contract Completion Date

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 6 of 78

The date of expiry of Guarantee Period (detailed in section 12 of this document) shall be deemed as the Contract Completion Date.

3.4 Contract Period/Time

The period from Contract Commencement Date to Contract Completion Date shall be deemed as the Contract Period/Time.

3.5 Contract Execution Completion Date

The stipulated date for completing the execution of all items in the schedule of quantities (Supply, Service and or both as applicable) shall be deemed as the Contract Execution Completion Date.

3.6 Contract Execution Period/Time

The Period from Contract Commencement Date to Contract Execution Completion Date shall be the Contract Execution Period/Time. Timely Completion of Works/Timely Delivery of Materials is the essence of the contract. The period from effective date of contract to the date stipulated for completion of delivery of all items/completion of all the works/services, as per schedule of quantities of the contract is defined as contract execution completion time. The Delivery of Materials /The Completion of Works, as applicable, should be achieved in all respects as per schedules of quantities and all the terms and conditions of the contract, in the contract execution time.

Any revision/amendment in the originally stipulated contract execution time has to be approved by authorized representative of TPNODL.

3.7 Contract Price /Value

The total all-inclusive price/value mentioned in the LOI/PO/RC of the contract document is the Contract Price/Value and is based on the quantity, unit rates and prices quoted and awarded and shall be subject to adjustment based on actual quantities supplied/actual measurement of work done and accepted and certified by the authorized representative of the company unless otherwise specified in schedule of quantities or in contract documents.

3.8 Contract Document

The Contract Document shall mean and include but not limited to the following:

- NIT/Tender Enquiry, QR, Instruction to Bidders, Special Condition of Contract (SCC) of tender, GCC, Technical & Commercial Specifications including relevant annexure and attachments).
- Bids & Proposals Received from Associate including relevant annexure/attachments.
- Letter of Intent (LOI/RC/PO) with agreed deviations from the tender/bid documents.
- All the Inspection and Test reports, Detailed Engineering Drawings.
- Material Dispatch Clearance Certificate (MDCC).
- Minutes of Meeting (MoM)

3.9 Contract Language

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 7 of 78

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language.

The Contract documents and all correspondence between the TPNODL, Third Parties associated with the contract, and the Associate shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi, and local languages.

3.10 Reverse Auction

TPNODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached in Annexure J. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form as mentioned in the Annexure J as a token of acceptance for the same.

In addition to this TPNODL reserve the rights for manual negotiation even after the Reverse Auction.

4.0 SCOPE OF WORK

All the activities that are to be undertaken by the Associate to realize the contractual deliverables in completeness form Scope of Work. Following clauses list, but not limited to, major requirements of the scope of work.

The associate shall satisfy himself and undertake fully the technical/commercial requirements of items to be supplied as listed in the Schedule of Quantities together with the tests to be performed /test reports to be furnished before dispatch, arrangement of stage and final inspections during manufacturing as per terms and conditions of contract, technical parameters & delivery terms and conditions including transit insurance to be met in order to fully meet TPNODL's requirements.

Completeness: Any supplies and services which might have not been specifically mentioned in the Contract but are necessary for the scope mentioned in Special Terms & Conditions and/or completeness of the works at the highest possible level, including any royalties, license fees & compensation to be paid, whether incurred by the associates or by a third party for the work covered in the scope, regardless of when incurred, shall be supplied/provided by the associate without any extra cost and within the time schedule for efficient, smooth and satisfactory operation and maintenance of the works at the highest possible level under Indian conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this Contract.

TPNODL have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by submitting a request in writing to the Associate. The Associate shall, within fifteen days of receipt of such request from the TPNODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPNODL requests a change, the Contract price and time shall be adjusted upwards or downwards, as the case may be and shall be mutually agreed to. The associate

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 8 of 78

shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes as requested till adjustment of contract price and time schedule where so applicable in terms of or otherwise directed by the TPNODL.

4.1 Bid Evaluation- Commercial, Technical and Safety Evaluation

TPNODL reserves the right to evaluate the bid in the following manner on the below parameters as per the requirement:

- **Safety Evaluation:** Business Associates may be required to submit a separate Safety Bid along with their Technical & Price Bids at the time of bidding, especially in cases where the expected contract value $\geq$ Rs. 1 Cr. and which fall in high risk category as detailed in Annexure-N. In such cases, TPNODL shall also do a Safety Bid Evaluation along with Technical Evaluation to declare the Qualified Bidders.
- **Technical Evaluation:** The bid shall be evaluated on the parameters and not limited to Bidder Experience, Bidder Performance with other utility/company, internal performance feedback, Technical Specification, General Technical Parameters (GTP), Layout, Drawings etc.

TPNODL reserves the right to carry out Factory Evaluation of Manufacturer along with the Visit to executed Sites for further evaluation to ascertain bidder's manufacturing capability, quality procedures & Performance of executed works.

- **Commercial Evaluation:** The bid shall be evaluated on the basis of Qualifying Requirement parameters and other commercial parameters as mentioned in tender.

4.2 Indemnity

Associates shall undertake to fully indemnify TPNODL (also referred to as the Company in the GCC) against all kinds of liabilities or damages, of whatsoever nature, including compensation arising from any accident to the person or property of those in Associate's employment or to any other person or properties including those of TPNODL, arising due to reasons attributable to any, act, omission or negligence of the Associate the Associates, for the entire period of contract including period of guarantee.

Within 7 days of award of work, the Associates shall submit Indemnity Bond in the format as per Annexure-E to Order Issuing Authority.

Contract having value more than Rs 2 Cr per Annum, Associates shall submit Indemnity Bond on Rs 100/- Non Judicial Stamp Paper in the format as per Annexure- E to Order Issuing Authority.

4.3 Display of Notice Boards at Work Sites

The Associate shall put up display notice board at each project site where the works are in progress indicating the information given below:

- Name of the Project.
- Estimated Cost of Project.
- Date of Commencement.
- Expected date of completion.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 9 of 78

- Name of Associate and his telephone number.
- Name of Engineer-in-Charge and his telephone number.

4.4 Disposal of Waste at Site

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change.

The associates shall follow the below criteria for disposal of waste at site during the execution of project.

- Associate shall ensure that the detailed project plan include the waste management, segregation of all designated waste material (Recyclable/ Non-Recyclable), collecting, storing, disposing and transferring the same to pre-arranged facility/destination in timely and safe manner as per environmental legislations during the execution of project. The project plan shall also include the innovative construction practice to eliminate or minimize waste, protect surface/ground water, control dust and other emissions to air and control noise during the execution of project. The copy of same shall be given to EIC before the commencement of project.
- The purchase policy of BA shall encourage the procurement of material with recycled and minimum packaging of goods during delivery. Associate shall provide the appropriate means for site to site transportation of materials to avoid damage and litter generation.
- Associate shall educate and inform to its project team about the requirement and responsibilities for waste minimization and disposal in general and provide training of practices that support this. Waste management should be treated like a safety program.
- In the event that area of contaminated or biological hazard is identified, Associate shall ensure that plant, equipment, personnel and any activity associated with the work is carried out in consultation with EIC of TPNODL.
- Associate shall ensure that the residents living near the site are kept informed about proposed working schedule and shall informed timings and duration of any abnormal noise full activity that is likely to happen.
- Associate shall ensure the regular maintenance and monitoring of vehicles and equipment for efficient fuel use so that emissions and noise are within acceptable limits to avoid air pollution.

4.5 Deployment of Work Force

Associate shall deploy adequate labour, as considered necessary by TPNODL for execution of the contract including Sundays and Holidays whenever required to do so with no extra cost to TPNODL. However, prior permission shall be taken from the site Engineer to carry out the work beyond normal working hours or on Sundays and Holidays. Female employees shall not be deployed beyond normal working hours/days and no child labour shall ever be deployed. Associate shall depute full time qualified and experienced engineers to supervise the work at site. All such staff shall be maintained from commencement to completion of all works to the entire satisfaction of the Engineer-in-Charge. Associate's employees deployed for the works under this contract will not be considered in Company's employment at any

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 10 of 78

time. Associate shall continue to be responsible for all such employees, their safety, all types of statutory compliances related thereto and in any other manner whatsoever. The company will stand indemnified by the Associate in respect of all the above. At the same time Company upon noticing any breach or default on any statutory compliances, may at their sole discretion, decide to act in a manner as deemed fit at the risks and costs of the Associate.

TPNODL shall have the right to instruct the Associate to change the Sub- Associates or skilled /unskilled workers in case the conduct, the workmanship or speed of the work is not satisfactory.

Associates shall submit duly signed undertaking regarding engagement of competent staff / employee commensurate to the nature of job to Engineer-in-charge in the format attached as Annexure – H.

4.6 Damages to Properties

The Associates shall take necessary steps to ensure that the equipment and installations of the Company, Third parties, including other utility services like water supply pipelines; open drains telephone cables etc. are not damaged during execution of the works. The Associates shall be responsible for all such damages and shall have to repair/ replace and/or compensate for the entire claims in respect of such damages at its own cost.

4.7 Issuance of Material

The material issued to the Associate shall be in the custody of the Associates who shall be fully responsible for the same. After completion of the works, the Associates will reconcile the material. Any cost of material which is short or damaged/lost will be deducted from Associate bill/ deposits.

4.8 Company's Right To Use Works

If Taking Over Certificate is delayed for any reason, for which TPNODL's decision shall be final and binding upon the Associate, the Company shall be entitled to use the works or portion thereof without affecting Associate's responsibility and liability to complete the balance works as per company's directives from time to time, though Associate shall be afforded reasonable opportunity by the company to enable Associates to complete all balance works required for issuance of 'Taking Over Certificate' by the company.

4.9 Rights of TPNODL to vary the scope work

TPNODL shall have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by communicating the intent to do so in writing to the Associate. On receipt of such communication the Associate shall, within the time frame specified in the contract shall provide TPNODL with a reasonably detailed estimate of the cost of the change in scope outlined in the TPNODL communication. The change in the Contract price and time shall be revised upwards or downwards, as the case may be, and shall be mutually agreed to. The Associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes in the scope of work till such time revision of Contract price and time schedule are approved and communicated to the associate by TPNODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 11 of 78

Any change in the Scope of Work and/or Terms & Conditions of the order shall be intimated by TPNODL through an amendment to the contract. The amendment shall be treated valid only if signed by the authorized signatory of the original contract.

5.0 PRICES/ RATES/ TAXES

5.1 For Supply part of Contract

Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPNODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPNODL store/site & unloading & delivery at TPNODL stores/TPNODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices/rates shall remain firm till actual completion of entire supply of goods/material/equipment as per contract is achieved and shall remain valid till the completion of the contract.

The prices shall remain unchanged irrespective of TPNODL making changes in quantum in all or any of the schedules of items of contract.

5.2 For Service part of Contract

The Prices and Rates are inclusive of cost of materials supplied as per contract terms and for which MDCC is issued by TPNODL and to the extent required for completion of works, cost of service executed as per schedule of quantities, cost of testing as per contract terms, cost of documentations including all relevant test certificates and other supportive documents to be furnished as per contract terms. The rates shall remain firm till actual completion of contract.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices shall remain unchanged irrespective of TPNODL making changes in quantum in all or any of the schedules of items of contract.

5.3 Changes in Statutory Tax Structure

If rate of any or all of the statutory taxes and duties applicable to the contract changes, such changes shall be incorporated by default if the changes occur within the contract execution time and shall be applicable if the contract is executed by the Associate within the Contract Execution Time.

For execution of contracts beyond contract execution time, where the delay is not attributable to TPNODL no upward revision in tax /duties shall be considered irrespective of changes in the statutory tax structure either within the contract execution time or beyond. However, in such cases, benefits due to any downward revisions in statutory tax rates shall be passed on to TPNODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 12 of 78

6.0 TERMS OF PAYMENT

- A. 5% of the Release Order/ Purchase Order price shall be paid as initial interest free advance on fulfillment of the following by the Associate:
 - a) Acceptance of PO/ LOI.
 - b) Submission of advance payment BG (APBG) of 15% of the Release Order/ Purchase Order price which shall remain valid till the advance is fully adjusted.
 - c) Submission of Contract Performance Bank Guarantee (CPBG) of 5/10% of the RC/ PO price valid till 30 days after taking over of the works.
- B. 10% of the Release Order/ Purchase Order price shall be paid as interest free advance against approval of drawings under Category-1 of major drawings, Quality Plans, Pert Chart, Field Quality Plan, posting of Project Manager and commencement of the first mile stone of the work mutually agreed including C-3 Form, and submission of a true copy of 'Erection All Risk Insurance Policy' taken for the awarded jobs. The drawing list shall be mutually agreed at the time of award of work.
- C. 50% on account payment of the total of item wise cost of material Release Order/ Purchase Order shall be paid against receipt of material at site in good condition and certification by TPNODL along with bills complete in all respects viz. MDCCs etc.
- D. 20% on account payment of the actual executed value shall be paid against mechanical completion of erection on prorata basis against monthly bills and 70% on account of the actual executed value shall be paid against the service line item including composite line item. In case this milestone is not completed beyond 120 days for reasons attributable to TPNODL, the payment corresponding to supply part shall be released subject to submission of BG of equivalent amount by the BA valid for a period of further 12 months. If required, it shall be extended by the BA on request of TPNODL.
- E. 15% payment of the actual executed Release Order/ Purchase Order shall be paid after completion of acceptance test and Taking Over of the complete systems specified in the enquiry, including clearance of Electrical Inspection, compliance of final punch point and after reconciliation & adjustment of payments, if any, towards Quantities of materials issued from purchaser's stock and consumed by the contractor for expeditious completion of the job. In case this milestone is not completed beyond 120 days beyond schedule for reasons attributable to TPNODL, the payment corresponding to supply part shall be released subject to submission of BG of equivalent amount by the BA valid for a period of further 12 months. If required, it shall be extended by the BA on request of TPNODL.

The Contractor shall submit all Operation & Maintenance manuals and "As Built Drawings" etc. and shall also submit Equipment Warranty Bank Guarantee (EWBG) equivalent to 5/10% of actual executed contract price before the release of this last payment and return of CPBG. The validity of EWBG shall be for a period of 15 months from the date of taking over of the works or specified guarantee period in drawing/tender/technical specification documents etc. whichever is later. The

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 13 of 78

associate shall also submit 'No Demand Certificate' at the time of receipt of full and final payment.

6.1 Pre-Requisites for Payment

- Associate should have completed execution of that part of contract, for which payment is sought, to the satisfaction of TPNODL's Engineer-in-Charge responsible for the contract and obtained certification for execution of the work.
- Associate has undertaken joint measurement of the work executed along with TPNODL's Engineer-in-charge
- Associate's bills/invoices submitted have been certified by Engineer-In-Charge.

6.2 Bills & Invoices

Unless specified otherwise in the special conditions of contract, Associate shall raise not more than one invoice/contract per month for the services rendered in the prescribed Tax Format and the invoice shall be submitted within 15 days of the following month at TPNODL.

All Bills shall be supported by joint measurement of work done, quality test report and a copy of wage sheet, if applicable (showing proof of having disbursed wages as per applicable law), e-Way challan (if applicable) and a copy of statement substantiating that statutory payments having been affected.

Bills/ invoices shall mention Associate's GST Number, PAN number as applicable.

Final bill submission after completion of project or execution of job must be within 30 days from the actual date of completion/execution of work awarded.

6.3 Payment & Statutory Deductions

Payment shall be released within 45 days from the submission of the bills. The associate shall submit "No Demand Certificate" in the format as per Annexure-D at the time of receipt of full and final payment. In case any non-compliance to contract conditions comes to TPNODL's notice, TPNODL will be entitled to deduct 30% of estimated wages plus 20% of wages as TPNODL's overheads. Associates would be obliged to provide the copy of monthly wage sheet in any case, failing which no payment shall be made. TPNODL at their sole discretion may deposit the PF etc. with statutory authorities. TPNODL will deduct the amounts of TDS as per statutory requirement under the income tax act and the DVAT Act and certificates (wherever applicable) will be issued to associate accordingly.

In case of non-submission of PAN No TDS @ 20% shall be deducted from all payable amounts for which no TDS certificate shall be issued. TDS once deducted as above shall not be revised in any condition.

6.3.1 Statutory Deductions

TPNODL will deduct the amounts of TDS, TCS as per statutory requirement under the income tax act, the Goods and Services tax act, BOCW Act, or any other applicable tax act and certificates (wherever applicable) will be issued to associate accordingly. For consumption of TPNODL's Water and Electricity by Associate for execution of Contract, Associate shall pay 0.5% & 1.0% respectively of contract value and it shall be deducted from the running bills. The Engineer-in-Charge as stated in the Order shall be responsible for

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 14 of 78

certification of the work executed and the bills. Bills (including original) shall be submitted in triplicate at Finance office, Balasore.

6.4 Guidelines for Raising Running/Final Bills

Contract Value Up to 5 Lakhs	One Final Bill
Contract Value More than 5 lakhs	Monthly Running Bill & One Final Bill

All Bills shall be processed only when all bank Guarantees are in place and before payments of Final Bill Associate have to furnish NDC.

6.5 Quantity Variation

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by TPNODL and not on the basis of contract quantity.

6.6 Full and Final Payment

Full & Final Payment in all contracts shall be made subject to the associate submitting "No Demand Certificate" in the format as per Annexure-D.

6.7 Erection All –Risk Insurance Policy

Associate shall obtain an Erection All Risk (EAR) Policy as a comprehensive insurance solution designed to cover broad spectrum of risks to which a project is exposed to - from arrival of construction material at site till the completion of project, including but not limited to the following, the copy of Insurance Policy shall be submitted to E-I-C/ Finance department of TPNODL before starting the work.

- a. Earthquake
- b. Terrorism
- c. Escalation Cost (10% of sum insured on annual basis)
- d. Extended Maintenance cover for defect liability period-24 months
- e. Design Defect
- f. 50-50 Clause
- g. 72 Hours Clause
- h. Loss minimization clause
- i. Offsite storage/ fabrication
- j. TPL (INR 50 lac per occurrence)
- k. Theft, pilferage
- l. Cross liability
- m. Malicious damage
- n. Contractor's plant & equipment (value 25 lakh)
- o. Waiver of Subrogation clause
- p. STFI- Storm, Tempest, Flood, Fire and Inundation

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 15 of 78

EAR policy is mandatory document for processing the invoices. Business Associate needs to ensure that the All- Risk Insurance Policy is obtained as per the terms of contract, failing which:

- Penalty @1% of contract value would be charged.
- In case of expiry of policy before handing over the project, TPNODL Engineer-In-Charge shall reserve the right to deduct the penalty upto a maximum of 1% of contract value.

7.0 MODE OF PAYMENT

Payment shall be made through RTGS/ NEFT/ Online Net banking mode for which Business Associate shall submit the details of Bank Account and other details as per annexure J. Further, for any payments made, TPNODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate.

The quantities of items indicated are estimated and preliminary. However, payments shall be made on the basis of actual quantity of work carried out and measured jointly by the Company and the Associate. Associates shall be responsible to organize joint measurements of works with TPNODL Engineer-in-Charge before raising any bill of work done. In the event Associate fails to do so, TPNODL at their sole discretion, may take measurements of work done and proceed as deemed fit and in such an event Associate's right to lodge any subsequent claim shall stand forfeited.

8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 21 days from the effective date of issue of PO/RC, Security cum Performance Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPNODL for:

- (a) 5% of the PO value if purchase order value is more than Rs 5 Crores.
 - (b) 10% of the PO value if purchase order value is less than Rs 5 Crores.
- This shall remain valid till the end of the Guarantee Period of contract, plus one month.
- (c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.

In case, PBG will not submitted by BA within 21 days post awarding the contract, TPNODL will reserve the right to take any appropriate action. However, in case of non-submission of PBG till the date of first bill submission, the amounts towards PBG shall be retained by TPNODL from Bills.

- For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by TPNODL while processing the invoice and shall be released after completion of Guarantee Period plus one month.
- For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable.
- In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 16 of 78

one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPNODL. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. Guarantee Period plus one month.

9.0 STATUTORY COMPLIANCE

9.1 Compliance to Various Acts

Associate should ensure adherence to the Anti-Lobbying, Debarment, Drug-Free, Child Labour, Factories Act and Shop and Establishment Workplace Certification, Registration details under GST, Sales Tax and Works Contract Tax Act.

Associate shall bear the entire responsibility, liability and risk relating to coverage of its workforce under different statutory regulations including Workman's Compensation Act, ESI Act, Factories Act, 1948, the Contract Labour (Regulation and abolition) Act 1970, and any other relevant regulations as the case may be. Associate shall also be solely responsible for the payment of all benefits such as Provident Fund, ESI, Bonus, Leave compensation and other benefits as may be applicable under applicable labour laws, etc. as per the various statutory regulations. The Associate shall compulsorily bear the cost of medical treatment and payment of monetary compensation to the families of the victims in case of injury or death, while on duty during his/her engagement with the Associate and shall keep TPNODL indemnified in this regard against any such claim and provide documentary evidences of the same to TPNODL. TPNODL shall be entitled to, if necessary, make such payment and recover the amount from Associate.

Associate should ensure adherence to all applicable laws, rules and regulation applicable under this contract from time to time. In case of violation any risk, costs etc. shall be in associates account and keep TPNODL indemnified always till completion of contracts.

9.2 SA 8000

Further being **TPNODL/ Tata Power** is SA 8000 complied and expects its Associates to follow guidelines of SA8000: 2014 on the following aspects

1. Child Labour
2. Forced or Compulsory Labour
3. Health & Safety
4. Freedom of Association & Right to Collective Bargaining
5. Discrimination
6. Disciplinary Practices
7. Working Hours
8. Remuneration
9. Management System

Business Associate is expected to ensure adherence to all statutory laws and requirements as applicable. The Associate needs to obtain Form C-3 before commencement of work and No Objection Certificate (NOC) on completion of work from BA-Relations Cell/ HR.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 17 of 78

In case any non-compliance is observed, TPNODL shall reserve the right to penalize the bidder as per direction of E-I-C. The penalty shall be 1% of total all-inclusive contract value for such cases. Also, TPNODL reserves the right to reject such bidder in future tenders.

9.3 Affirmative Action

TPNODL appreciate and welcome the engagement/employment of persons from SC/ST community or any other deprived section of society by their business associates.

Relaxation in Contract Clauses under Affirmative Action for SC/ ST Business Associates**

TPNODL believes that inclusive growth is the key to sustainable development, and to promote the same Policy on Affirmative Action for Scheduled Caste & Scheduled Tribe Communities has been adopted across the company.

Under the same pre-text, and to promote entrepreneurship among SC/ST community TPNODL has taken initiative by proposing relaxations in contract clauses as per below:

S. No.	Initiative	for SC/ ST BA's	Guideline Document
1	Tender Fees	100% waiver for SC/ST community	All Open Tenders
2	Earnest Money Deposit	50 % relaxation of estimated EMD value	All limited and Open Tenders
3	Performance Bank Guarantee	25% relaxation in PBG for order value above 50 lacs else 50% relaxation	All limited and Open tenders
4	Turnover	25% relaxation in company turnover under qualifying requirement criteria	All Open Tenders

****Classification of BA s under SC/ST shall be governed under following guidelines:**

- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be duly audited balance Sheet for the last FY bearing the name of proprietor.
- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and audited balance sheet/ ITR for last FY.
- Private limited company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Certification from SC/ST commission shall be required for deciding upon SC/ST status of a person.

9.4 Compliance to Labor Laws

Bidder needs to ensure compliance to applicable labor laws including timely disbursement of wages. In case wages are not disbursed as per the stipulated timelines, then TPNODL shall pay the wages to BA employees on behalf of BA. Apart from deducting the amount of wages paid, TPNODL shall deduct an additional service charge equivalent to 25% of the wages paid from the payment due to BA.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 18 of 78

9.5 Compliance to Construction and Demolition Waste Management Rules & Environment (Protection) Amendment Rules

BA is liable to follow the Construction and Demolition Waste Management Rules- 2016, Environment (Protection) Amendment Rules- 2018 and Guidelines on dust mitigation measures in handling construction material and C&D wastes issued by CPCB.

Following are some main points of above Rules/Guidelines for Construction work, cable laying jobs etc.

1. Barricading to be provided at site to cover complete area.
2. Construction material and waste should be inside the closed area made by using barricading.
3. Water sprinkling/fine spray from nozzles to be done to suppress the dust.
4. The board of Dust mitigation measures shall be displayed at site for public viewing with required details.
5. Loose sand or soil and construction material that causes dust shall be covered.
6. Transport material that are easily wind borne need to be covered by a sheet made of either jute, tarpaulin, plastic or any other effective material.
7. All areas for storing C&D waste/construction material to be demarcated and preferably barricaded particularly those materials that have potential to be dust borne.
8. Grinding and cutting of building materials in open area shall be prohibited.
9. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
10. No uncovered vehicles carrying construction material and waste shall be permitted.
11. Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures to be notified at the site.

9.6 Special Terms & Conditions for BAs engaged under PLPBC or Service Contracts

1. The Business Associate will abide by the rules & regulations and various process requirements of TPNODL which may get amended from time to time based on business needs.
2. The Business Associate shall ensure submission of required information to TPNODL as required by TPNODL or any government authorities (with a copy to TPNODL), as and when required within the stipulated time frame.
3. The business associate shall, before start of work, obtain and submit to TPNODL a copy of
 - 🚩 PF Code allotment letter issued to him/them by the EPF organization.
 - 🚩 ESIC Code allotment letter issued to him/them by the ESI authorities.
 - 🚩 valid insurance documents under Employees' Compensation Act, for its employees not eligible for coverage under ESIC
4. The Business Associate shall, in case of his/engagement in any construction activities falling under the purview of the Building and Other Construction Workers (BOCW) Act, apply for registration under the said BOCW Act before start of work and obtain the said registration within a month of starting such work. Business Associate shall also ensure compliance to all other applicable provisions including payment of applicable cess under the Act.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 19 of 78

5. The Business Associate shall comply with all applicable provisions under Inter State Migrant Workmen (ISMW) Act.
6. The Business Associate shall ensure its employees enter and work at respective place of work or premises of TPNODL in fulfilment of contractual obligations of the Business Associate, only with due authorization and valid IDENTITY. Issue of such authorization cum identity passes to its workers would be facilitated by the Business Associate, by submitting relevant information, documents, authorizations and complying to TPNODL's processes including safety training and medical checkup procedures as laid down from time to time for issue of authorization cum identity-passes. Business Associate shall not engage any of its workers for work without a valid authorization cum identity pass or with a VISITOR GATE PASS. Violation of the above may lead to termination of the contract.
7. The Business Associate shall comply with the following under various statutes, statutory requirement or any other requirement as may be applicable from time to time :
 - i) Submit an application for obtaining Form-V, required for applying for Labour License.
 - ii) Submit a copy of valid Labour License with reference to the work order, without which authorization cum identity passes would not be issued to the employees of respective Business Associate.
 - iii) Temporary authorization cum identity passes are issued only for seven days, hence the Business Associate will be required to arrange for issuance of permanent authorization cum identity passes within said timeline, by submitting required documents/information. With special permission from user and HR/IR department the validity of temporary authorization cum identity passes can be extended upto 15 days. Under no circumstances shall temporary authorization cum identity passes be issued for more than 15 days.
 - iv) Business Associate is required to complete the process of Medical fitness certificate and police verification certificate within these seven days, unless exempted by the TPNODL management. Any delay due to reasons beyond control of the vendor, needs to be approved by TPNODL HR/IR department.
 - v) Business Associate shall apply for Authorisation cum Photo identity pass as per Company's security procedure.
 - vi) In case of renewal of authorization cum identity passes, the application should be initiated at least seven days in advance.
 - vii) Business Associate shall submit the Register of Workmen in Form-XIII, duly filled in all respects, within 15 days of starting the job.
 - viii) Business Associate shall provide employment card (Form-XIV) to all his/their workers.
 - ix) Business Associate shall disburse wages to its employees by 7th of the subsequent month under intimation to TPNODL, through bank transfer with submission of a copy of bank statement to TPNODL. TPNODL expects its associate vendors/ Business Associates to facilitate opening of bank account by all its employees and pay wages through bank transfers.
 - x) Wage notification should be given by the Business Associate at least one week ahead. A copy of the same to be forwarded to TPNODL for information necessary confirmation of payments.
 - xi) Wages Slip (Form-XIX) to be provided by the Business Associate to all its workers before disbursement of wages.
 - xii) PF contribution to be deposited on or before 15th of the subsequent month and proof thereof need to be submitted to TPNODL by 25th of the month.
 - xiii) Business Associate to facilitate transfer of PF/EPS accumulations in respect of its employees from their previous employer, if any.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 20 of 78

- xiv) ESI contribution to be deposited on or before 21st of the subsequent month and proof thereof need to be submitted to TPNODL by 25th of the month.
 - xv) Muster roll, Wage Register, Combined Challan & ECR of PF deposition and Challan / Contribution history of ESIC to be submitted to TPNODL HR/IR Department on or before 25th of the subsequent month.
 - xvi) Business Associate shall be required to arrange for applicable welfare measures under applicable statutes for its employees in consultation with TPNODL order manager.
 - xvii) Business Associate has to submit all the relevant returns under all applicable enactments on or within the scheduled date and a copy of the same need to be submitted to TPNODL HR/IR department within seven days of the scheduled date of submission.
8. Business Associate shall not be allowed to work for TPNODL without possessing a
*** Valid PO *Valid Labour License * Valid Authorisation cum Identity Pass**
 9. NO BILLS OF THE VENDOR/BUSINESS ASSOCIATE SHALL BE RELEASED IN CASE OF FAILURE TO COMPLY WITH THE ABOVE PROVISIONS.
 10. Above requirement not being exhaustive, vendors/ Business Associate will be liable to comply with the provisions of any other enactment as notified or would be applicable to them from time to time.
 11. An additional overhead charge of 25% of the wage bill value will be charged to the Business Associate in case the BA fails to pay the wages of its workers in time and TPNODL as principle employers is compelled to make the payment on their behalf. The total amount, including the overhead charge, will be recovered from the subsequent bill payable to the Business Associate.
 12. Continuous default in wage payment to its employees within stipulated date as mentioned above, for three months, will lead to termination of the contract and may also lead to blacklisting of the Business Associate/ cancel vendors' registration.
 13. After completion of work and before or at the time of submission of final bills, the Business Associate must ensure the following and submit proof thereof to TPNODL enabling TPNODL release its final bills. In absence of the same no such bills would be released by TPNODL :
 - a. All wage payments are made to its workers till the last day of their work in TPNODL
 - b. Compensation towards Leave with wages are disbursed to its employees till the last day of their work.
 - c. Statutory bonus is paid to its employees for the period of their work.
 - d. Retrenchment compensation, where applicable, is paid to its employees as per eligibility.
 - e. Notice is given to the workers regarding retrenchment and in absence; notice pay is given to the workers as per the enactment, where applicable.
 - f. Along with final payments, full & final statement is issued to all its employees engaged by them for their work in TPNODL
 - g. No dues certificate is obtained from all its employees and copy submitted to TPNODL
 - h. Ensure withdrawal or transfer formalities in respect of PF/EPF accumulation of all its employees and submit proof thereof to TPNODL HR/IR dept.
 - i. Submit Form VI-A to TPNODL and surrender Labour License, wherever issued, to concerned labour department in case the license is no more required for work in

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 21 of 78

TPNODL, and obtain clearance thereof from the Licensing Authority for submission to TPNODL.

- j. Ensure intimation to PF & ESI authorities regarding completion of work and closure of contract with TPNODL. Proof of such intimation need to be submitted to TPNODL.
 - k. Indemnify TPNODL from any future liability on account of statutory compliance or failure on part of the vendor/Business Associate for their work in TPNODL in respect of their employees or employees of their sub vendors/Business Associates, by submitting an Indemnity Bond on Rs.100/- non judicial stamp paper executed by its Director/Proprietor, authorized for the purpose, and duly notarized.
 - l. Return back the Authorization cum Photo Identity passes to Administration representative or HR/IR department and submit proof thereof to TPNODL HR/IR team.
14. Penalty of up to Rs.1,00,000/- per month will be applicable to Business Associates defaulting on compliances as mentioned below, at the sole discretion of TPNODL management.
- a. Any complaint received from the workmen of the Business Associate of non-payment / less payment or payment after the due date i.e. the stipulated date for such payment as per law, will attract penalty
 - b. Non submission of any or all of the documents listed below (as applicable), in proof of all required statutory compliance (other than wage/payment register), within stipulated time for which it is due, will attract penalty.

List of documents:

1. Copy of valid Labour License.
2. Registers & records under applicable enactments.
3. PF Challan & ECR File.
4. ESI Challan & Contribution History.
5. Undertaking regarding non engagement of migrant workmen at TPNODL Site.
6. Details of wage payment through Bank.
7. Compliance w.r.t. BOCW Act (if applicable)
8. Submission of Applicable returns.

Our Business Associates are our business partners who we expect to be law abiding and complying to all statutory requirements, thereby not necessitating us to invoke the penalty clause mentioned in this GCC

15. The Business Associate will be required to take an appropriate insurance coverage for all its employees engaged by them in TPNODL against any accidental death anywhere in India, for a sum insured value of Rs.15 Lacs. In absence of having such coverage and in an unfortunate event of any accidental death of any of its workers, the BA will be required to pay such amount of Rs.15 Lacs to the victim's family/ legal heirs. This will be payable by the BA over & above the compensation, if any, payable under the Employees' State Insurance Act for covered employees or compensation payable by BA under the Employees' Compensation Act.

The Business Associate will also be required to take an appropriate insurance coverage for all its employees engaged by them in TPNODL against any death due to Covid-19 irrespective of place, type & days of treatment anywhere in India, for a sum insured value of

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 22 of 78

Rs.10 Lacs. In absence of having such coverage and in an unfortunate event of any death of any of its workers due to Covid-19, the BA will be required to pay such amount of Rs.10 Lacs to the victim's family/ legal heirs. The BA is free to have this coverage for their employees against Covid-19 death through a mutually agreed contributory scheme and may recover up to 50% of the average premium payable per insured, from its employees.

9.6 MSME Development ACT 2006

Provisions for Firms falling in The Micro, Small and Medium Enterprise Development Act 2006:-

- Business Associate is requested to inform the TPNODL if they fall under provisions of -The Micro, Small and Medium Enterprises Development Act, 2006 legislation, and provide necessary documents to TPNODL. The Associate also needs to mention the relevant details on their invoice/ bill.
- Business Associate shall submit the self-undertaking of registration in MSME category at the time of bidding as well as on an annual basis to TPNODL, enabling them to avail the consequent benefits, failing which TPNODL may take appropriate action against such defaults.
- Business Associates falling in MSME category can avail the following benefits-
 - a. **Tender Fees:** To participate in the tender, MSMEs registered in the State of Odisha shall pay Rs.1,000/- including GST towards cost of tender paper.
 - b. **Earnest Money Deposit (EMD):** EMD shall be exempted for MSME registered in the State of Odisha. However, Bidder shall be barred to participate in the tendering process for a period of 2 years in case it backs out post award of the contract.
 - c. **Qualification Requirement for Open Tenders:** Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria. For past experience, instead of relying on the volumes / value of earlier Supplies / Projects, assessment of the Bidder shall be done on the basis of feedback from Customers. Past performance experience at Tata Power/ TPNODL and its Group Companies shall supersede feedback from other Customers.
 - d. **Reservation for MSME:** TPNODL reserve the rights to procure at least 20% of the total volume of the procurement from MSME registered in the State of Odisha (however, it shall not apply where goods/services are not available with the MSME), subject to matching L1 discovered prices and meeting technical specifications including quality requirements.
 - e. **Performance Bank Guarantees:** Performance Bank Guarantee for MSME registered in the State of Odisha shall be 25% of the value normally prescribed.

9.6 ISO 14001

The vendor to confirm whether their organization is ISO 14001 certified. If not, the Vendor must certify that the handling, use and disposal of their product/ by-products conform to practices consistent with sound environment management and local statutes. The Vendor shall ensure that all the wastes are disposal in environmental friendly way with strict

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 23 of 78

compliance to applicable laws including adherence to MoEF guidelines with respect to the disposal of batteries, lead waste, copper cables, ash, waste oil, e-waste etc. which shall be disposed through MoEF approved parties only. The vendor shall also dispose off the e-waste generated at the end of the product life cycle at its own costs and risk as per the MoEF guidelines/ Orders

10.0 QUALITY

10.1 Knowledge of Requirements

The Associate shall be deemed to have carefully examined and to have knowledge of the equipment, the general and other conditions, specifications, schedules, drawings, etc. forming part of the Contract and also to have satisfied himself as to the nature and character of the work to be executed and the type of the equipment and duties required including wherever necessary of the site conditions and relevant matters and details. Any information thus procured or otherwise obtained from TPNODL/Consultants shall not in any way relieve the Associate from his responsibility and executing the works in accordance with the terms of contract.

10.2 Material/Equipment/Works Quality

The items / works under the scope of the Associate shall be of the best quality and workmanship according to the latest engineering practice and shall be manufactured from materials of best quality considering strength and durability for their best performance and, in any case, in accordance with the specifications set forth in this Contract. All material shall be new. Substitution of specified material or variation from the process of fabrication/construction/manufacture may be permitted but only with the prior written approval of the TPNODL.

10.3 Adherence to Rules & Regulations

The Associate shall procure and/or fabricate/erect all materials and equipment in accordance with all requirements of Central and State enactment, rules and regulations governing such work in India and at site. This shall not be construed as relieving the Associate from complying with any requirement of TPNODL as enumerated in the Contract which may be more rigid than and not contrary to the above mentioned rules, nor providing such construction as may be required by the above mentioned rules and regulations. In case of variance of the Technical Specification from the laws, ordinance, rules and regulations governing the work, the Associate shall immediately notify the same to the TPNODL. It is the sole responsibility of the Associate, however, to determine that such variance exists. Wherever required by rules and regulations, the Associate shall also obtain the statutory authorities' approval for the plant, machinery and equipment to be supplied by the Associate.

10.4 Specifications and Standards

The Associate shall follow all codes and standards referred in the Contract Document. Codes and standards of other may be followed by the Associate with the prior written approval of TPNODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 24 of 78

and qualities of the bought out items without the prior written approval of the TPNODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPNODL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

11.0 SAFETY

All Associates shall strictly abide by the guidelines provided in TPNODL's Contractor Safety Management System (CSMS) as applicable at all stages during the contract period. Associate shall execute the contracts ensuring the following in and as order of priority:

- Safety of Human Beings.
- Safety of equipment/Assets.
- Timely Completion of Contract.

Safety related requirements as mentioned in our Contractor Safety Management System is attached as annexure K and is an integral part of this GCC.

12.0 INSPECTION/PARTICIPATION

12.1 Right to Carry Out Inspection

TPNODL reserves the right to send its representatives for inspection or participation at various stages of contract execution listed below, applicable as per contract construction.

- During basic design and detail engineering of material/ Equipment carried out by Associate /Outsourced Agencies.
- During manufacturing stages of the product at Associate's/Associate's Outsourced Agency's Plant/Facility.
- During Pre-dispatch Inspection and Testing of finished/manufactured product at Associate's/Associate's outsourced Agency's Plant/Facility.
- During Installation & Commissioning Activities/Stages.
- Prior to Clearing of the completed installation for commissioning.
- Any other stage as find appropriate by TPNODL during contract execution time.

All inspections and participations shall be carried out within maximum of two weeks of TPNODL giving written intimation to the Associate or receiving appropriate advance written inspection call from the Associate, unless otherwise specified elsewhere in the contract document.

MDCC request shall be submitted by BA to TPNODL at least 7 days before inspection date.

12.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TPNODL's engineers to get acquainted with the technical know-how and the methods and practices adopted by the Associate in basic and detail engineering. The Associate shall provide documents, drawings, calculations etc. as may be required by TPNODL's Engineers.

The Associate shall provide free of charge office accommodation, office facilities, secretarial services, communication facilities, general and drawing office stationary, etc. as may be reasonably required by the TPNODL's engineers. Similarly, facilities shall also be provided

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 25 of 78

by Associate's outsource agencies/partners/authorized dealers (collectively termed as sub-associates) if such basic and detail engineering activities are carried out in the design offices of sub-Associates.

The Associate shall be responsible for the safety of employees of TPNODL/Third Party Agency when they are at the Associate's /Associate's outsource agency's plant or facility for carrying out/witnessing inspection/testing. All statutory safety precautions as applicable shall be followed by the Associate during Inspection Testing. If TPNODL inspectors are not satisfied with the safety arrangements at the plant, TPNODL have the right to call off inspection till such time corrective action is taken by the Associate.

Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc-as specified in the contract document and submit copies of the test certificates to TPNODL along with the inspection call, for scrutiny of TPNODL.

The Associate and TPNODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to provide compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TPNODL for receiving clearance for dispatch of materials.

12.3 Third Party Nomination

TPNODL also may nominate a third party for the purpose of carrying out the inspection and such an agency shall be entitled to all the rights and privileges of TPNODL as far as conducting the inspection.

12.4 Waiver of Inspections

TPNODL on its own discretion shall chose to waive off any inspection and ask the Associate to submit all the test reports as applicable as per contract specifications, related to inspection and testing of the goods ordered for scrutiny and clearance for dispatch.

12.5 Incorrect Inspection Call

In case it is observed that the material offered for inspection is not ready at the time of TPNODL inspection visit rendering it as futile, all costs towards such inspection shall be recovered from the BA. Taxes as applicable on such recoveries shall be borne by the BA.

13.0 MDCC & DELIVERY OF MATERIALS

13.1 Material Dispatch Clearance Certificate

Associate shall deliver material/goods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate (hereafter termed as MDCC) issued by designated authority of TPNODL. Material delivered at TPNODL stores or at project site without a valid MDCC issued by the designated official of TPNODL shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documented during pre-dispatch inspection and testing at Associate's/ Sub-Associate's plant/ facility. In case Pre-dispatch inspection is waived at the discretion of TPNODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 26 of 78

The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, sea, rail and road or any other means.

All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall take special precautions to prevent rusting of steel and iron parts during transit by sea. Gas seals or other materials shall be utilised by the associate for protection against moisture during transit of all Plant and Equipment.

Each Equipment or parts of Equipment shall be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the associate, item description, quantity, item / package identification.

All packing cases, containers, packing and other similar materials shall be new and supplied free by the associate and it shall not be required to be returned to the associate.

Notwithstanding anything stated in this clause, the associate shall be entirely responsible for loss, damage or depreciation or deterioration to the materials and supplies due to faulty and/or insecure packing or otherwise during transportation to the Site until otherwise provided herein.

In case of the consignments dispatched by road, the associate shall ensure that it or its sub-contractors:

- i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.
- ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

Timelines for inspection and MDCC is as below:

S. No.	Inspection	MDCC issuance time including inspection time (max.)
1	Outside Odisha	12 days
2	Within Odisha	5 days
3	Waiver*	3 working days

* Associate is expected to raise the inspection call assuming that Inspection shall be carried out by TPNODL. The decision for waiver of inspection shall be on sole discretion of TPNODL.

13.2 Right to Rejection on Receipt

Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPNODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPNODL.

If delivery of the material is beyond the agreed time, Liquidated damage clause, mentioned in this GCC separately shall be applicable; but the period for levy of LD shall be considered

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 27 of 78

as per the original delivery schedule and not from the agreed timelines for material rectification.

13.3 Consignee

Unless otherwise specified in the Contract Document, Materials/Goods/Equipment shall be consigned to “Stores-In-Charge”, **TPNODL, Balasore/ Jaipur/ Others.**

13.4 Submission of mandatory documents on Delivery

Following documents shall be mandatorily submitted by BA along with supply of material to TPNODL stores/site:

S. No.	Documents	Requisite
1	Invoice copy in original	With all consignments
2	LR copy	Wherever required
3	Packing list	With all consignments
4	MDCC	With all consignments
5	Purchase order / Release order	Signed copy
6	Test certificates	With all consignments
7	Inspection/JVR report	In case pre-dispatch inspection is conducted
8	Device data in CD as per template for metering items	Wherever applicable

13.5 Dispatch and Delivery Instructions

S. No.	Instructions
1	Purchase order/ Release order no. shall be mentioned on invoice and on material
2	TPNODL material code and material description shall be mentioned in invoice and on material.
3	“Property of TPNODL” shall be embossed on material.
4	The material shall be properly sealed and packed in standard packing as per purchase order terms & conditions.
5	The weight and quantity of material shall be mentioned wherever applicable
6	The material supplied shall be co-related with the packing list.
7	The name plate detail on equipment shall include Material code, Material description, specification detail of material [as applicable], Serial No. Year of manufacturing, PO/RO no. and date, “PROPERTY OF TPNODL, Odisha”, Guarantee period and Associate’s name.
8	In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at TPNODL central store. For heavy item(s), crane shall be arrange by the BA. However, in case, BA is not able to arrange the Crane, then TPNODL reserve the rights to hire the crane from market/ within internal resources and all expenditure/ unloading shall be recovered from BA.
9	The driver should have valid License and one helper in truck. All the documents of

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 28 of 78

S. No.	Instructions
	truck like registration papers, PUC etc should be available in Truck.
10	BA representative should accompany the material and get it unloaded / stacked in his presence wherever possible.

14.0 GUARANTEE

30.0 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied/service or work rendered under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract. For a specific period termed as Guarantee Period (as elaborated elsewhere in this clause) The Associate should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

14.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TPNODL for the equipment/material/service/work and where standard specifications are not part of contract documents or guarantee period is not specified in the standard specifications,, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC Guarantee Period will be 15 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

14.3 Failure in Guarantee Period (GP)

If the equipment and material supplied/service or work rendered under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied/service or work rendered under the contract within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied/service or work rendered under the contract, failed in Guarantee Period, TPNODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPNODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.

If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/ damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by TPNODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPNODL within 7 days of reporting the issue by TPNODL. Thereafter, the total time for supply of new equipment/ material shall be equal to the original delivery period of that equipment/ material as specified in the Contract. In case

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 29 of 78

the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.

14.4 Cost of repairs on failure in GP

The cost of repairs/rectification /replacement, apart from the actual cost of repairs/rectification/replacement is also inclusive of all associate costs of required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable, to be borne by the Associate. The Associate has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

14.5 Guarantee period for Goods Outsourced

If the Associate outsources partly equipment/materials/services from third party as mutually agreed upon at the pre award stage of contract, TPNODL shall have the benefit of any additional guarantee period if provided by the third party for the part supplied/executed by them.

14.6 Latent Defect

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

14.7 Support beyond the Guarantee Period

The Associate shall ensure availability of spares and necessary support for a period of at least 10 years post completion of guarantee period of equipment supplied against the contract.

15.0 LIQUIDATED DAMAGES

Liquidated damages @1% of the total executed contract value per week or part thereof, for the period of delay in integrated completion, subject to maximum 10% of the value of the contract shall become leviable without prejudice to other rights of the TPNODL. This amount shall be recoverable from any amount due or becoming due to the Business Associates under this or any other contract. In specific cases, TPNODL reserves the right to apply LD only on the unexecuted portion of the supply and works for standalone use, provided full quantity is executed within a maximum 30% additional time. Deduction of LD shall be on landed cost i.e contract value inclusive of taxes and in pursuant statutory compliance GST would be applicable at the stipulated rate and the same shall be borne by Business Associate. In case of LD deduction, a GST invoice shall be issued by TPNODL as a proof of deduction/ recovery.

31.0 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD. Request submitted beyond the timeline shall not be entertained.

15.2 Material Recovery

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 30 of 78

In case of any recoveries for materials or services (for material free issued by TPNODL and not reconciled by BA or for services claimed and paid in excess at the time of running bills), the total cost which shall be recovered from the BA, shall be the gross amount of material or services (i.e. including taxes) plus applicable taxes as prevailing at the time of such recoveries.

16.0 ASSIGNMENT OR SUBCONTRACTING

Associates shall not assign/subcontract/outsource the schedule of activities of contract TPNODL enters with the associate, in part or full, without TPNODL's prior written approval. However outsourcing of materials/equipment/services by Associate to make the integrated product for which TPNODL's has placed the contract with the associate from suppliers, makes and agencies which have been mutually agreed upon during contract pre-award stage is permitted subject to following conditions.

In such cases where outsourcing is done by the Associate

- Shall ensure that outsourced suppliers comply with the technical and financial qualification requirements specified by TPNODL in the contract document
- Shall furnish all particulars about the proposed outsourcing agencies and the details of the goods/services/work outsourced to the Associate while seeking approval of TPNODL for inclusion for outsourcing. The Associate shall give approval or shall refuse approval in writing within thirty (30) days of receipt of such request. However the Associate shall not be entitled for any additional contract execution time whatsoever in lieu of the process for approval for outsourcing agencies, and shall be held responsible for any delay in the project execution time.
- Shall remain jointly and severally liable for any action, deficiency, and/or negligence on the part of his outsourcing agencies. The approval extended by the Associate to outsourcing agencies recommended by the Associate shall not discharge the later from his Contract obligations.

Shall submit to the Associate unpriced copies of purchase orders with technical specifications included in the orders, placed on outsourcing agencies as soon as the respective orders have been placed by the Associate.

17.0 UNLAWFUL ACTIVITIES

The Associate shall have to ensure that none of its employees are engaged in any unlawful activities (whether covered under the scope of the present GCC or not) subversive of the TPNODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPNODL, in accordance with the terms of the present GCC.

18.0 CONFIDENTIALITY

Associate and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

32.0 Documents

All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Associate by the TPNODL in connection with the performance of the

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 31 of 78

contract shall be held confidential by the Associate and shall remain the property of the TPNODL and shall not be used or disclosed to third parties by the Associate for any purpose other than for which they have been supplied or prepared. The Associate may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the TPNODL.

18.2 Geographical Data

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPNODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TPNODL and upon execution of confidentiality agreements satisfactory to the TPNODL with such third parties prior to disclosure.

18.3 Associate's Processes

Title to secret processes if any developed by the Associate on an exclusive basis and employed in the design of the equipment shall remain with the Associate. TPNODL shall hold in confidence such processes and shall not disclose such processes to the third parties without prior approval of the Associate and execution by such third parties of secrecy agreements satisfactory to the Associate prior to disclosure. Upon completion of contract, such processes shall become the property of the TPNODL. Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPNODL under the Contract shall be passed on to the TPNODL. The TPNODL shall have the right to use these for construction, erection, start-up, Trial Run, operation, maintenance, modifications and/or expansion of the works including for the manufacture of spare parts.

18.4 Exclusions

The provision of Clauses 16.1 to 16.3 shall not apply to information:

- Which at the time of disclosure are in the public domain which later on become part of public domain through no fault of the party concerned, or
- Which were in the possession of the party concerned prior to disclosure to him by the other party, or
- Which were received by the party concerned after the time of disclosure without restriction on disclosure or use, from a third party who did not acquire such information directly or indirectly from the other party or has no obligation of confidentiality for such information.

18.5 Violation

In case of violation of this clause, the Associate is liable to pay compensation and damages as may be determined by the competent authority of TPNODL.

19.0 INTELLECTUAL PROPERTY RIGHTS

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Associate acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark,

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 32 of 78

copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with the TPNODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPNODL.

Moreover, the Associate undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Associate shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages arising from any legal proceeding/s, or otherwise. No liability of TPNODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPNODL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

20.0 INDEMNITY

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPNODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPNODL is held liable for by any court judgement. In this connection, the TPNODL shall pass on all claims made against him to the Associate for settlement.

The Associate assumes responsibility for and shall indemnify and save harmless the TPNODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPNODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under the Contract or for which the Associate has assumed responsibilities under the Contract including those imposed under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract. The Associate shall execute, deliver and shall cause his Sub-Associate and suppliers to execute and deliver, such other further instruments and to comply with all the requirements of such laws and regulation as may be necessary there under to conform and effectuate the Contract and to protect the TPNODL.

The TPNODL shall not be held responsible for any accident or damages incurred or claims arising, due to the Associate's error there from prior to completion of work. The Associate shall be liable for such accidents and after completion of work for such accidents as the case may be due to negligence on his part to carry out Work in accordance with Indian laws and regulations and the specifications set forth herein.

21.0 LIABILITY & LIMITATIONS

21.1 Liability

Except for any specific liability which may be identified in the Contract and which may be payable hereunder, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 33 of 78

in connection with the Performance of the Work or supply of Goods ***unless caused by Associate's negligence, willful misconduct or breach of contract.***

TPNODL shall have no liability or any special, incidental, indirect or consequential Damages for any loss of Business Contracts, revenues or other financial loss arising out of this Contract.

21.2 Limitation of Liability

The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.

22.0 FORCE MAJEURE

Force Majeure applies if the performance by either Party ("the Affected Party") of its obligations under Contract is materially and adversely affected.

"Force Majeure" shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

- Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, embargo, blockade, revolution, riot, bombs, religious strife or civil commotion, etc.
- Politically motivated sabotage, or terrorism, etc.
- Action or Act of Government or Governmental agency for which remedy is beyond the control of the affected parties.
- Any act of God.

Note: Causes like power breakdown/ shortages/fire/strikes, accidents etc do not fall under Force Majeure.

Time being the essence of the Contract, if either party is prevented from the performance of its obligations in whole or in part due to an event of Force Majeure, then provided Notice of happening of any event by the Affected Party is given to the other party within seven (7) days from the date of occurrence of such event, which DIRECTLY has impact on works and submitted details and quantum of resulting effect, but at the same time had made all possible efforts to mitigate and overcome effects thereof, the Affected Party's performance under this Contract shall be suspended until such event ceases and the Scheduled Completion shall be delayed accordingly.

If Force Majeure event(s) continue for a period of more than three months, the parties shall hold consultation to discuss the further course of action.

Neither party shall be considered to be in default or in breach of its obligation under the Contract to the extent that performance of such obligation by either party is prevented by any circumstances of Force Majeure which arise after effective date of Contract.

Neither party can claim any compensation from the other party on account of Force Majeure.

23.0 SUSPENSION OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 34 of 78

33.0 Suspension for Convenience

TPNODL may, at any time and at its sole option, suspend execution of all or any portions of the schedule of items of contract to be supplied/work to executed by Associate under the contract by providing to the Associate atleast two business days written notice for contracts having contract completion period less than sixty days and atleast seven business days' notice for all other contracts.

Upon receipt of any such notice, the Associate shall respond as follows as applicable as per contract construction.

- Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts
- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPNODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.
- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

On receipt of resumption notice from TPNODL, the Associate shall resume execution of contract as specified in the resumption notice, within the time frame specified in the resumption notice,

23.2 Suspension for Breach of Contract conditions.

TPNODL shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 27 for breach/default of contract conditions.

23.3 Compensation in lieu of Suspension

If the suspension of the contract in whole or in part is for convenience of TPNODL and not due to any breach of contract conditions by the associate, TPNODL at its discretion shall consider compensating all reasonable additional costs incurred by Associate in lieu of suspension of whole or part of contract, on representation of the Associate providing justified estimates of such additional costs and such estimates are found acceptable and approved by competent authority of TPNODL.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 24.3) by the Associate, Associate shall not be entitled for any compensation for any cost incurred in lieu of suspension of whole or part of contract and also shall be liable for compensating all the losses arising to TPNODL in lieu of suspension of contract. Resumption notice shall be subject to the Associate taking corrective action for the breach of contract conditions within the time frame and as per the terms specified in the suspension notice.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 35 of 78

24 TERMINATION OF CONTRACTS

24.1 Termination for Default/Breach of Contract

The contract / PO shall be subject to termination by TPNODL in case of breach of the contract by the Associate which shall include but not be limited to the following:

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution / completion of the contracted work /PO or failure in ensuring adherence to any delivery schedules, in deviation of the contract/ PO.
- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPNODL and within the timeframe as specified in the contract document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.
- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.
- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPNODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPNODL.

If the default or breach as specified under clause 24 (except sub clause g thereof) be committed by the associate for the first time, TPNODL shall issue, along the with notice of default or breach, a warning notice instructing the associate to take remedial/corrective action within the time frame stipulated in the warning notice and not to repeat the same in future. The timeframe for corrective action by the associate shall be specific to the nature of breach of contract and the same shall not be objected to by the Associate. If the Associate fails to comply with the instructions in the warning notice or in taking corrective action to the satisfaction of TPNODL then TPNODL may terminate the entire or part of contract at its discretion by issuing termination notice without incurring any liability on this ground.

In case the contract is terminated for any breach of the nature specified in clause 24 g stated above, TPNODL shall have the right to terminate all the contracts TPNODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPNODL available to it under law.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 36 of 78

Without prejudice to its right to terminate for breach of contract, TPNODL may, without assigning any reason, terminate the Contract in whole or in part at any time at its discretion while the contract is in force by serving a written notice of two weeks to the Associate.

In the event of TPNODL having proceeded with termination of the contract the associate shall comply and proceed further in the following manner:

34.0 Associate shall discontinue the supply, on the expiry of the said period of two weeks.

ii) Associate shall ensure that no further steps are being taken towards discharge of the obligations, terms and conditions as contained in the contract/PO. This shall include initiation of actions not limited to discontinuation of other allied and associated arrangements which the associate might have entered into with third parties for due discharge of its obligations under the contract with TPNODL.

iii) The Associate shall perform thereafter such tasks as may be necessary to preserve and protect the terminated portion of the material/service/work in progress and the materials and equipment at TPNODL sites or in transit thereto. However the associate shall continue to fulfill its contractual obligations with regard to the part of contract not terminated.

iv) It shall be open for TPNODL to conduct a joint assessment with the associate of the material ,supplies, equipment ,works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.

v) It shall be open to TPNODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested against by the associate.

In case of termination of the contract the parties agree to be governed inter alia by the following:

a) In case TPNODL exercises its right of termination as stated above the associate shall not dispute or object to the same.

b) The Associate shall be entitled to receive and claim only such payments OR sums of money from TPNODL as may be found payable to it in regard to works executed by it under the terms of the contract and no other claim of any nature whatsoever shall be made by the Associate.

c) All such provisions which the parties have agreed to survive and prevail even after termination of the contract shall remain effective despite the termination.

In the event of such termination, TPNODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPNODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPNODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPNODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPNODL under law against the associate.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 37 of 78

Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct, TPNODL shall be entitled to bar the associates its agents, affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPNODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPNODL.

24.2 Termination for convenience of Associate

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPNODL has full right to accept, reject or partially accept such request. This convenience will be available to associate only after one year from the contract effective date. For this purpose, associate will provide a notice period of 90 days to TPNODL, Associate will have to pay TPNODL a 'termination convenience fee' equivalent to 5% of unexecuted contract value.

24.3 Termination for Convenience of TPNODL

TPNODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPNODL shall pay the Associate for all the supplies/ services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

25.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavor to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Bhubaneswar. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the arbitration proceedings unless otherwise directed in writing by TPNODL or suspended by the arbitrator. Further, TPNODL shall continue making such payments as may be found due and payable to the associate for such works.

35.0 Governing law and jurisdiction

The parties shall be subject to the jurisdiction of the courts of law in Bhubaneswar and any matter arising here from shall be subject to applicable law in force in India.

26.0 ATTRIBUTES OF GCC

26.1 Cancellation

The Company reserves the right to cancel, add, delete at its sole discretion, all or any terms of this GCC or any contract, order or terms agreed between the parties in pursuance without assigning any reasons and without any compensation to the Associates.

26.2 Severability

If any portion of this GCC is held to be void, invalid, or otherwise unenforceable, in whole or part, the remaining portions of this GCC shall remain in effect.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 38 of 78

26.3 Order of Priority

In case of any discrepancies between the stipulations in General Conditions of the Contract (GCC) and Special Conditions of Contract (SCC), the GCC shall stand superseded by the SCC to the extent stipulated hereinabove while balance portion of respective clauses of GCC shall continue to be applicable.

36.0 INSURANCE

The Associate shall arrange accident insurance policy for his foreign experts/specialists/personnel deputed to Site and Associate's/his sub-Associates' manufacturing works as well as for his Indian engineers and supervisory staff. The Associate shall also take out for his Indian workmen, where applicable, a separate policy as required under Workmen's Compensation Act.

Associates shall be responsible to suitably insure their entire work-force (to the extent of at least meeting requirements under Workmen Compensation Act) Tools, Plant, Third party liability at the project site, All Risk comprehensive insurance for the entire works (insurance for free issue items will be in TPNODL scope) for total contract (PO/RO) value or any other such risks during execution of works, till the works are handed over to the company, in consultation with TPNODL and shall submit copies of such insurances to the Engineer-in-Charge for review / acceptance before commencing the work. Engineer-in-charge must ensure compliance to insurance requirement by Associate before commencement of works. TPNODL shall stand fully indemnified in this respect.

28.0 ERRORS AND OMISSIONS

The Associate shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the TPNODL or not. However any error in design/drawing arising out of any incorrect data/written information from TPNODL will not be considered as error and omissions on part of the Associate.

29.0 TRANSFER OF TITLES

The title of ownership and property to all equipment, installations, erections, constructions materials, drawings & documents shall pass to the TPNODL after Commissioning and complete handing over-taking over.

However, such passing of title of ownership and property to the TPNODL shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract including loss or damages and all risks, which shall vest with the Associate.

The Associate shall take all corrective measures arising out of discrepancies, errors and omissions in drawings and other information within the time schedule and without extra cost to the TPNODL.

The Associate shall also be responsible for any delay and/or extra cost if any, in carrying out engineering, and site works by other agencies arising out of discrepancies, errors and omissions stated in as well as of any late revision/s of drawings and information submitted by the Associate.

37.0 SUGGESTIONS & FEEDBACK

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 39 of 78

We welcome all our Business Associates to write to us about their experience with TPNODL; be it our Company, our services or our people. Each and every concern, issue, query and suggestion from you will help us to become a better company to work with and shall help us develop a strong bonding of trust and a long term relationship with you.

You may send your feedback to HoD Contracts by filling up our Business Associate Feedback Form enclosed herewith as Annexure-Q.

38.0 CONTACT POINTS

In case Business Associate needs information with respect to payments or has any grievances, same may be submitted by log on to our website www.tpnodl.com

32.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
1.	Performa for Bid Security Bank Guarantee	A
2.	Performa for Advance Payment Bank Guarantee	B
3.	Performa for Performance Bank Guarantee (CP cum EP)	C
4.	Performa for No Demand Certificate by Associate	D
5.	Performa for Indemnification on Statutory Compliance	E
6.	Performa For Application For Issuance of Consolidated TDS Certificate	F
7.	HR Service Level Agreement	G
8.	Under taking for competence of workmen	H
9.	Acceptance Form For Participation In Reverse Auction Event	I
10.	NEFT or RTGS payment request form	J
11.	Contractor Safety Management System	K
12.	Vendor Appraisal Form	L
13.	Manufacturers Authorization Form	M
14.	Safety Bid Document	N
15.	Tata Code of Conduct	P
16.	Vendor Feedback Form	Q

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 40 of 78

ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

TP Northern Odisha Distribution Ltd

Balasore

WHEREAS, (Name of the Bidder) _____ (hereinafter called "the BIDDER") has submitted his bid dated _____ for the (Tender No. & Name of Contract) _____ (hereinafter called "the BID").

KNOW ALL men by these presents we (Name of the Bank) _____ of (Name of the Country) _____ having our registered office at _____ (hereinafter called "the BANK) are bound unto TP Northern Odisha Distribution Ltd (TPNODL) in the sum of _____ for which payment well and truly to be made to the TPNODL the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20_____.

The CONDITIONS of this obligation are:

i) If the Bidder withdraws his Bid during the period of bid validity specified in the Proforma of Bid

or

ii) If the Bidder having been notified of the acceptance of his Bid by the TPNODL during the period of bid validity fails or refuses to furnish the Contract Performance Bank Guarantee, in accordance with the Instructions to Bidders.

We undertake to pay the TPNODL upto the above amount upon receipt of its first written demand, provided that in its demand the TPNODL will note that amount claimed by it is due to it owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force upto and including the date (No of days as mentioned in tender enquiry) days after the closing date of submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

DATE.....

SIGNATURE

OF

THE

BANK.....

WITNESS.....

SEAL.....

(Signature, Name & Address)

(At least 2 witnesses)

(The claim period of BG shall be 6 months from

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 41 of 78

ANNEXURE-B

PROFORMA FOR ADVANCE PAYMENT BANK GUARANTEE

(On Rs.100/- Stamp Paper)

Note:

- (a) Format shall be followed in toto
- (b) Claim period of six months must be kept up
- (c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Northern Odisha Distribution Ltd

Balasore

Advance Payment B.G.No.....

Contract No.....dated.....

1. You have entered into a Contract with No _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the supply and delivery of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, you have agreed to make an advance payment of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on "the Vendor" furnishing you with an irrevocable, unconditional and acceptable bank guarantee to be valid till the date of receipt of "the said equipment" covered by your above mentioned contract. For this purpose you have agreed to accept our guarantee.
3. In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a further period of one months from the date of expiry.
5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 42 of 78

not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Balasore branch and claim will also be payable at Balasore Branch **(to be confirmed by Balasore Branch by a letter to that effect)**
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____
(Rupees _____ only) and the guarantee will remain in force upto and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within six months from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 200_____

Witness

1. _____	Bank's rubber stamp Banks full address
2. _____	Designation of Signatory Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 43 of 78

ANNEXURE- C

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

(On Rs.100/- Stamp Paper)

Note:

- (a) Format shall be followed in toto
- (b) Claim period of six months must be kept up
- (c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Northern Odisha Distribution Ltd

Balasore

CP cum EP BG No.....

Order/Contract No.....dated.....

- You have entered into a Contract No _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the supply cum erection / civil work of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
- In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for 10% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose you have agreed to accept the guarantee.
- In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____ % (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
- You shall have the right to file / make your claim on us under the guarantee for a **further period of one month** from the date of expiry.
- This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 44 of 78

any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Balasore branch and claim will also be payable at Balasore Branch (to be confirmed by Balasore Branch by a letter to that effect in case BG is from the branch outside Balasore)
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____ (Rupees _____) only and the guarantee will remain in force upto and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within six months from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 200__

Witness

1. _____

Bank's rubber stamp

Banks full address

2. _____

Designation of Signatory

Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 45 of 78

ANNEXURE-D

PROFORMA FOR “NO DEMAND CERTIFICATE” BY ASSOCIATE

(On Company's Letter head or with Company Seal)

(To be submitted by the Associate to TPNODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project

Order/ Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

We, M/s. _____ (Associate) do hereby acknowledge and confirm that we have received the full and final payment due and payable to us from TPNODL, in respect of our aforesaid Order No _____ dated _____ including amendments, if any, issued by TPNODL to our entire satisfaction and we further confirm that we have no claim whatsoever pending with TPNODL under the said contract / W.O.

Notwithstanding any protest recorded by us in any correspondence, documents, measurement books and / or final bills etc., we waive all our rights to lodge any claim or protest in future under this contract.

We are issuing this “NO DEMAND CERTIFICATE” in favour of TPNODL, with full knowledge and with our free consent without any undue influence, misrepresentation, coercion etc.

Dated

Signature

Place

Name

Designation

(Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 46 of 78

ANNEXURE – E

PROFORMA FOR “INDEMNIFICATION ON STATUTORY COMPLIANCES”

(To be submitted by the successful Bidder within seven days of award of work)

(Certificate No. CCP/001)

Name of the Project

Letter of Award / Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

By this confirmation we, _____
(Associate) are formally bound to M/s. TPNODL towards any sum which may be imposed, levied or hereinafter recovered by the Provident Fund Organization under the provisions of the Employees of the Provident Fund and Miscellaneous Provisions Act 1952 in respect of employees employed by us.

We well and truly bind ourselves and our heirs executors administrators and representatives jointly severally and respectively for the above payment only to be paid to M/s. TPNODL.

AND WHEREAS we, _____ (Associate)
is making compliance of the Employees Provident Fund and Miscellaneous Provisions Act 1952, have entered into the above written bond for the indemnity to M/s. TPNODL against all losses from the acts or default of the said Associate in respect of compliance of the Provident Fund Act.

Similarly we hereby confirm that we have complied with all statutory and local laws and nothing is outstanding with regard to Local Sales Tax, Labour Laws, Local Municipal dues, Electricity dues etc. We have entered into the above written bond for the indemnity to M/s. TPNODL against all losses from the acts or default of the said Associate in respect of compliance of the Local Sales Tax Laws, Local Laws, Labour Laws, Local Municipal Dues, Electricity dues etc.

NOW THE CONDITION, of the above written bond is as such that if the Associate during the period of this contract commits any default or fails to make payment of Contributions in respect of his employees to the Employees Provident Fund Organization, he shall indemnify the Principal Employer M/s. TPNODL from all and every loss and damage caused to them from any act, omissions or negligence of the said Associate in respect of compliances under the Employees Provident Fund and Miscellaneous Provisions Act, 1952.

IN WITNESS to the above written bond we have here to set our hands, with our free consent.

Dated

Signature

Place

Name

Designation (Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 47 of 78

ANNEXURE-F

**PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS
CERTIFICATE**

To be printed on the letterhead

To,

TP Northern Odisha Distribution Ltd,

Balasore

Sub: Application for issuance of Consolidated TDS Certificate for the FY _____

Dear Sir,

I / we hereby request / authorize you to issue me / us a consolidate TDS Certificate for the financial year _____ against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961.

For and on behalf of

Signature

Name

Address

Contact No. (Land Line)

(Mobile)

PAN #

Assessing authority

ATTACH THE COPY OF PAN CARD

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 48 of 78

ANNEXURE - G

SERVICE LEVEL AGREEMENT

(To be adhered to by Business Associates (BAs) in TPNODL on Human Resource Issues)

1.0 The following shall be adhered to by the Business Associates during his / its association with TPNODL:

Shall Abide by TPNODL Core Values:

- a) **Integrity** – We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.
- b) **Understanding** – We must be caring, show respect, compassion and humanity to our colleagues and customers and always work for the benefit of the communities we serve.
- c) **Excellence** – We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of services we provide.
- d) **Unity** – We must work cohesively with our colleagues across the group and with our customers and partners to build strong relationships based on tolerance, understanding and mutual co-operation.
- e) **Responsibility** – We must continue to be responsible and sensitive to the communities and environments in which we work and always ensuring that what comes from the people; goes back to the people many times over.
- f) **Agility**- We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 The Business Associate / his manager / supervisor who is responsible for managing the project site / performance contract etc. in TPNODL would also ensure adherence of these values by his employees / persons deployed by him in connection with his works undertaken in TPNODL.

3.0 TPNODL is a signatory to the United Nation Global Compact as an integral part of its Governance principles / business. The Business Associates are required to:

- a) Support and respect the protection of human rights and make sure that they are not complicit in human right abuses.
- b) Respect freedom of association and effective recognition of the right to collective bargaining.
- c) Not to resort to any form of forced and compulsory labour.
- d) Shall ensure abolition of child labour in his area of work.
- e) There is no discrimination in respect of employment and occupation in respect of his employees.
- f) Support precautionary approach to environmental challenges.
- g) Promote greater environmental responsibility by himself and his employees in his areas of work.
- h) Deploy and defuse environmental friendly technologies while carrying out the works.
- i) Work against corruptions in all its form including extortion and bribery by himself and his employees.

4.0 The Business Associates are required to adhere to all applicable Labour Laws with special reference to the following:

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 49 of 78

- a) No person below the age of 18 years and no child labour will be engaged directly or indirectly for executing the work connected with the business of TPNODL.
- b) Minimum wages along with other statutory dues like PF, ESI, etc. as applicable to the workers shall be made within the prescribed period of 7th / 10th day of the following month.
- c) Deduction / deposit / record keeping and all other requirements under Employees PF Act 1952, Employees State Insurance Act 1948 and other applicable acts (if any) shall be adhered to.
- d) Only statutorily authorized deductions (if any) shall be made in accordance with the relevant statutes.
- e) All the provisions of Contract Labour (R&A) Act 1970 shall be complied with in respect of the workers engaged for TPNODL work. The work will be commenced only after completing necessary formalities for obtaining Labour License (if applicable).
- f) Necessary registers / records, filing of returns etc. shall be maintained for verification by Statutory / TPNODL authorities.
- g) Payment of wages shall be made only in presence of and with certification of authorized representative of TPNODL or shall be made in the form of cheque / bank transfer to the employee.
- h) During the period of contract, the Business Associate will arrange for deployment of his supervisor / manager for total supervision and control of the work and their manpower. All the activities related to their manpower e.g. attendance, leave, wage disbursement etc. will be done under the supervision & control of Business Associates, While adhering to the prescribed standard / norms of production / productivity & quality. During execution of the work, Business Associate shall engage only such qualified / skilled manpower as may be envisaged / required for ensuring level of production / service into the contract / work order.
- i) Clearances as follows shall be obtained from IR & Welfare Group:
 - i. Clearance for commencement (before start of the work).
 - ii. No Objection Certificate (after completion / before final settlement).
 - iii. Copies of PF / ESI Challans shall be deposited with IR & Welfare Group every month
- j) The Business Associate shall indemnify TPNODL from any liabilities under applicable Labour Statutes.
- k) The Business Associate shall ensure safety and health of his employees and shall also maintain hygienic working environment / condition in his area of work.
- l) The Business Associate and his employee shall abide by Laws of Land and shall not violate any applicable provisions.
- m) The Business Associate appreciates with and acquiesces to the right of TPNODL as principal employer to fulfil any of his legal obligations, if he fails to do so under applicable labour laws and deduct the same from his running bills / final payments / encashing security deposit / Bank Guarantee as the case may be. If there is any further shortfall TPNODL has the right to recover the same from the Business Associate.
- n) The Business Associate ensures that person employed by him adhere to the moral and legal conduct and shall not violate any standard conduct envisaged in the premise of

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 50 of 78

TPNODL by all such as, Transparency, Safety, Discipline, Integrity etc. The Business Associate or his employees should refrain from corrupt practices, giving or taking bribe in connection with any TPNODL business.

5.0 The 'Statutory Compliance Enforcement System' in TPNODL is detailed below for adherence by all concerned. Corporate IR & Welfare Group will be the process owner for implementation of the system with the help of concerned Engineer I/c or Officer I/c.

- a) Statutory Compliance being a professed value in TPNODL Code of Conduct, the concerned Engineer / Officer in charges are requested to adhere to the provisions and advise respective Business Associates in their domain to comply in letter and spirit.
- b) Immediately after issuance of letter of intent, the authorized representative of the Business Associate will report to Corporate IR & Welfare group for completion of statutory requirements.
- c) Normally, the work will be started only after 'Clearance for Commencement of Work (CCW)' is issued by IR & W group to the Business associate. However in exceptional exigencies in engineer I/c / Officer I/c may direct the Business Associate to start the work and inform IR & W group about the same. Statutory requirements in this case may be completed parallelly.
- d) First monthly bill will be released only after producing CCW to the finance department. Similarly closure of work and final settlement will be affected after issuance of no objection certificate from IR & W group.

6.0 Requirements for 'Clearance for Commencement of Work' (CCW):

- a) Submission of filled up Form 'A' for database (Annexure-1).
- b) Copy of PF Code allocation letter.
- c) Copy of ESI Code allocation letter.
- d) Submission of duly filled up Form IV CL(R&A) act (In case more than or equals to 20 workers during the period of contract).
- e) Submission of duly filled up Form VI A (Notice of Commencement).
- f) Copy of insurance cover note under WC Act 1923 (if applicable).
- g) Copy of Contract Agreement.
- h) Copy of indemnity bond (if applicable).
- i) Affidavit with regard to payment of wages through cheque / bank transfer only.

7.0 Requirements during execution of work:

- a) Copy of receipt of application for license / license (if applicable).
- b) Copy of PF Challan (latest by 26th day of every Month).
- c) Copy of ESI Challan (latest by 26th day of every Month).
- d) Copy of Wage disbursement sheet / Bank statement.
- e) Filing / Maintenance of all statutory registers / reports / returns for inspection by Statutory/ TPNODL authorities.
- f) Certification of wage disbursement by authorized representative of TPNODL.
- g) Copy of 'Labour Welfare Fund' deposit certificate / Challan.
- h) Insuring safe working practices at the work place.

8.0 Requirements for 'No Objection Certificate' (NOC) for closure of work:

- a) Submission of duly filled up Form VI A (Notice of Completion).

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 51 of 78

- b) Copy of Half yearly / Annual return for ESI / PF / CL(R&A).
- c) Consolidated copy of wage sheet of last month indicating full & final settlement of all dues like retrenchment benefit, bonus, leave encashment etc. Copy of individual declaration by employees in Form X regarding termination of employment.
- d) Confirmation certificate regarding filling up of form for transfer / withdrawal of PF by the concerned workers.

In case any of the above are deviated / not complied with the Letter of Award/Order shall be liable to be withdrawn / cancelled.

Enclosure:

- 1) Form A
- 2) Form X
- 3) Form XI
- 4) Form VI A
- 5) Form XXIV

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 52 of 78

FORM (A)

[To be submitted by the Business Associate to the Principal Employer within a week from LoA issuance]

A. Details of the Agency

1. Name of Agency :
2. Nature of work :
3. Local Address with Ph.No. :
(With Father's name) :
4. Permanent Address (Full) :
5. PF code no. & Place :
6. ESI Code no. & Place :
7. Name and address of :
Sub-contractor (if any)

B. Details of Work

8. Name of work (as specified in LOI/LOA) :
9. LOI/LOA Nos. & Dates :
10. Period of contract (Specify Dates) :
[Including Extension period, if any] :
11. Work Area [Department / Location] :
12. Name / Cell no. of Officer I/c :
13. Maximum No. of workers and staff to be engaged on any day during the year.
 - Supervisory Staff :
 - Workers :
14. Do you have any other contract in TPNODL : Yes/No
If yes, furnish details:

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 53 of 78

15. Details of Workmen's compensation Policy, if applicable

Name of Insurance Company
Policy No Number of persons
 covered Period of coverage: From To

If no, I hereby undertake the liability arising out of Workmen's Compensation Act and Rules made there under.

C. Details of workers to be engaged

No. of Workers

S. No.	Unskilled*	Semi-skilled*	Skilled*	Clerical / Supervisory

*** Number to be indicated**

I/We shall fulfill all obligations arising from and under all relevant law in force from time to time. I/We undertake to keep the TPNODL indemnified against any loss or liability arising out of failure of my / our abiding the relevant laws.

The name of my / our representatives is to enter the TPNODL Premises on my behalf.

Date:

**(Signature of the Business Associate
 or his Authorized Representative)**

This Business Associate is / will be engaged in TPNODL.

(Signature and seal of

Officer I/c of the Work)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 54 of 78

Form X

Undertaking

I _____ hereby undertake that all the dues in respect of my employment with M/s _____ for the period of _____ to _____ have been settled and final payments including retrenchment benefit have been made to me in full.

(_____)

Date:

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 55 of 78

Form XI

Undertaking

With reference to the contract job awarded by M/s TPNODL to M/s _____ vide work order No. _____ dated _____

I _____ on behalf of

M/s _____ hereby undertake:

1. that the dues in respect of the workmen/ employee(s) engaged by us for the said contract, payable as per the provisions of relevant statute pertaining to
 - i. wages/ salary
 - ii. PF & ESI, Bhubaneswar Labour Fund
 - iii. All other statutory obligation
 has been paid /settled in full and no amount/ compliance is due/ pending.
2. That in case any dispute / claim is raised by the concerned workers i.r.o. any dues / payments, M/s _____ will settle the same on it's own and such liability will be borne by M/s _____
3. That M/s _____ hereby indemnify M/s TPNODL from any future liability i.r.o. any statutory obligation in respect of said contract.

Date:

()

Authorized Signatory

For M/s _____

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 56 of 78

FORM- VI A

Notice for Commencement /Completion of contract work

I/We, Sh. / M/s _____ (Name and Address of the Contractor) hereby intimate that the contract work _____ (name of work) in establishment of the _____ (name and address of the Principal Employer) for which License No. _____ dated _____ has been issued to me/us by the Licensing Officer _____ (name of the Headquarters), has been commenced / completed with effect from _____ date / on date.

Signature of Contractor

With Office Seal

The Inspector

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 57 of 78

FORM XXIV

[See Rule 82(1)]

Return to be sent by the Contractor to the licensing Officer (in duplicate)

Half -Yearly Ending _____

1. Name and address of the Contractor
2. Name and address of the Establishment
3. Name and address of the Principal Employer
4. Duration of Contract: From _____ to _____
5. No. of days during the half year on which
 - (a) the establishment of the principal employer had worked
 - (b) the contractor's establishment had worked
6. Maximum No. of contract labour employed on any day during the half –year:

Men	Women	Children	Total

7.
 - (i) Daily hours of work and spread over
 - (ii) (a) whether weekly holiday observed and on what day
 - (b) if so, whether it was paid for
 - (iii) No. of man – hours of overtime worked

8. No. of man days worked by

Men	Women	Children	Total

9. Amount of wages paid

Men	Women	Children	Total

10. Amount of deductions from wages, if any

Men	Women	Children	Total

Whether the following have been provided –

- (i) Canteen : _____
- (ii) Rest rooms : _____

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 58 of 78

(iii) Drinking water : _____

(iv) Crèches : _____

(v) First Aid : _____

Signature of contractor

Place _____

Date _____

GENERAL CONDITIONS OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 59 of 78

ANNEXURE – H

UNDERTAKING FOR COMPETENCE OF WORKMEN

Name of Associate :

Tender No. :

Item :

With reference to the tender mentioned above, I/We _____,
 hereby undertake that the workmen/ employee(s) engaged by M/s
 _____ for the job against said tender shall be competent in all
 respect, commensurate to the nature of job.

Date:

 ()

Authorized Signatory

For M/s

Seal

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 60 of 78

ANNEXURE-I

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process more fair and transparent, TPNODL intends to use the reverse auctions through SAP-SRM/ ARIBA tool as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. TPNODL shall provide the user id and password to the authorized representative of the bidder. *(Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).*
2. TPNODL will make every effort to make the bid process transparent. However, the award decision by TPNODL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPNODL, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPNODL.
6. In case of intranet medium, TPNODL shall provide the infrastructure to bidders. Further, TPNODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be outrightly rejected by TPNODL.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPNODL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by TPNODL.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all-inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 62 of 78

send payment information)

Name of the Authorized Signatory :

Contact Person's Name :

Official Correspondence Address :

We confirm that we will bear the charges, if any, levied by our bank for the credit of NEFT/RTGS amounts in our account. Any change in above furnished information shall be informed to TPNODL well in time at our own. Further, we kept TPNODL indemnified for any loss incurred due to wrong furnishing of above information.

Thanking you,

For _____

(Authorized Signatory)

(Signature with Rubber Stamp)

Certification from Bank:

We confirm that we are enabled for receiving NEFT/RTGS credits and we further confirm that the account number (specify Bank a/c no.) of (Please mention here name of the account holder), the signature of the authorized signatory and the MICR and IFSC Code of our branch mentioned above are correct.

This also is certified that the above information is correct as per Bank record

(Manager's/ Officers Signature under Bank Stamp)

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 63 of 78

ANNEXURE-L
VENDOR APPRAISAL FORM

TO BE SUBMITTED BY VENDOR (To be filled as applicable)		
Part A		
1.0	DETAILS OF THE FIRM	
	1.1	NAME (IN CAPITAL LETTERS)
	1.2	TYPE OF CONCERN (PROPRIETARY) PARTNERSHIP PVT.LTD., PUBLIC LTD. ETC.
	1.3	YEAR OF ESTABLISHMENT
	1.4	LOCATION OF OFFICE POSTAL ADDRESS
	1.5	CONTACT DETAIL OF BA's REPRESENTATIVE NAME E-MAIL ID CELL NO.
	1.6	LOCATION OF MANUFACTURING UNITS
		i) UNITS 1
		ii) OTHER UNITS
2.0	PRODUCTS / SERVICES BEING OFFERED	
3.0	TURNOVER DURING THE LAST 3 YEARS (TO BE VERIFIED WITH THE LATEST PROFIT & LOSS STATEMENT).	
4.0	AVAILABILITY OF STATUTORY DOCUMENTS I.E. COPY OF PAN CARD	
5.0	AVAILABILITY OF STATUTORY DOCUMENTS I.E. COPY OF GST REGISTRATION	
6.0	APPLICABILITY UNDER MSME CERTIFICATION	

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 64 of 78

7.0	BA BELONGS TO AA COMMUNITY (SC/ST)		÷
8.0	DOCUMENTS VERIFYING ADDRESS PROOF (SUPPORTED BY ANY GOVT. ISSUED DOCUMENT)		÷
9.0	TECHNICAL		
	9.1	NO.OF DESIGN ENGINEERS (INDICATE NO.OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	9.2	NO.OF DRAUGHTSMEN	:
	9.3	COLLABORATION DETAILS (IF ANY)	:
		9.3.1 DATE OF COLLABORATION	:
		9.3.2 NAME OF COLLABORATOR	:
		9.3.3 RBI APPROVAL DETAILS	:
		9.3.4 EXPERIENCE LIST OF COLLABORATOR	:
		9.3.5 DURATION OF AGREEMENT	:
	9.4	AVAILABILITY OF STANDARDS / DESIGN PROCEDURES / COLLABORATOR'S / DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT)	:
	9.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	9.6	QUALITY OF DRAWINGS	:
10.0	MANUFACTURE		
	10.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	:
	10.2	POWER (KVA)	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 65 of 78

		MAINS INSTALLED	:	
		UTILISED	:	
		STANDBY POWER SOURCE	:	
	10.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENTS AS APPLICABLE)	:	
		10.3.1 MATERIAL HANDLING	:	
		10.3.2 MACHINING	:	
		10.3.3 FABRICATION	:	
		10.3.4 HEAT TREATMENT	:	
		10.3.5 BALANCING FACILITY	:	
		10.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:	
	10.4	SUPERVISORY STAFF	:	
	10.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	:	
	10.6	NO. OF SHIFTS	:	
	10.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	:	
	10.8	WORKMANSHIP	:	
	10.9	MATERIAL IN STOCK AND VALUE	:	
	10.10	TRANSPORT FACILITIES	:	
	10.11	CARE IN HANDLING	:	
11.0	INSPECTION / QC / QA / TESTING			

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 66 of 78

	11.1	NUMBER OF PERSONNEL (INDICATE NO.OF YEARS OF EXPERIENCE)	:	
	11.2	INDEPENDENCE FROM PRODUCTION	:	
	11.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:	
	11.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:	
	11.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:	
	11.6	STAGE INSPECTION AND DOCUMENTATION	:	
	11.7	SUB-ASSEMBLY & DOCUMENTATION	:	
	11.8	FINAL INSPECTION AND DOCUMENTATION	:	
	11.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	:	
	11.10	TYPE TEST FACILITIES	:	
	11.11	ACCEPTANCE TEST FACILITIES	:	
	11.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	:	
	11.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC.(AS APPLICABLE)	:	
	11.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:	
	11.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNISED LABORATORIES	:	

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 67 of 78

	i)	FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	:	
	ii)	CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:	
12.0		EXPERIENCE (INCLUDING CONSTRUCTION / ERECTION / COMMISSIONING) TO BE FURNISHED IN THE FORMAT INDICATED IN APPENDIX)	:	
13.0		SALES, SERVICE AND SITE ORGANISATIONAL DETAILS	:	
14.0		CERTIFICATE FROM CUSTOMERS (ATTACH COPIES OF DOCUMENTS)	:	
15.0		POWER SITUATION	:	
16.0		LABOUR SITUATION	:	
17.0		APPLICABILITY OF SC/ST RELAXATION (Y/N) IF YES, SUPPORTING DOCUMENTS TO BE ATTACHED	:	
Part C Supporting Documents				

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 68 of 78

18.0	DOCUMENTS TO BE ENCLOSED: 1. Factory License 2. ISO Certificate 3. Registration of Central Excise 4. Income Tax Clearance. 5. PF Registration 6. ESI Registration 7. Insurance for Workman Compensation Act No. 8. Electrical Contract LIC No. 9. PAN No. 10. GST Registration 11. MSME Certification 12. WC Tax Registration 13. Organogram of Co. having organogram of Design, safety, quality, production and other teams. 14. Details of subscription of BIS, IEC, IEE, ASTM or other. 15. Details of the team in Design, Quality, Safety, Production. 16. List of manufacturing equipment as per Part C. 17. List of calibrated equipment as per Part C. 18. List of clients and order executed in past two years. 19. Complaint escalation matrix. 20. Performance Certificates of same product from Minimum two utilities. 21. e-Payment Form as per enclosed Annexure-J	

*** Classification of BAs under SC/ST shall be governed under following guidelines:**

- **Proprietorship/ Single Ownership Firm:** Proprietor of the firm should be from SC/ST community. Governing document shall be Proprietorship Deed.
- **Partnership Firm:** Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed.
- **Private Limited Company:** Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).
- The relaxation available for BAs under SC / STs shall be as per GCC for Tender Fees, EMD, PBG and Turnover criteria.

Note:

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 69 of 78

- *Certification from SC/ST Commission shall be required for deciding upon SC/ST status of a person.*
- *Annexure-J (e-Payment detail form) must be filled by Associate along with this form.*

ANNEXURE-M

MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:

Tender Enquiry No.:

To,

Chief (Procurement & Stores)

TP Northern Odisha Distribution Ltd,
Balasore

Sir,

WHEREAS M/s. [name of OEM], who are official manufacturers of having factories at [address of OEM] do hereby authorize M/s [name of bidder] to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us

.....

and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the Special Conditions of Contract or as mentioned elsewhere in the Tender Document, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

We hereby confirm that in case, the channel partner fails to provide the necessary services as per the Tender Document referred above, M/s [name of OEM] shall provide standard warranty on the materials supplied against the contract. The warranty period and inclusion / exclusion of parts in the warranty shall remain same as defined in the contract issued to their channel partner against this tender enquiry.

Yours Sincerely,

For

Authorized Signatory

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 70 of 78

Annexure-P

TATA CODE OF CONDUCT (TCoC)

Introducing Tata Code of Conduct (TCoC) in GCC, the following clause is proposed for inclusion as per suggestions from Chief Ethics Counsellor -

“TCoC is the overarching policy framework that applies to all TATA Group companies including TPNODL. TCoC provides for stakeholder-wise approach in each of the seven chapters.

The chapter “Our Value Chain Partners” states the policy as follows:

1. We shall select our suppliers and service providers fairly and transparently.
2. We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
3. Our suppliers and service providers shall represent our company only with duly authorized written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
4. We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company’s gifts and hospitality policy.
5. We respect our obligations on the use of third party intellectual property and data.

To effectively implement TCoC, there is a 3-tier framework comprising of Ethics Management Apex Team headed by the CEO, who is also the Principal Ethics Officer (PEO), TPNODL; Locational Ethics Counsellors (LECs) who cover various locations/offices of TPNODL; and LECs are assisted by 4-5 Ethics Champions (ECs).

In case any Ethical Concern is faced during the course of your business dealings with TPNODL, one may utilize any one or more of the following avenues:

1. Ethics Portal on website – www.tpnodl.com
2. Ethics Box
3. IVRS No. 19124 and then press 7
4. Locational Ethics Counsellor (LEC)
5. **Third Party Ethics Helpline – 1800-22-7697 (Toll Free) ***
6. Chief Ethics Counsellor

TPNODL is committed to follow Core Values and Core Principles mentioned in TCoC, cited below, in carrying out various activities as well as in discharge of bi-lateral and multi-lateral obligations involving other entities/organizations:

Core Values:

All six core values are already mentioned in GCC.

Core Principles:

1. **Zero tolerance to bribery or corruption** in any form.
2. Committed to **good corporate citizenship**
3. Contribute to the **economic development of the communities** of the countries & regions we operate in.

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 71 of 78

4. No compromise on **Safety**
5. Our conduct shall be **fair & transparent**
6. Respect the **human rights & dignity** of our stakeholders
7. **No unfair discrimination** of any kind
8. Statements made to stakeholders shall be **truthful** & made in **good faith**
9. Not engage in any restrictive or **unfair trade practice**
10. Provide avenues for our stakeholders to **raise concerns in good faith**
11. Environment **free from fear** of retribution to deal with concerns that are raised
12. Expect the leaders to be **role model**
13. **Comply with the laws** of the countries in which we operate

Gift Policy:

Principles for acceptance of gifts/benefits –

A gift or benefit may be accepted only if it complies with all of the following principles:

- ✓ it does not influence,
- ✓ does not have the potential to influence, an employee in such a way as to compromise or appear to compromise integrity and impartiality
- ✓ does not create a conflict of interest or perception of conflict of interest;

Principles for non-acceptance of gifts/benefits -

The gift or benefit may not be accepted or given if any of the following principles apply:

- ✓ causes the recipient or donor **to act in partial manner** in the course of duty
- ✓ apprehension of the recipient becoming **obligated to the donor**
- ✓ it is **not offered openly**
- ✓ if is an **offer of money** or something readily convertible to money (e.g. Shares)

Violation –

1. Not abiding with this policy would constitute violation of “Our Employees” Stakeholder group Clause “Gifts and Hospitality” of the Tata Code of Conduct (TCoC) 2015. Prompt action will be taken against violations.
2. Any deviation from this policy must be supported by appropriate rationale and must be duly approved by CEO who is also the Principal Ethics Officer. In any case, in dealing with such deviations, the spirit of the TCoC should in no case be compromised.
3. If it is determined that an employee / associate has violated this policy, appropriate action including termination of the employee’s / associate’s employment or association with TPNODL may be decided upon.

ANNEXURE-Q

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 72 of 78

BUSINESS ASSOCIATE FEEDBACK FORM

With an objective to improve our internal processes and systems, and serve you better, we solicit your valuable feedback & suggestions. It is estimated that it will take about 10 minutes to complete this survey. We assure you that your feedback shall be kept confidential. Please send the duly filled feedback form in the "TPNODL addressed - attached envelop"

You are associated with us as

☐ OEMs ☐ Service Contractor ☐ Material Suppliers ☐ Material & Manpower Supplier

You are associated with us for

☐ Less than 1 year ☐ More than 1 year but less than 3 years ☐ More than 3 years

Your office is located at

☐ Balasore ☐ Within 200 kms from Balasore ☐ More than 200 kms from Balasore

Your nearly turnover with TPNODL

☐ Less than 25 Lacs ☐ 25 Lacs to 1 Crore ☐ More than 1 Cr.

Additional information

Your Name	
Your Designation	
Your Organization	
Contact Nos.	
Email	

We once again thank you for your participation in this survey. Please spare 10 minutes to give your feedback on following pages (Section A to E)

SECTION - A

(Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.).

S.	Parameters	1	2	3	4	5	Remarks/

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 73 of 78

No.		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	Suggestion
1	You receive all relevant queries / tenders from us in timely manner.						
2	We provide you enough lead time to respond to our queries / tenders.						
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.						
4	All following elements of our contract / purchase order are rational :						
4.1	Scope of Work						
4.2	Delivery / Execution Schedule						
4.3	Payment Terms						
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	TPNODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	TPNODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPNODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	TPNODL Engineer-in-Charge timely certifies the jobs executed/ material supplied						
11	TPNODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job						
12	BIRD (Bill Inward Receipt Desk) initiative has improved payment disbursement process						

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 74 of 78

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?						
14	TPNODL never defaults on contractual terms						
15	In TPNODL Contracts closure is done within set time limit						
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience						
17	Bank Guarantees are released in time bound manner						
18	Our processes related to payment / account settlement are effective.						
19	You get payments on time						
20	TPNODL Employees follow Ethical behavior						

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 75 of 78

SECTION - B

SECTION – B (Please rate the following parameters on a scale of 1 to 5, where 1 - Minimum; 5 - Maximum)

SN	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of TPNODL employees you interact with from following team?						
1.1	Project Engineering						
1.2	District / Zones						
1.3	Projects/HOG (TS &P)						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing						
1.7	Accounts / Finance						
1.8	Administration						
1.9	IT & Automation						
2	How would you rate TPNODL in comparison to your other clients in terms of fairness of treatment and transparency with its Business Associates?						
3	How would you rate TPNODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates						
4	How would you rate TPNODL in comparison to your other clients in terms of building long term & mutually relationship with its Business Associates						

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 76 of 78

SECTION – C

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

S. No.	Parameters	Certainly NO	Probably NO	Probably YES	Certainly YES	Remarks/ Suggestion
1	Based on your experience with TPNODL, would you like to continue your relationship with TPNODL?					
2	If someone asks you about TPNODL, would you talk “positively” about TPNODL?					
3	Would you refer TPNODL name to others in your community, fraternity and society as a professional & dynamic organization?					

SECTION - D

If we ask you to rate us on a scale of 1 to 10, how will you rate TPNODL, that truly represents your overall satisfaction with us (please tick appropriate box) –

1	2	3	4	5	6	7	8	9	10

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 77 of 78

SECTION – E

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

Please spare your thoughts for TPNODL's improvement in particular areas of weaknesses, particularly relating to some great practices, attitudes that you have seen elsewhere in Indian and International Organizations, which you recommend TPNODL to adopt. Please give your valuable salient recommendations.

Please spare your thoughts for TPNODL's improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, altitudes that you have observed / experienced elsewhere in Indian/ International organization.

Recommendation	Please tick (✓) your top 5 expectations out of the following 10 points listed below -	
(Please list down improvement you expect from TPNODL)	Timely payment	
1	Flexibility in Contracts/PO	
	Clarity in PO,s & Contracts	
2	Timely response to quarries	
	Timely certification of works executed	
3	Clarity in Specs, drawings, other docs etc.	
	Adequate information provided on website for tender notification, parties qualified etc.	
4	Timely receipt of material at site for execution	
	Performance Guarantee/EMD released in time	
5	Inspection & quality assurance support for timely job completion	

We thank you for your time and courtesy!!

Doc. Title	GENERAL CONDITIONS OF CONTRACT FOR COMPOSITE WORKS	
Rev. No	01 dtd 1.12.2021	Page 78 of 78

GENERAL CONDITIONS OF CONTRACT

CONTENTS

CLAUSE NO.	DESCRIPTION
1.0	ORGANIZATIONAL VALUES
2.0	ETHICS
3.0	CONTRACT PARAMETERS
3.1	Issue/ Award of Contract
3.2	Contract Commencement Date
3.3	Contract Completion Date
3.4	Contract Period/Time
3.5	Contract Execution Completion Date
3.6	Contract Execution Period/Time
3.7	Contract Price /Value
3.8	Contract Document
3.9	Contract Language
3.10	Reverse Auction
4.0	SCOPE OF WORK
4.1	Indemnity
4.2	Display of notice boards at work site
4.3	Disposal of waste at site
4.4	Deployment of workforce
4.5	Damage of Properties
4.6	Issuance of material
4.7	Company's right to use works
4.8	Rights of TPSODL to vary the scope work
5.0	PRICES/RATES/TAXES
5.1	For Supply part of Contract
5.2	For Service part of Contract
5.3	Changes in statutory Tax Structure

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 2 of 105

CONTENTS	
CLAUSE NO.	DESCRIPTION
6.0	TERMS OF PAYMENT
6.1	Pre-Requisites for Payment
6.2	Bills & Invoices
6.3	Payment & Statutory Deductions
6.4	Guidelines for Raising Running/Final Bills
6.5	Quantity Variation
6.6	Full and Final Payment
7.0	MODE OF PAYMENT
8.0	SECURITY CUM PERFORMANCE DEPOSIT
9.0	STATUTORY COMPLIANCE
9.1	Compliance to Various Acts
9.2	SA 8000
9.3	Affirmative Action
9.4	Preferential norms for procurement from MSMEs registered in the State of Odisha
9.5	Compliance to Labour Laws
9.6	Compliance to C&D Waste Management Rules & Environment (Protection) Amendment Rules
10.0	QUALITY
10.1	Knowledge of Requirements
10.2	Material/Equipment/Works Quality
10.3	Adherence to Rules & Regulations
10.4	Specifications and Standards
11.0	SAFETY
12.0	INSPECTION/PARTICIPATION
12.1	Right to Carry Out Inspection
12.2	Facilitating Inspection
12.3	Third Party Nomination
12.4	Waiver of Inspections
12.5	Incorrect Inspection Call

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 3 of 105

CONTENTS	
CLAUSE NO.	DESCRIPTION
13.0	MDCC & DELIVERY OF MATERIALS
13.1	Material Dispatch Clearance Certificate
13.2	Right to Rejection on Receipt
13.3	Consignee
13.4	Submission of Mandatory Documents on delivery
13.5	Dispatch and Delivery Instructions
14.0	GUARANTEE
14.1	Guarantee of Performance
14.2	Guarantee period
14.3	Failure in Guarantee period (GP)
14.4	Cost of repairs on failure in GP
14.5	Guarantee Period for Goods Outsourced
14.6	Latent Defect
14.7	Support beyond the Guarantee Period
15.0	LIQUIDATED DAMAGES
15.1	LD Waiver Request
15.2	Material Recovery
16.0	ASSIGNMENT OR SUBCONTRACTING
17.0	UNLAWFUL ACTIVITIES
18.0	CONFIDENTIALITY
18.1	Documents
18.2	Geographical Data
18.3	Associate's Processes
18.4	Exclusions
18.5	Violation
19	INTELLECTUAL PROPERTY RIGHTS
20	INDEMNITY
21	LIABILITY & LIMITATIONS
21.1	Liability

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 4 of 105

CONTENTS	
CLAUSE NO.	DESCRIPTION
21.2	Limitation of Liability
22.0	FORCE MAJEURE
23.0	SUSPENSION OF CONTRACT
23.1	Suspension for Convenience
23.2	Suspension for Breach of Contract Conditions
23.3	Compensation in lieu of Suspension
24.0	TERMINATION OF CONTRACTS
24.1	Termination for default/breach of contract
24.2	Termination for convenience of associate
24.3	Termination for Convenience of TPSODL
25.0	Dispute resolution and Arbitration
25.1	Governing laws and jurisdiction
26.0	ATTRIBUTES OF GCC
26.1	Cancellation
26.2	Severability
26.3	Order of Priority
27.0	INSURANCE
28.0	ERRORS AND OMISSIONS
29.0	TRANSFER OF TITLES
30.0	SUGGESTIONS & FEEDBACK
31.0	CONTACT POINTS
32.0	LIST OF ANNEXURES

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 5 of 105

1.0 ORGANIZATIONAL VALUES

The Tata Group has always been a value driven organization. These values continue to direct the Group's growth and businesses. The Six core Tata Values underpinning the way we do business are:

Integrity - We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.

Understanding - We must be caring, respectful, compassionate and humanitarian towards our colleagues and customers around the world and always work for the benefit of India.

Excellence - We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of goods and services we provide.

Unity - We must work cohesively with our colleagues across the group and with our customers and partners around the world to build strong relationships based on tolerance, understanding and mutual co-operation.

Responsibility - We must continue to be responsible and sensitive to the countries, communities and environments in which we work, always ensuring that what comes from the people goes back to the people many times over.

Agility - We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 ETHICS

In our effort towards Excellence and in Management of Business Ethics at TPSODL, an Ethics Management Team is constituted.

The main objective of the Ethics Management Team is to:

1. Record, address and allay the issues and concerns on ethics raised by different stakeholders like employees, consumers, vendors, associates etc. by initiating immediate corrective actions.
2. Ensure proper communication of the ethics policies and guidelines through prominent displays at all offices of TPSODL and through printed declarations in all concerned documents where external stakeholders are involved.
3. Ensure proper framework of policies as preventive measures against any ethics violation recorded by them.
4. Prepare and submit MIS of all issues and concerns, corrective and preventive actions on monthly basis to the top management for their information.
5. All Associates and Stakeholders are requested to register any grievance on ethics violation on TPSODL website www.tpsouthernodisha.com

3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 6 of 105

TPSODL awards the contract to the Associate in writing in the form of Purchase order or Rate Contract (RC) hereafter referred as Contract, through in any or all of following modes- physical handover / post / e-mail / web document / fax with all the attachments/enclosures which shall be part of the contract document

On receipt of the contract, the associate shall return to TPSODL copy of the contract document duly signed by legally authorized representative of associate, within two days of Effective Date of Contract for contracts having contract execution time less than 30 days and within five days for all other contracts.

3.2 Contract Commencement Date

The date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.3 Contract Completion Date

The date of expiry of Guarantee Period (detailed in section 12 of this document) shall be deemed as the Contract Completion Date.

3.4 Contract Period/Time

The period from Contract Commencement Date to Contract Completion Date shall be deemed as the Contract Period/Time.

3.5 Contract Execution Completion Date

The stipulated date for completing the execution of all items in the schedule of quantities (Supply, Service and or both as applicable) shall be deemed as the Contract Execution Completion Date.

3.6 Contract Execution Period/Time

The Period from Contract Commencement Date to Contract Execution Completion Date shall be the Contract Execution Period/Time. Timely Completion of Works/Timely Delivery of Materials is the essence of the contract. The period from effective date of contract to the date stipulated for completion of delivery of all items/completion of all the works/services, as per schedule of quantities of the contract is defined as contract execution completion time. The Delivery of Materials /The Completion of Works, as applicable, should be achieved in all respects as per schedules of quantities and all the terms and conditions of the contract, in the contract execution time.

Any revision/amendment in the originally stipulated contract execution time has to be approved by authorized representative of TPSODL.

3.7 Contract Price /Value

The total all inclusive price/value mentioned in the LOI/PO/RC of the contract document is the Contract Price/Value and is based on the quantity, unit rates and prices quoted and awarded and shall be subject to adjustment based on actual quantities supplied/actual measurement of work done and accepted and certified by the authorized representative of the company unless otherwise specified in schedule of quantities or in contract documents.

3.8 Contract Document

The Contract Document shall mean and include but not limited to the following:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 7 of 105

- NIT/Tender Enquiry, QR, Instruction to Bidders, Special Condition of Contract (SCC) of tender, GCC, Technical & Commercial Specifications including relevant annexure and attachments).
- Bids & Proposals Received from Associate including relevant annexure/attachments.
- Letter of Intent (LOI/RC/PO) with agreed deviations from the tender/bid documents.
- All the Inspection and Test reports, Detailed Engineering Drawings.
- Material Dispatch Clearance Certificate (MDCC).
- Minutes of Meeting (MoM)

3.9 Contract Language

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language.

The Contract documents and all correspondence between the TPSODL, Third Parties associated with the contract, and the Associate shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi, and local languages.

3.10 Reverse Auction

TPSODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached in Annexure J. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form as mentioned in the Annexure J as a token of acceptance for the same.

Bid validity will stand get automatically extended from the date of latest Negotiation event i.e. Reverse Auction or Manual Negotiation and accordingly bid shall be valid further

- i. For minimum 45 days if original bid validity duration is lesser than 45 days at latest negotiation date.
- ii. For actual bid validity duration if original bid validity is more than 45 days at latest negotiation date.

4.0 SCOPE OF WORK

All the activities that are to be undertaken by the Associate to realize the contractual deliverables in completeness form Scope of Work. Following clauses list, but not limited to, major requirements of the scope of work.

The associate shall satisfy himself and undertake fully the technical/commercial requirements of items to be supplied as listed in the Schedule of Quantities together with the tests to be performed /test reports to be furnished before dispatch, arrangement of stage and final inspections during manufacturing as per terms and conditions of contract, technical parameters & delivery terms and conditions including transit insurance to be met in order to fully meet TPSODL's requirements.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 8 of 105

Completeness: Any supplies and services which might have not been specifically mentioned in the Contract but are necessary for the scope mentioned in Special Terms & Conditions and/or completeness of the works at the highest possible level, including any royalties, license fees & compensation to be paid, whether incurred by the associates or by a third party for the work covered in the scope, regardless of when incurred, shall be supplied/provided by the associate without any extra cost and within the time schedule for efficient, smooth and satisfactory operation and maintenance of the works at the highest possible level under Indian conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this Contract.

TPSODL have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by submitting a request in writing to the Associate. The Associate shall, within fifteen days of receipt of such request from the TPSODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPSODL requests a change, the Contract price and time shall be adjusted upwards or downwards, as the case may be and shall be mutually agreed to. The associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes as requested till adjustment of contract price and time schedule where so applicable in terms of or otherwise directed by the TPSODL.

4.1 Indemnity

Associates shall undertake to fully indemnify TPSODL (also referred to as the Company in the GCC) against all kinds of liabilities or damages, of whatsoever nature, including compensation arising from any accident to the person or property of those in Associate's employment or to any other person or properties including those of TPSODL, arising due to reasons attributable to any, act, omission or negligence of the Associate the Associates, for the entire period of contract including period of guarantee.

Within 7 days of award of work, the Associates shall submit Indemnity Bond in the format as per Annexure-E to Order Issuing Authority.

Contract having value more than Rs 2 Cr per Annum, Associates shall submit Indemnity Bond on Rs 100/- Non Judicial Stamp Paper in the format as per Annexure- E to Order Issuing Authority.

4.2 Display of Notice Boards at Work Sites

The Associate shall put up display notice board at each project site where the works are in progress indicating the information given below:

- Name of the Project.
- Estimated Cost of Project.
- Date of Commencement.
- Expected date of completion.
- Name of Associate and his telephone number.
- Name of Engineer-in-Charge and his telephone number.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 9 of 105

4.3 Disposal of Waste at Site

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change.

The associates shall follow the below criteria for disposal of waste at site during the execution of project.

- Associate shall ensure that the detailed project plan include the waste management, segregation of all designated waste material (Recyclable/ Non-Recyclable), collecting, storing, disposing and transferring the same to pre-arranged facility/destination in timely and safe manner as per environmental legislations during the execution of project. The project plan shall also include the innovative construction practice to eliminate or minimize waste, protect surface/ground water, control dust and other emissions to air and control noise during the execution of project. The copy of same shall be given to EIC before the commencement of project.
- The purchase policy of BA shall encourage the procurement of material with recycled and minimum packaging of goods during delivery. Associate shall provide the appropriate means for site to site transportation of materials to avoid damage and litter generation.
- Associate shall educate and inform to its project team about the requirement and responsibilities for waste minimization and disposal in general and provide training of practices that support this. Waste management should be treated like a safety program.
- In the event that area of contaminated or biological hazard is identified, Associate shall ensure that plant, equipment, personnel and any activity associated with the work is carried out in consultation with EIC of TPSODL.
- Associate shall ensure that the residents living near the site are kept informed about proposed working schedule and shall informed timings and duration of any abnormal noise full activity that is likely to happen.
- Associate shall ensure the regular maintenance and monitoring of vehicles and equipment for efficient fuel use so that emissions and noise are within acceptable limits to avoid air pollution.

4.4 Deployment of Work Force

Associate shall deploy adequate labour as considered necessary by TPSODL for execution of the contract including Sundays and Holidays whenever required to do so with no extra cost to TPSODL. However, prior permission shall be taken from the site Engineer to carry out the work beyond normal working hours or on Sundays and Holidays. Female employees shall not be deployed beyond normal working hours/days and no child labour shall ever be deployed. Associate shall depute full time qualified and experienced engineers to supervise the work at site. All such staff shall be maintained from commencement to completion of all works to the entire satisfaction of the Engineer-in-Charge. Associate's employees deployed for the works under this contract will not be considered in Company's employment at any time. Associate shall continue to be responsible for all such employees, their safety, all types of statutory compliances related thereto and in any other manner whatsoever. The company

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 10 of 105

will stand indemnified by the Associate in respect of all the above. At the same time Company upon noticing any breach or default on any statutory compliances, may at their sole discretion, decide to act in a manner as deemed fit at the risks and costs of the Associate.

TPSODL shall have the right to instruct the Associate to change the Sub- Associates or skilled /unskilled workers in case the conduct, the workmanship or speed of the work is not satisfactory.

Associates shall submit duly signed undertaking regarding engagement of competent staff / employee commensurate to the nature of job to Engineer-in-charge in the format attached as Annexure – H.

4.5 Damages to Properties

The Associates shall take necessary steps to ensure that the equipment and installations of the Company, third parties, including other utility services like water supply pipelines; open drains telephone cables etc. are not damaged during execution of the works. The Associates shall be responsible for all such damages and shall have to repair/ replace and/or compensate for the entire claims in respect of such damages at its own cost.

4.6 Issuance of Material

The material issued to the Associate shall be in the custody of the Associates who shall be fully responsible for the same. After completion of the works, the Associates will reconcile the material. Any cost of material which is short or damaged/lost will be deducted from Associate bill/ deposits.

4.7 Company's Right To Use Works

If Taking Over Certificate is delayed for any reason, for which TPSODL's decision shall be final and binding upon the Associate, the Company shall be entitled to use the works or portion thereof without affecting Associate's responsibility and liability to complete the balance works as per company's directives from time to time, though Associate shall be afforded reasonable opportunity by the company to enable Associates to complete all balance works required for issuance of 'Taking Over Certificate' by the company.

4.8 Rights of TPSODL to vary the scope work

TPSODL shall have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by communicating the intent to do so in writing to the Associate. On receipt of such communication the Associate shall, within the time frame specified in the contract shall provide TPSODL with a reasonably detailed estimate of the cost of the change in scope outlined in the TPSODL communication. The change in the Contract price and time shall be revised upwards or downwards, as the case may be, and shall be mutually agreed to. The Associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes in the scope of work till such time revision of Contract price and time schedule are approved and communicated to the associate by TPSODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 11 of 105

Any change in the Scope of Work and/or Terms & Conditions of the order shall be intimated by TPSODL through an amendment to the contract. The amendment shall be treated valid only if signed by the authorized signatory of the original contract.

5.0 PRICES/ RATES/ TAXES

5.1 For Supply part of Contract

Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPSODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPSODL store/site & unloading & delivery at TPSODL stores/TPSODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices/rates shall remain firm till actual completion of entire supply of goods/material/equipment as per contract is achieved and shall remain valid till the completion of the contract.

The prices shall remain unchanged irrespective of TPSODL making changes in quantum in all or any of the schedules of items of contract.

5.2 For Service part of Contract

The Prices and Rates are inclusive of cost of materials supplied as per contract terms and for which MDCC is issued by TPSODL and to the extent required for completion of works, cost of service executed as per schedule of quantities, cost of testing as per contract terms, cost of documentations including all relevant test certificates and other supportive documents to be furnished as per contract terms. The rates shall remain firm till actual completion of contract.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices shall remain unchanged irrespective of TPSODL making changes in quantum in all or any of the schedules of items of contract.

5.3 Changes in Statutory Tax Structure

If rate of any or all of the statutory taxes and duties applicable to the contract changes, such changes shall be incorporated by default if the changes occur within the contract execution time and shall be applicable if the contract is executed by the Associate within the Contract Execution Time.

For execution of contracts beyond contract execution time, where the delay is not attributable to TPSODL no upward revision in tax /duties shall be considered irrespective of changes in the statutory tax structure either within the contract execution time or beyond. However, in such cases, benefits due to any downward revisions in statutory tax rates shall be passed on to TPSODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 12 of 105

6.0 TERMS OF PAYMENT

- A. 5% of the Release Order/ Purchase Order price shall be paid as initial interest free advance on fulfillment of the following by the Associate:
 - a) Acceptance of PO/ LOI.
 - b) Submission of advance payment BG of 15% of the Release Order/ Purchase Order price which shall remain valid till the advance is fully adjusted.
 - c) Submission of Contract Performance Bank Guarantee of 5/10% of the RC/ PO price valid till 30 days after taking over of the works.
- B. 10% of the Release Order/ Purchase Order price shall be paid as interest free advance against approval of drawings under Category-1 of major drawings, Quality Plans, Pert Chart, Field Quality Plan, posting of Project Manager and commencement of the first mile stone of the work mutually agreed including C-3 Form, and submission of a true copy of 'Erection All Risk Insurance Policy' taken for the awarded jobs. The drawing list shall be mutually agreed at the time of award of work.
- C. 50% on account payment of the total of item wise cost of material Release Order/ Purchase Order shall be paid against receipt of material at site in good condition and certification by TPSODL along with bills complete in all respects viz. MDCCs etc.
- D. 20% on account payment of the actual executed value shall be paid against mechanical completion of erection on prorata basis against monthly bills and 70% on account of the actual executed value shall be paid against the service line item including composite line item. In case this milestone is not completed beyond 120 days for reasons attributable to TPSODL, the payment corresponding to supply part shall be released subject to submission of BG of equivalent amount by the BA valid for a period of further 12 months. If required, it shall be extended by the BA on request of TPSODL.
- E. 15% payment of the actual executed Release Order/ Purchase Order shall be paid after completion of acceptance test and Taking Over of the complete systems specified in the enquiry, including clearance of Electrical Inspection, compliance of final punch point and after reconciliation & adjustment of payments, if any, towards Quantities of materials issued from purchaser's stock and consumed by the contractor for expeditious completion of the job. In case this milestone is not completed beyond 120 days beyond schedule for reasons attributable to TPSODL, the payment corresponding to supply part shall be released subject to submission of BG of equivalent amount by the BA valid for a period of further 12 months. If required, it shall be extended by the BA on request of TPSODL.

The Contractor shall submit all Operation & Maintenance manuals and "As Built Drawings" etc. and shall also submit Equipment Warranty Bank Guarantee (EWBG) equivalent to 5/10% of actual executed contract price before the release of this last payment and return of CPBG. The validity of EWBG shall be for a period of 15 months from the date of taking over of the works or specified guarantee period in drawing/tender/technical specification documents etc. whichever is later. The associate shall also submit 'No Demand Certificate' at the time of receipt of full and final payment.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 13 of 105

6.1 Pre-Requisites for Payment

- Associate should have completed execution of that part of contract, for which payment is sought, to the satisfaction of TPSODL's Engineer-in-Charge responsible for the contract and obtained certification for execution of the work.
- Associate has undertaken joint measurement of the work executed along with TPSODL's Engineer-in-charge
- Associate's bills/invoices submitted have been certified by Engineer-In-Charge.

6.2 Bills & Invoices

Unless specified otherwise in the special conditions of contract, Associate shall raise not more than one invoice/contract per month for the services rendered in the prescribed Tax Format and the invoice shall be submitted within 15 days of the following month at Bill Inward Receipt Desk (BIRD) Receipt Desk / Invoice Desk / Office of CFO, TPSODL located at TPSODL Corporate Office, Kamapally, Courtpetta, Berhampur, District Ganjam, Odisha, India – 760 004

All Bills shall be supported by joint measurement of work done, quality test report and a copy of wage sheet, if applicable (showing proof of having disbursed wages as per applicable law) and a copy of statement substantiating that statutory payments having been affected.

Bills/ invoices shall mention Associate's 'Sales, Service, WCT Tax Registration Number, PAN number as applicable.

Final bill submission after completion of project or execution of job must be within 30 days from the actual date of completion/execution of work awarded.

6.3 Payment & Statutory Deductions

Payment shall be released within 30 days from the submission of the bills. The associate shall submit "No Demand Certificate" in the format as per Annexure-D at the time of receipt of full and final payment. In case any non-compliance to contract conditions comes to TPSODL's notice, TPSODL will be entitled to deduct 30% of estimated wages plus 20% of wages as TPSODL's overheads. Associates would be obliged to provide the copy of monthly wage sheet in any case, failing which no payment shall be made. TPSODL at their sole discretion may deposit the PF etc. with statutory authorities. TPSODL will deduct the amounts of TDS as per statutory requirement under the income tax act and the DVAT Act and certificates (wherever applicable) will be issued to associate accordingly.

In case of non-submission of PAN No TDS @ 20% shall be deducted from all payable amounts for which no TDS certificate shall be issued. TDS once deducted as above shall not be revised in any condition.

6.3.1 Statutory Deductions

TPSODL will deduct the amounts of TDS, TCS as per statutory requirement under the income tax act, the Goods and Services tax act, BOCW Act, or any other applicable tax act and certificates (wherever applicable) will be issued to associate accordingly. For consumption of TPSODL's Water and Electricity by Associate for execution of Contract, Associate shall pay 0.5% & 1.0% respectively of contract value and it shall be deducted from the running bills. The Engineer-in-Charge as stated in the Order shall be responsible for certification of the work executed and the bills. Bills (including original) shall be submitted in

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 14 of 105

triplicate at Bill Inward Receipt Desk (BIRD) / Invoice Desk / Office of CFO, TPSODL located at TPSODL Corporate Office, Kamapally, Courtpeta, Berhampur, District Ganjam ,Odisha, India – 760 004

6.4 Guidelines for Raising Running/Final Bills

Contract Value Up to 5 Lakhs	One Final Bill
Contract Value More than 5 lakhs	Monthly Running Bill & One Final Bill

All Bills shall be processed only when all bank Guarantees are in place and before payments of Final Bill Associate have to furnish NDC.

6.5 Quantity Variation

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by TPSODL and not on the basis of contract quantity.

6.6 Full and Final Payment

Full & Final Payment in all contracts shall be made subject to the associate submitting “No Demand Certificate” in the format as per Annexure-D.

7.0 MODE OF PAYMENT

Payment shall be made through RTGS mode for which Business Associated shall submit the details of Bank Account and other details as per annexure K. Further, for any payments made, TPSODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate.

The quantities of items indicated are estimated and preliminary. However, payments shall be made on the basis of actual quantity of work carried out and measured jointly by the Company and the Associate. Associates shall be responsible to organize joint measurements of works with TPSODL Engineer-in-Charge before raising any bill of work done. In the event Associate fails to do so, TPSODL at their sole discretion, may take measurements of work done and proceed as deemed fit and in such an event Associate's right to lodge any subsequent claim shall stand forfeited.

8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 15 days from the effective date of issue of PO/RC, Security cum Performance Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPSODL for:

- (a) 5% of the PO value if purchase order value is more than Rs 5 Crores.
 - (b) 10% of the PO value if purchase order value is less than Rs 5 Crores.
- This shall remain valid till the end of the Guarantee Period of contract, plus one month.
- (c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 15 of 105

- For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by TPSODL while processing the invoice and shall be released after completion of Guarantee Period plus one month.
- For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable.
- In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPSODL. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. Guarantee Period plus one month.

9.0 STATUTORY COMPLIANCE

9.1 Compliance to Various Acts

Associate should ensure adherence to all applicable laws, rules and regulation applicable under this contract from time to time. In case of violation any risk, costs etc shall be in associates account and keep TPSODL indemnified always till completion of contracts.

9.2 Social Accountability

TPSODL expects its Associates to follow guidelines of best practices on the following aspects

1. Child Labour
2. Forced or Compulsory Labour
3. Health & Safety
4. Freedom of Association & Right to Collective Bargaining
5. Discrimination
6. Disciplinary Practices
7. Working Hours
8. Remuneration
9. Management System

9.3 Affirmative Action

TPSODL appreciate and welcome the engagement/employment of persons from SC/ST community or any other deprived section of society by their business associates.

Relaxation in Contract Clauses under Affirmative Action for SC/ ST Business Associates**

TPSODL believes that inclusive growth is the key to sustainable development, and to promote the same Policy on Affirmative Action for Scheduled Caste & Scheduled Tribe Communities has been adopted across the company.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 16 of 105

Under the same pre-text, and to promote entrepreneurship among SC/ST community TPSODL has taken initiative by proposing relaxations in contract clauses as per below:

S. No.	Initiative	for SC/ ST BA's	Guideline Document
1	Tender Fees	100% waiver for SC/ST community	All Open Tenders
2	Earnest Money Deposit	50 % relaxation of estimated EMD value	All limited and Open Tenders
3	Performance Bank Guarantee	25% relaxation in PBG for order value above 50 lacs else 50% relaxation	All limited and Open tenders
4	Turnover	25% relaxation in company turnover under qualifying requirement criteria	All Open Tenders

****Classification of BAs under SC/ST shall be governed under following guidelines:**

- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be duly audited balance Sheet for the last FY bearing the name of proprietor.
- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and audited balance sheet/ ITR for last FY.
- Private limited company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Certification from SC/ST commission shall be required for deciding upon SC/ST status of a person.

9.4 Preferential norms for procurement from MSMEs registered in the State of Odisha

- i. MSME Business Associate registered in the State of Odisha is requested to inform the TPSODL if they fall under provisions of the Micro, Small and Medium Enterprises (MSME) Category and provide necessary documents to TPSODL. The Associate also needs to mention the relevant details on their invoice / bill.
- ii. MSME Business Associate registered in the State of Odisha shall submit the self-undertaking of registration in MSME category at the time of bidding as well as on an annual basis to TPSODL, enabling them to avail the consequent benefits, failing which TPSODL may take appropriate action against such defaults.
- iii. **Tender Fees** - To participate in the tender, MSMEs registered in the State of Odisha shall pay Rs.1,000/- including GST towards cost of tender paper.
- iv. **Earnest Money Deposit (EMD)** - EMD shall be exempted for MSME registered in the State of Odisha. However, Bidder shall be barred to participate in the tendering process for a period of 2 years in case it backs out post award of the contract.
- v. **Qualification Requirement for Open Tenders**

Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 17 of 105

For Technical Qualification, instead of relying on the volumes / value of earlier Supplies / Projects, assessment of the Bidder shall be done on the basis of feedback from Customers. Past performance experience at Tata Power and its Group Companies shall supersede feedback from other Customers.

- vi. **Performance Bank Guarantees-** Performance Bank Guarantee for MSME registered in the State of Odisha shall be 25% of the value normally prescribed.

9.5 Compliance to Labour Laws

Bidder needs to ensure compliance to applicable labour laws including timely disbursement of wages. In case wages are not disbursed as per the stipulated timelines, then TPSODL shall pay the wages to BA employees on behalf of BA. Apart from deducting the amount of wages paid, TPSODL shall deduct an additional service charge equivalent to 25% of the wages paid from the payment due to BA.

9.6 Compliance to Construction and Demolition Waste Management Rules & Environment (Protection) Amendment Rules

BA is liable to follow the Construction and Demolition Waste Management Rules- 2016, Environment (Protection) Amendment Rules- 2018 and Guidelines on dust mitigation measures in handling construction material and C&D wastes issued by CPCB.

Following are some main points of above Rules/Guidelines for Construction work, cable laying jobs etc.

1. Barricading to be provided at site to cover complete area.
2. Construction material and waste should be inside the closed area made by using barricading.
3. Water sprinkling/fine spray from nozzles to be done to suppress the dust.
4. The board of Dust mitigation measures shall be displayed at site for public viewing with required details.
5. Loose sand or soil and construction material that causes dust shall be covered.
6. Transport material that are easily wind borne need to be covered by a sheet made of either jute, tarpaulin, plastic or any other effective material.
7. All areas for storing C&D waste/construction material to be demarcated and preferably barricaded particularly those materials that have potential to be dust borne.
8. Grinding and cutting of building materials in open area shall be prohibited.
9. Construction material and waste should be stored only within earmarked area and roadside storage of construction material and waste shall be prohibited.
10. No uncovered vehicles carrying construction material and waste shall be permitted.
11. Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures to be notified at the site.

10.0 QUALITY

10.1 Knowledge of Requirements

The Associate shall be deemed to have carefully examined and to have knowledge of the equipment, the general and other conditions, specifications, schedules, drawings, etc. forming part of the Contract and also to have satisfied himself as to the nature and character of the work to be executed and the type of the equipment and duties required including

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 18 of 105

wherever necessary of the site conditions and relevant matters and details. Any information thus procured or otherwise obtained from TPSODL/Consultants shall not in any way relieve the Associate from his responsibility and executing the works in accordance with the terms of contract.

10.2 Material/Equipment/Works Quality

The items / works under the scope of the Associate shall be of the best quality and workmanship according to the latest engineering practice and shall be manufactured from materials of best quality considering strength and durability for their best performance and, in any case, in accordance with the specifications set forth in this Contract. All material shall be new. Substitution of specified material or variation from the process of fabrication/construction/manufacture may be permitted but only with the prior written approval of the TPSODL.

10.3 Adherence to Rules & Regulations

The Associate shall procure and/or fabricate/erect all materials and equipment in accordance with all requirements of Central and State enactment, rules and regulations governing such work in India and at site. This shall not be construed as relieving the Associate from complying with any requirement of TPSODL as enumerated in the Contract which may be more rigid than and not contrary to the above mentioned rules, nor providing such construction as may be required by the above mentioned rules and regulations. In case of variance of the Technical Specification from the laws, ordinance, rules and regulations governing the work, the Associate shall immediately notify the same to the TPSODL. It is the sole responsibility of the Associate, however, to determine that such variance exists. Wherever required by rules and regulations, the Associate shall also obtain the statutory authorities' approval for the plant, machinery and equipment to be supplied by the Associate.

10.4 Specifications and Standards

The Associate shall follow all codes and standards referred in the Contract Document. Codes and standards of other may be followed by the Associate with the prior written approval of TPSODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name and qualities of the bought out items without the prior written approval of the TPSODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPSODL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

11.0 SAFETY

All Associates shall strictly abide by the guidelines provided in TPSODL's Contractor Safety Management System (CSMS) as applicable at all stages during the contract period. Associate shall execute the contracts ensuring the following in and as order of priority:

- Safety of Human Beings.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 19 of 105

- Safety of equipment/Assets.
- Timely Completion of Contract.

Safety related requirements as mentioned in our Contractor Safety Management System is attached as annexure L and is an integral part of this GCC.

12.0 INSPECTION/PARTICIPATION

12.1 Right to Carry Out Inspection

TPSODL reserves the right to send its representatives for inspection or participation at various stages of contract execution listed below, applicable as per contract construction.

- During basic design and detail engineering of material/ Equipment carried out by Associate /Outsourced Agencies.
- During manufacturing stages of the product at Associate's/Associate's Outsourced Agency's Plant/Facility.
- During Pre-dispatch Inspection and Testing of finished/manufactured product at Associate's/Associate's outsourced Agency's Plant/Facility.
- During Installation & Commissioning Activities/Stages.
- Prior to Clearing of the completed installation for commissioning.
- Any other stage as find appropriate by TPSODL during contract execution time.

All inspections and participations shall be carried out within maximum of two weeks of TPSODL giving written intimation to the Associate or receiving appropriate advance written inspection call from the Associate, unless otherwise specified elsewhere in the contract document.

12.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TPSODL's engineers to get acquainted with the technical know-how and the methods and practices adopted by the Associate in basic and detail engineering. The Associate shall provide documents, drawings, calculations etc. as may be required by TPSODL's Engineers.

The Associate shall provide free of charge office accommodation, office facilities, secretarial services, communication facilities, general and drawing office stationery, etc. as may be reasonably required by the TPSODL's engineers. Similarly, facilities shall also be provided by Associate's outsource agencies/partners/authorized dealers (collectively termed as sub-associates) if such basic and detail engineering activities are carried out in the design offices of sub-Associates.

The Associate shall be responsible for the safety of employees of TPSODL/Third Party Agency when they are at the Associate's /Associate's outsource agency's plant or facility for carrying out/witnessing inspection/testing. All statutory safety precautions as applicable shall be followed by the Associate during Inspection Testing. If TPSODL inspectors are not satisfied with the safety arrangements at the plant, TPSODL have the right to call off inspection till such time corrective action is taken by the Associate.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 20 of 105

Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc.-as specified in the contract document and submit copies of the test certificates to TPSODL along with the inspection call, for scrutiny of TPSODL.

The Associate and TPSODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to provide compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TPSODL for receiving clearance for dispatch of materials.

12.3 Third Party Nomination

TPSODL also may nominate a third party for the purpose of carrying out the inspection and such an agency shall be entitled to all the rights and privileges of TPSODL as far as conducting the inspection.

12.4 Waiver of Inspections

TPSODL on its own discretion shall chose to waive off any inspection and ask the Associate to submit all the test reports as applicable as per contract specifications, related to inspection and testing of the goods ordered for scrutiny and clearance for dispatch.

12.5 Incorrect Inspection Call

In case it is observed that the material offered for inspection is not ready at the time of TPSODL inspection visit rendering it as futile, all costs towards such inspection shall be recovered from the BA. Taxes as applicable on such recoveries shall be borne by the BA.

13.0 MDCC & DELIVERY OF MATERIALS

13.1 Material Dispatch Clearance Certificate

Associate shall deliver material/goods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate (hereafter termed as MDCC) issued by designated authority of TPSODL. Material delivered at TPSODL stores or at project site without a valid MDCC issued by the designated official of TPSODL shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documented during pre-dispatch inspection and testing at Associate's/ Sub-Associate's plant/ facility. In case Pre-dispatch inspection is waived at the discretion of TPSODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.

The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, sea, rail and road or any other means.

All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall take special precautions to prevent rusting of steel and iron parts during transit by sea. Gas seals or other materials shall be utilized by the associate for protection against moisture during transit of all Plant and Equipment.

Each Equipment or parts of Equipment shall be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the associate, item description, quantity, item / package identification.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 21 of 105

All packing cases, containers, packing and other similar materials shall be new and supplied free by the associate and it shall not be required to be returned to the associate.

Notwithstanding anything stated in this clause, the associate shall be entirely responsible for loss, damage or depreciation or deterioration to the materials and supplies due to faulty and/or insecure packing or otherwise during transportation to the Site until otherwise provided herein.

In case of the consignments dispatched by road, the associate shall ensure that it or its sub-contractors:

- i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.
- ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

Timelines for inspection and MDCC is as below:

S. No.	Inspection	MDCC issuance time including inspection time (max.)
1	Outside Berhampur	12 days
2	Within Berhampur	5 days
3	Waiver*	3 working days

* Associate is expected to raise the inspection call assuming that Inspection shall be carried out by TPSODL. The decision for waiver of inspection shall be on sole discretion of TPSODL.

13.2 Right to Rejection on Receipt

Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPSODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPSODL.

If delivery of the material is beyond the agreed time, Liquidated damage clause, mentioned in this GCC separately shall be applicable; but the period for levy of LD shall be considered as per the original delivery schedule and not from the agreed timelines for material rectification.

13.3 Consignee

Unless otherwise specified in the Contract Document / Purchase Order/ Release Order, Materials/Goods/Equipment shall be consigned to "Stores-In-Charge", TPSODL Berhampur

13.4 Submission of mandatory documents on Delivery

Following documents shall be mandatorily submitted by BA along with supply of material to TPSODL stores/site:

S. No.	Documents	Requisite
1	Invoice copy in original	With all consignments

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 22 of 105

2	LR copy	Wherever required
3	Packing list	With all consignments
4	MDCC	With all consignments
5	Purchase order / Release order	Signed copy
6	Test certificates	With all consignments
7	Inspection/JVR report	In case pre-dispatch inspection is conducted
8	Device data in CD as per template for metering items	Wherever applicable

13.5 Dispatch and Delivery Instructions

S. No.	Instructions
1	Purchase order/ Release order no. shall be mentioned on invoice and on material
2	TPSODL material code and material description shall be mentioned in invoice and on material.
3	"Property of TPSODL" shall be embossed on material.
4	The material shall be properly sealed and packed in standard packing as per purchase order terms & conditions.
5	The weight and quantity of material shall be mentioned wherever applicable
6	The material supplied shall be co-related with the packing list.
7	The name plate detail on equipment shall include Material code, Material description, specification detail of material [as applicable], Serial No. Year of manufacturing, PO/RO no. and date, "PROPERTY OF TPSODL, Berhampur", Guarantee period and Associate's name.
8	In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at TPSODL Southern store. For heavy item(s), crane will be provided by TPSODL [unloading cost will be recovered from the associate].
9	The driver should have valid License and one helper in truck. All the documents of truck like registration papers, PUC etc. should be available in Truck.
10	BA representative should accompany the material and get it unloaded / stacked in his presence wherever possible.

14.0 GUARANTEE

14.1 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied/service or work rendered under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract. for a specific period termed as Guarantee Period (as elaborated elsewhere in this clause) The Associate should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

14.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TPSODL for the equipment/material/service/work and where

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 23 of 105

standard specifications are not part of contract documents or guarantee period is not specified in the standard specifications,, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC, Guarantee Period will be 15 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

14.3 Failure in Guarantee Period (GP)

If the equipment and material supplied/service or work rendered under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied/service or work rendered under the contract within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied/service or work rendered under the contract, failed in Guarantee Period, TPSODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPSODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.

If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/ damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by TPSODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPSODL within 7 days of reporting the issue by TPSODL. Thereafter, the total time for supply of new equipment/ material shall be equal to the original delivery period of that equipment/ material as specified in the Contract. In case the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.

14.4 Cost of repairs on failure in GP

The cost of repairs/rectification /replacement, apart from the actual cost of repairs/rectification/replacement is also inclusive of all associate costs of required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable, to be borne by the Associate. The Associate has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

14.5 Guarantee period for Goods Outsourced

If the Associate outsources partly equipment/materials/services from third party as mutually agreed upon at the pre award stage of contract, TPSODL shall have the benefit of any

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 24 of 105

additional guarantee period if provided by the third party for the part supplied/executed by them.

14.6 Latent Defect

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

14.7 Support beyond the Guarantee Period

The Associate shall ensure availability of spares and necessary support for a period of at least 10 years post completion of guarantee period of equipment supplied against the contract.

15.0 LIQUIDATED DAMAGES

Liquidated damages @1% of the total executed contract value per week or part thereof, for the period of delay in integrated completion, subject to maximum 10% of the value of the contract shall become leviable without prejudice to other rights of the TPSODL. This amount shall be recoverable from any amount due or becoming due to the Business Associates under this or any other contract. In specific cases, TPSODL reserves the right to apply LD only on the unexecuted portion of the supply and works for standalone use, provided full quantity is executed within a maximum 30% additional time. Deduction of LD shall be on landed cost i.e. contract value inclusive of taxes and in pursuant statutory compliance GST would be applicable at the stipulated rate and the same shall be borne by Business Associate. In case of LD deduction, a GST invoice shall be issued by TPSODL as a proof of deduction/ recovery.

15.1 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD. Request submitted beyond the timeline shall not be entertained.

15.2 Material Recovery

In case of any recoveries for materials or services (for material free issued by TPSODL and not reconciled by BA or for services claimed and paid in excess at the time of running bills), the total cost which shall be recovered from the BA, shall be the gross amount of material or services (i.e. including taxes) plus applicable taxes as prevailing at the time of such recoveries.

16.0 ASSIGNMENT OR SUBCONTRACTING

Associates shall not assign/subcontract/outsource the schedule of activities of contract TPSODL enters with the associate, in part or full, without TPSODL's prior written approval. However, outsourcing of materials/equipment/services by Associate to make the integrated product for which TPSODL's has placed the contract with the associate from suppliers, makes and agencies which have been mutually agreed upon during contract pre-award stage is permitted subject to following conditions.

In such cases where outsourcing is done by the Associate

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 25 of 105

- Shall ensure that outsourced suppliers comply with the technical and financial qualification requirements specified by TPSODL in the contract document
- Shall furnish all particulars about the proposed outsourcing agencies and the details of the goods/services/work outsourced to the Associate while seeking approval of TPSODL for inclusion for outsourcing. The Associate shall give approval or shall refuse approval in writing within thirty (30) days of receipt of such request. However, the Associate shall not be entitled for any additional contract execution time whatsoever in lieu of the process for approval for outsourcing agencies and shall be held responsible for any delay in the project execution time.
- Shall remain jointly and severally liable for any action, deficiency, and/or negligence on the part of his outsourcing agencies. The approval extended by the Associate to outsourcing agencies recommended by the Associate shall not discharge the later from his Contract obligations.

Shall submit to the Associate unpriced copies of purchase orders with technical specifications included in the orders, placed on outsourcing agencies as soon as the respective orders have been placed by the Associate.

17.0 UNLAWFUL ACTIVITIES

The Associate shall have to ensure that none of its employees are engaged in any unlawful activities (whether covered under the scope of the present GCC or not) subversive of the TPSODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPSODL, in accordance with the terms of the present GCC.

18.0 CONFIDENTIALITY

Associate and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

18.1 Documents

All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Associate by the TPSODL in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TPSODL and shall not be used or disclosed to third parties by the Associate for any purpose other than for which they have been supplied or prepared. The Associate may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the TPSODL.

18.2 Geographical Data

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPSODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 26 of 105

TPSODL and upon execution of confidentiality agreements satisfactory to the TPSODL with such third parties prior to disclosure.

18.3 Associate's Processes

Title to secret processes if any developed by the Associate on an exclusive basis and employed in the design of the equipment shall remain with the Associate. TPSODL shall hold in confidence such processes and shall not disclose such processes to the third parties without prior approval of the Associate and execution by such third parties of secrecy agreements satisfactory to the Associate prior to disclosure. Upon completion of contract, such processes shall become the property of the TPSODL. Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPSODL under the Contract shall be passed on to the TPSODL. The TPSODL shall have the right to use these for construction, erection, start-up, Trial Run, operation, maintenance, modifications and/or expansion of the works including for the manufacture of spare parts.

18.4 Exclusions

The provision of Clauses 16.1 to 16.3 shall not apply to information:

- Which at the time of disclosure are in the public domain which later on become part of public domain through no fault of the party concerned, or
- Which were in the possession of the party concerned prior to disclosure to him by the other party, or
- Which were received by the party concerned after the time of disclosure without restriction on disclosure or use, from a third party who did not acquire such information directly or indirectly from the other party or has no obligation of confidentiality for such information.

18.5 Violation

In case of violation of this clause, the Associate is liable to pay compensation and damages as may be determined by the competent authority of TPSODL.

19.0 INTELLECTUAL PROPERTY RIGHTS

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Associate acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark, copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with the TPSODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPSODL.

Moreover, the Associate undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Associate shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages arising from any legal proceeding/s, or otherwise. No liability of TPSODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPSODL in this

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 27 of 105

regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

20.0 INDEMNITY

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPSODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPSODL is held liable for by any court judgement. In this connection, the TPSODL shall pass on all claims made against him to the Associate for settlement.

The Associate assumes responsibility for and shall indemnify and save harmless the TPSODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPSODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under the Contract or for which the Associate has assumed responsibilities under the Contract including those imposed under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract. The Associate shall execute, deliver and shall cause his Sub-Associate and suppliers to execute and deliver, such other further instruments and to comply with all the requirements of such laws and regulation as may be necessary there under to conform and effectuate the Contract and to protect the TPSODL.

The TPSODL shall not be held responsible for any accident or damages incurred or claims arising, due to the Associate's error there from prior to completion of work. The Associate shall be liable for such accidents and after completion of work for such accidents as the case may be due to negligence on his part to carry out Work in accordance with Indian laws and regulations and the specifications set forth herein.

21.0 LIABILITY & LIMITATIONS

21.1 Liability

Except for any specific liability which may be identified in the Contract and which may be payable hereunder, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or in connection with the Performance of the Work or supply of Goods ***unless caused by Associate's negligence, willful misconduct or breach of contract.***

TPSODL shall have no liability or any special, incidental, indirect or consequential Damages for any loss of Business Contracts, revenues or other financial loss arising out of this Contract.

21.2 Limitation of Liability

The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 28 of 105

22.0 FORCE MAJEURE

Force Majeure applies if the performance by either Party ("the Affected Party") of its obligations under Contract is materially and adversely affected.

"Force Majeure" shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

- Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, embargo, blockade, revolution, riot, bombs, religious strife or civil commotion, etc.
- Politically motivated sabotage, or terrorism, etc.
- Action or Act of Government or Governmental agency for which remedy is beyond the control of the affected parties.
- Any act of God.

Note: Causes like power breakdown/ shortages/fire/strikes, accidents etc. do not fall under Force Majeure.

Time being the essence of the Contract, if either party is prevented from the performance of its obligations in whole or in part due to an event of Force Majeure, then provided Notice of happening of any event by the Affected Party is given to the other party within seven (7) days from the date of occurrence of such event, which DIRECTLY has impact on works and submitted details and quantum of resulting effect, but at the same time had made all possible efforts to mitigate and overcome effects thereof, the Affected Party's performance under this Contract shall be suspended until such event ceases and the Scheduled Completion shall be delayed accordingly.

If Force Majeure event(s) continue for a period of more than three months, the parties shall hold consultation to discuss the further course of action.

Neither party shall be considered to be in default or in breach of its obligation under the Contract to the extent that performance of such obligation by either party is prevented by any circumstances of Force Majeure which arise after effective date of Contract.

Neither party can claim any compensation from the other party on account of Force Majeure.

23.0 SUSPENSION Of CONTRACT

23.1 Suspension for Convenience

TPSODL may, at any time and at its sole option, suspend execution of all or any portions of the schedule of items of contract to be supplied/work to be executed by Associate under the contract by providing to the Associate at least two business days written notice for contracts having contract completion period less than sixty days and at least seven business days' notice for all other contracts.

Upon receipt of any such notice, the Associate shall respond as follows as applicable as per contract construction.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 29 of 105

- Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts
- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPSODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.
- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

On receipt of resumption notice from TPSODL, the Associate shall resume execution of contract as specified in the resumption notice, within the time frame specified in the resumption notice,

23.2 Suspension for Breach of Contract conditions.

TPSODL shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 27 for breach/default of contract conditions.

23.3 Compensation in lieu of Suspension

If the suspension of the contract in whole or in part is for convenience of TPSODL and not due to any breach of contract conditions by the associate, TPSODL at its discretion shall consider compensating all reasonable additional costs incurred by Associate in lieu of suspension of whole or part of contract, on representation of the Associate providing justified estimates of such additional costs and such estimates are found acceptable and approved by competent authority of TPSODL.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 24.3) by the Associate, Associate shall not be entitled for any compensation for any cost incurred in lieu of suspension of whole or part of contract and also shall be liable for compensating all the losses arising to TPSODL in lieu of suspension of contract. Resumption notice shall be subject to the Associate taking corrective action for the breach of contract conditions within the time frame and as per the terms specified in the suspension notice.

24 TERMINATION OF CONTRACTS

24.1 Termination for Default/Breach of Contract

The contract / PO shall be subject to termination by TPSODL in case of breach of the contract by the Associate which shall include but not be limited to the following:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 30 of 105

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution / completion of the contracted work /PO or failure in ensuring adherence to any delivery schedules, in deviation of the contract/ PO.
- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPSODL and within the timeframe as specified in the contract document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.
- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.
- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPSODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPSODL.

If the default or breach as specified under clause 24 (except sub clause g thereof) be committed by the associate for the first time, TPSODL shall issue, along the with notice of default or breach, a warning notice instructing the associate to take remedial/corrective action within the time frame stipulated in the warning notice and not to repeat the same in future. The timeframe for corrective action by the associate shall be specific to the nature of breach of contract and the same shall not be objected to by the Associate. If the Associate fails to comply with the instructions in the warning notice or in taking corrective action to the satisfaction of TPSODL then TPSODL may terminate the entire or part of contract at its discretion by issuing termination notice without incurring any liability on this ground.

In case the contract is terminated for any breach of the nature specified in clause 24 g stated above, TPSODL shall have the right to terminate all the contracts TPSODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPSODL available to it under law.

Without prejudice to its right to terminate for breach of contract, TPSODL may, without assigning any reason, terminate the Contract in whole or in part at any time at its discretion while the contract is in force by serving a written notice of two weeks to the Associate.

In the event of TPSODL having proceeded with termination of the contract the associate shall comply and proceed further in the following manner:

- i) Associate shall discontinue the supply, on the expiry of the said period of two weeks.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 31 of 105

ii) Associate shall ensure that no further steps are being taken towards discharge of the obligations, terms and conditions as contained in the contract/PO. This shall include initiation of actions not limited to discontinuation of other allied and associated arrangements which the associate might have entered with third parties for due discharge of its obligations under the contract with TPSODL.

iii) The Associate shall perform thereafter such tasks as may be necessary to preserve and protect the terminated portion of the material/service/work in progress and the materials and equipment at TPSODL sites or in transit thereto. However, the associate shall continue to fulfill its contractual obligations with regard to the part of contract not terminated.

iv) It shall be open for TPSODL to conduct a joint assessment with the associate of the material ,supplies, equipment ,works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.

v) It shall be open to TPSODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested by the associate.

In case of termination of the contract the parties agree to be governed inter alia by the following:

a) In case TPSODL exercises its right of termination as stated above the associate shall not dispute or object to the same.

b) The Associate shall be entitled to receive and claim only such payments OR sums of money from TPSODL as may be found payable to it in regard to works executed by it under the terms of the contract and no other claim of any nature whatsoever shall be made by the Associate.

c) All such provisions which the parties have agreed to survive and prevail even after termination of the contract shall remain effective despite the termination.

In the event of such termination, TPSODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPSODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPSODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPSODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPSODL under law against the associate.

Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct , TPSODL shall be entitled to bar the associates its agents , affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPSODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPSODL.

24.2 Termination for convenience of Associate

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 32 of 105

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPSODL has full right to accept, reject or partially accept such request. This convenience will be available to associate only after one year from the contract effective date. For this purpose, associate will provide a notice period of 90 days to TPSODL, Associate will have to pay TPSODL a 'termination convenience fee' equivalent to 5% of unexecuted contract value.

24.3 Termination for Convenience of TPSODL

TPSODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPSODL shall pay the Associate for all the supplies/ services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

25.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavor to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Berhampur. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the arbitration proceedings unless otherwise directed in writing by TPSODL or suspended by the arbitrator. Further, TPSODL shall continue making such payments as may be found due and payable to the associate for such works.

25.1 Governing law and jurisdiction

The parties shall be subject to the jurisdiction of the courts of law in Berhampur and any matter arising here from shall be subject to applicable law in force in India.

26.0 ATTRIBUTES OF GCC

26.1 Cancellation

The Company reserves the right to cancel, add, delete at its sole discretion, all or any terms of this GCC or any contract, order or terms agreed between the parties in pursuance without assigning any reasons and without any compensation to the Associates.

26.2 Severability

If any portion of this GCC is held to be void, invalid, or otherwise unenforceable, in whole or part, the remaining portions of this GCC shall remain in effect.

26.3 Order of Priority

In case of any discrepancies between the stipulations in General Conditions of the Contract (GCC) and Special Conditions of Contract (SCC), the GCC shall stand superseded by the SCC to the extent stipulated hereinabove while balance portion of respective clauses of GCC shall continue to be applicable.

27.0 INSURANCE

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 33 of 105

The Associate shall arrange accident insurance policy for his foreign experts/specialists/personnel deputed to Site and Associate's/his sub-Associates' manufacturing works as well as for his Indian engineers and supervisory staff. The Associate shall also take out for his Indian workmen, where applicable, a separate policy as required under Workmen's Compensation Act.

Associates shall be responsible to suitably insure their entire work-force (to the extent of at least meeting requirements under Workmen Compensation Act) Tools, Plant, Third party liability at the project site, All Risk comprehensive insurance for the entire works (insurance for free issue items will be in TPSODL scope) for total contract (PO/RO) value or any other such risks during execution of works, till the works are handed over to the company, in consultation with TPSODL and shall submit copies of such insurances to the Engineer-in-Charge for review / acceptance before commencing the work. Engineer-in-charge must ensure compliance to insurance requirement by Associate before commencement of works. TPSODL shall stand fully indemnified in this respect.

BA will also ensure purchase of Special Covid Insurance policy of ₹ 5 lacs for the legal heir(s) of deceased BA employees (in case of death due to Covid- 19)

- i. BA to take appropriate Special Covid Insurance policy from a reputed insurance agency prevailing in the market so that all the BA employees are covered under the purview of ₹ 5,00,000/- compensation, in case of death due to Covid -19.

BA shall be required to purchase the policy immediately post receipt of LOI / Work Order.
- ii. If it is found that the BA employee(s) is/are not covered under the purview of Special Covid Insurance Policy, the concerned BA shall be liable to pay the entire sum of ₹ 5,00,000/-.
- iii. Cost of the Covid Insurance policy shall be borne @50% each by the BA and TPSODL. BA will be reimbursed @50% of the Annual Premium based on the original money receipt and policy copy.
- iv. TPSODL HR department will be the overall process owner and BA shall be required to coordinate with TPSODL HR department for policy implementation immediately post receipt of LOI / Work Order.

Group Personal Accident (GPA) policy coverage of ₹ 15 Lacs to be taken by the respective BAs.

- i. It is mandatorily required to take the GPA policy coverage of ₹ 15 Lacs by the BA for his employees from a reputed insurance agency.
- ii. TPSODL HR department will be the overall process owner and BA shall be required to coordinate with TPSODL HR department for policy implementation immediately post receipt of LOI / Work Order.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 34 of 105

28.0 ERRORS AND OMISSIONS

The Associate shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the TPSODL or not. However, any error in design/drawing arising out of any incorrect data/written information from TPSODL will not be considered as error and omissions on part of the Associate.

29.0 TRANSFER OF TITLES

The title of ownership and property to all equipment, installations, erections, constructions materials, drawings & documents shall pass to the TPSODL after Commissioning and complete handing over-taking over.

However, such passing of title of ownership and property to the TPSODL shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract including loss or damages and all risks, which shall vest with the Associate.

The Associate shall take all corrective measures arising out of discrepancies, errors and omissions in drawings and other information within the time schedule and without extra cost to the TPSODL.

The Associate shall also be responsible for any delay and/or extra cost if any, in carrying out engineering, and site works by other agencies arising out of discrepancies, errors and omissions stated in as well as of any late revision/s of drawings and information submitted by the Associate.

30.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TPSODL; be it our Company, our services or our people. Each and every concern, issue, query and suggestion from you will help us to become a better company to work with and shall help us develop a strong bonding of trust and a long term relationship with you.

You may send your feedback by filling up our Business Associate Feedback Form enclosed herewith as Annexure-I. You can also log on to our website www.tpsouthernodisha.com to provide your feedback according to the guidelines mentioned below:

31.0 CONTACT POINTS

In case Business Associate needs information with respect to payments or has any grievances, same may be lodged by log on to our website www.tpsouthernodisha.com

32.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
1.	Performa for Bid Security Bank Guarantee	A
2.	Performa for Advance Payment Bank Guarantee	B
3.	Performa for Performance Bank Guarantee (CP cum EP)	C
4.	Performa for No Demand Certificate by Associate	D
5.	Performa for Indemnification on Statutory Compliance	E

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 35 of 105

6.	Performa For Application For Issuance of Consolidated TDS Certificate	F
7.	HR Service Level Agreement	G
8.	Under taking for competence of workmen	H
9.	Business Associate Feedback Form	I
10.	Acceptance Form For Participation In Reverse Auction Event	J
11.	NEFT or RTGS payment request form	K
12.	Contractor Safety Management System	L
13.	Vendor Appraisal Form	M
14.	Manufacturers Authorization Form	N

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 36 of 105

ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

TP Southern Odisha Distribution Limited

Berhampur

WHEREAS, (Name of the Bidder) _____ (hereinafter called "the BIDDER") has submitted his bid dated _____ for the (Name of Contract) _____ (hereinafter called "the BID").

KNOW ALL men by these presents we (Name of the Bank) _____ of (Name of the Country) _____ having our registered office at _____ (hereinafter called "the BANK") are bound unto TP Southern Odisha Distribution Limited (TPSODL) in the sum of _____ for which payment well and truly to be made to the TPSODL the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20_____.

The CONDITIONS of this obligation are:

i) If the Bidder withdraws his Bid during the period of bid validity specified in the Proforma of Bid

or

ii) If the Bidder having been notified of the acceptance of his Bid by the TPSODL during the period of bid validity fails or refuses to furnish the Contract Performance Bank Guarantee, in accordance with the Instructions to Bidders.

We undertake to pay the TPSODL up to the above amount upon receipt of its first written demand, provided that in its demand the TPSODL will note that amount claimed by it is due to it owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date (No of days as mentioned in tender enquiry) days after the closing date of submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

DATE.....

SIGNATURE

OF

THE

BANK.....

WITNESS.....

SEAL.....

(Signature, Name & Address)

(At least 2 witnesses)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 37 of 105

ANNEXURE-B

PROFORMA FOR ADVANCE PAYMENT BANK GUARANTEE

(On Rs.100/- Stamp Paper)

Note:

- (a) Format shall be followed in toto
- (b) Claim period of six months must be kept up
- (c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Southern Odisha Distribution Limited

Berhampur

Advance Payment B.G.No.....

Contract No.....dated.....

1. You have entered into a Contract with No _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the supply and delivery of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, you have agreed to make an advance payment of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on "the Vendor" furnishing you with an irrevocable, unconditional and acceptable bank guarantee to be valid till the date of receipt of "the said equipment" covered by your above mentioned contract. For this purpose you have agreed to accept our guarantee.
3. In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a further period of three months from the date of expiry.
5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 38 of 105

not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at Berhampur branch of the bank. However, in specific scenario, where Treasury Branch of the bank is not available at Berhampur, then any claim / extension under the guarantee can be lodge-able at Bhubaneswar branch of the bank.
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____
(Rupees _____ only) and the guarantee will remain in force up to and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within one month from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 200_____

Witness

1. _____

Bank's rubber stamp

Banks full address

2. _____

Designation of Signatory

Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 39 of 105

ANNEXURE- C

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

(On Rs.100/- Stamp Paper)

Note:

- (a) Format shall be followed in toto
- (b) Claim period of one month must be kept up
- (c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Southern Odisha Distribution Limited ,

Berhampur

CP cum EP BG No.....

Order/Contract No.....dated.....

1. You have entered into a Contract No _____ Dated _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the _____ work (hereinafter referred to as "the said supply/ erection / civil work") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for _____% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose, you have agreed to accept the guarantee.
3. In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a **further period of three month** from the date of expiry.
5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 40 of 105

any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at Berhampur branch of the bank. However, in specific scenario, where Treasury Branch of the bank is not available at Berhampur, then any claim / extension under the guarantee can be lodge-able at Bhubaneswar branch of the bank.
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____ (Rupees _____) only and the guarantee will remain in force up to and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within one months from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 200__

Witness

1. _____

Bank's rubber stamp

Banks full address

2. _____

Designation of Signatory

Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 41 of 105

ANNEXURE-D

PROFORMA FOR “NO DEMAND CERTIFICATE” BY ASSOCIATE

(On Company's Letter head or with Company Seal)

(To be submitted by the Associate to TPSODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project

Order/ Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

We, M/s. _____ (Associate) do hereby acknowledge and confirm that we have received the full and final payment due and payable to us from TPSODL, in respect of our aforesaid Order No _____ dated _____ including amendments, if any, issued by TPSODL to our entire satisfaction and we further confirm that we have no claim whatsoever pending with TPSODL under the said contract / W.O.

Notwithstanding any protest recorded by us in any correspondence, documents, measurement books and / or final bills etc., we waive all our rights to lodge any claim or protest in future under this contract.

We are issuing this “NO DEMAND CERTIFICATE” in favor of TPSODL, with full knowledge and with our free consent without any undue influence, misrepresentation, coercion etc.

Dated

Signature

Place

Name

Designation

(Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 42 of 105

ANNEXURE – E

PROFORMA FOR “INDEMNIFICATION ON STATUTORY COMPLIANCES”

(To be submitted by the successful Bidder within seven days of award of work)

(Certificate No. CCP/001)

Name of the Project

Letter of Award / Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

By this confirmation we, _____
(Associate) are formally bound to M/s. TPSODL towards any sum which may be imposed, levied or hereinafter recovered by the Provident Fund Organization under the provisions of the Employees of the Provident Fund and Miscellaneous Provisions Act 1952 in respect of employees employed by us.

We well and truly bind ourselves and our heirs executors administrators and representatives jointly severally and respectively for the above payment only to be paid to M/s. TPSODL.

AND WHEREAS we, _____ (Associate)
is making compliance of the Employees Provident Fund and Miscellaneous Provisions Act 1952, have entered into the above written bond for the indemnity to M/s. TPSODL against all losses from the acts or default of the said Associate in respect of compliance of the Provident Fund Act.

Similarly, we hereby confirm that we have complied with all statutory and local laws and nothing is outstanding with regard to Local Sales Tax, Labor Laws, Local Municipal dues, Electricity dues etc. We have entered into the above written bond for the indemnity to M/s. TPSODL against all losses from the acts or default of the said Associate in respect of compliance of the Local Sales Tax Laws, Local Laws, Labor Laws, Local Municipal Dues, Electricity dues etc.

NOW THE CONDITION, of the above written bond is as such that if the Associate during the period of this contract commits any default or fails to make payment of Contributions in respect of his employees to the Employees Provident Fund Organization, he shall indemnify the Principal Employer M/s. TPSODL from all and every loss and damage caused to them from any act, omissions or negligence of the said Associate in respect of compliances under the Employees Provident Fund and Miscellaneous Provisions Act, 1952.

IN WITNESS to the above written bond we have here to set our hands, with our free consent.

Dated

Place

Signature

Name

Designation (Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 43 of 105

ANNEXURE-F

**PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS
CERTIFICATE**

To be printed on the letterhead

To,

TP Southern Odisha Distribution Limited,

Berhampur

Sub: Application for issuance of Consolidated TDS Certificate for the FY _____

Dear Sir,

I / we hereby request / authorize you to issue me / us a consolidate TDS Certificate for the financial year _____ against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961.

For and on behalf of

Signature

Name

Address

Contact No. (Land Line)

(Mobile)

PAN #

Assessing authority

ATTACH THE COPY OF PAN CARD

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 44 of 105

ANNEXURE - G

SERVICE LEVEL AGREEMENT

(To be adhered to by Business Associates (BAs) in TPSODL on Human Resource Issues)

1.0 The following shall be adhered to by the Business Associates during his / its association with TPSODL:

Shall Abide by Tata Core Values:

- a) **Integrity** – We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.
- b) **Understanding** – We must be caring, show respect, compassion and humanity to our colleagues and customers and always work for the benefit of the communities we serve.
- c) **Excellence** – We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of services we provide.
- d) **Unity** – We must work cohesively with our colleagues across the group and with our customers and partners to build strong relationships based on tolerance, understanding and mutual co-operation.
- e) **Responsibility** – We must continue to be responsible and sensitive to the communities and environments in which we work and always ensuring that what comes from the people; goes back to the people many times over.
- f) **Agility**- We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 The Business Associate / his manager / supervisor who is responsible for managing the project site / performance contract etc. in TPSODL would also ensure adherence of these values by his employees / persons deployed by him in connection with his works undertaken in TPSODL.

3.0 The Business Associates are required to:

- a) Support and respect the protection of human rights and make sure that they are not complicit in human right abuses.
- b) Respect freedom of association and effective recognition of the right to collective bargaining.
- c) Not to resort to any form of forced and compulsory labour.
- d) Shall ensure abolition of child labour in his area of work.
- e) There is no discrimination in respect of employment and occupation in respect of his employees.
- f) Support precautionary approach to environmental challenges.
- g) Promote greater environmental responsibility by himself and his employees in his areas of work.
- h) Deploy and defuse environmental friendly technologies while carrying out the works.
- i) Work against corruptions in all its form including extortion and bribery by himself and his employees.

4.0 The Business Associates are required to adhere to all applicable labour Laws with special reference to the following:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 45 of 105

- a) No person below the age of 18 years and no child labour will be engaged directly or indirectly for executing the work connected with the business of TPSODL.
- b) Minimum wages along with other statutory dues like PF, ESI, etc. as applicable to the workers shall be made within the prescribed period of 7th / 10th day of the following month.
- c) Deduction / deposit / record keeping and all other requirements under Employees PF Act 1952, Employees State Insurance Act 1948 and other applicable acts (if any) shall be adhered to.
- d) Only statutorily authorized deductions (if any) shall be made in accordance with the relevant statutes.
- e) All the provisions of Contract Labour (R&A) Act 1970 shall be complied with in respect of the workers engaged for TPSODL work. The work will be commenced only after completing necessary formalities for obtaining Labour License (if applicable).
- f) Necessary registers / records, filing of returns etc. shall be maintained for verification by Statutory / TPSODL authorities.
- g) Payment of wages shall be made only in presence of and with certification of authorized representative of TPSODL or shall be made in the form of cheque / bank transfer to the employee.
- h) During the period of contract, the Business Associate will arrange for deployment of his supervisor / manager for total supervision and control of the work and their manpower. All the activities related to their manpower e.g. attendance, leave, wage disbursement etc. will be done under the supervision & control of Business Associates, while adhering to the prescribed standard / norms of production / productivity & quality. During execution of the work, Business Associate shall engage only such qualified / skilled manpower as may be envisaged / required for ensuring level of production / service into the contract / work order.
- i) Clearances as follows shall be obtained from IR & Welfare Group:
 - i. Clearance for commencement (before start of the work).
 - ii. No Objection Certificate (after completion / before final settlement).
 - iii. Copies of PF / ESI Challans shall be deposited with IR & Welfare Group every month
- j) The Business Associate shall indemnify TPSODL from any liabilities under applicable Labour Statutes.
- k) The Business Associate shall ensure safety and health of his employees and shall also maintain hygienic working environment / condition in his area of work.
- l) The Business Associate and his employee shall abide by Laws of Land and shall not violate any applicable provisions.
- m) The Business Associate appreciates with and acquiesces to the right of TPSODL as principal employer to fulfil any of his legal obligations, if he fails to do so under applicable labour laws and deduct the same from his running bills / final payments / encashing security deposit / Bank Guarantee as the case may be. If there is any further shortfall TPSODL has the right to recover the same from the Business Associate.
- n) The Business Associate ensures that person employed by him adhere to the moral and legal conduct and shall not violate any standard conduct envisaged in the premise of

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 46 of 105

TPSODL by all such as, Transparency, Safety, Discipline, Integrity etc. The Business Associate or his employees should refrain from corrupt practices, giving or taking bribe in connection with any TPSODL business.

5.0 The 'Statutory Compliance Enforcement System' in TPSODL is detailed below for adherence by all concerned. Business Associate Cell (BA Cell) will be the process owner for implementation of the system with the help of concerned Engineer I/c or Officer I/c.

- a) Statutory Compliance being a professed value in TPSODL Code of Conduct, the concerned Engineer / Officer in charges are requested to adhere to the provisions and advise respective Business Associates in their domain to comply in letter and spirit.
- b) Immediately after issuance of letter of intent, the authorized representative of the Business Associate will report to BA Cell for completion of statutory requirements.
- c) Normally, the work will be started only after 'Clearance for Commencement of Work (CCW)' is issued by BA Cell to the Business associate. However, in exceptional exigencies in engineer I/c / Officer I/c may direct the Business Associate to start the work and inform BA Cell about the same. Statutory requirements in this case may be completed in parallel.
- d) First monthly bill will be released only after producing CCW to the finance department. Similarly closure of work and final settlement will be affected after issuance of no objection certificate from BA Cell group.

6.0 Requirements for 'Clearance for Commencement of Work' (CCW):

- a) Submission of filled up Form 'A' for database (Annexure-1).
- b) Copy of PF Code allocation letter.
- c) Copy of ESI Code allocation letter.
- d) Submission of duly filled up Form IV CL(R&A) act (In case more than or equals to 20 workers during the period of contract).
- e) Submission of duly filled up Form VI A (Notice of Commencement).
- f) Copy of insurance cover note under WC Act 1923 (if applicable).
- g) Copy of Contract Agreement.
- h) Copy of indemnity bond (if applicable).
- i) Affidavit with regard to payment of wages through cheque / bank transfer only.

7.0 Requirements during execution of work:

- a) Copy of receipt of application for license / license (if applicable).
- b) Copy of PF Challan (latest by 26th day of every Month).
- c) Copy of ESI Challan (latest by 26th day of every Month).
- d) Copy of Wage disbursement sheet / Bank statement.
- e) Filing / Maintenance of all statutory registers / reports / returns for inspection by Statutory/ TPSODL authorities.
- f) Certification of wage disbursement by authorized representative of TPSODL.
- g) Copy of 'Labour Welfare Fund' deposit certificate / Challan.
- h) Insuring safe working practices at the workplace.

8.0 Requirements for 'No Objection Certificate' (NOC) for closure of work:

- a) Submission of duly filled up Form VI A (Notice of Completion).
- b) Copy of Half yearly / Annual return for ESI / PF / CL(R&A).

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 47 of 105

- c) Consolidated copy of wage sheet of last month indicating full & final settlement of all dues like retrenchment benefit, bonus, leave encashment etc. Copy of individual declaration by employees in Form X regarding termination of employment.
- d) Confirmation certificate regarding filling up of form for transfer / withdrawal of PF by the concerned workers.

In case any of the above are deviated / not complied with the Letter of Award/Order shall be liable to be withdrawn / cancelled.

Enclosure:

- 1) Form A
- 2) Form X
- 3) Form XI
- 4) Form VI A
- 5) Form XXIV

GENERAL CONDITIONS OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 48 of 105

FORM (A)

[To be submitted by the Business Associate to the Principal Employer within a week from LoA issuance]

A. Details of the Agency

1. Name of Agency :
2. Nature of work :
3. Local Address with Ph.No. :
(With Father's name) :
4. Permanent Address (Full) :
5. PF code no. & Place :
6. ESI Code no. & Place :
7. Name and address of :
Sub-contractor (if any)

B. Details of Work

8. Name of work (as specified in LOI/LOA) :
9. LOI/LOA Nos. & Dates :
10. Period of contract (Specify Dates) :
[Including Extension period, if any] :
11. Work Area [Department / Location] :
12. Name / Cell no. of Officer I/c :
13. Maximum No. of workers and staff to be engaged on any day during the year.
 - Supervisory Staff :
 - Workers :
14. Do you have any other contract in TPSODL : Yes/No
If yes, furnish details:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 49 of 105

15. Details of Workmen's compensation Policy, if applicable

Name of Insurance Company
.....Policy No Number of persons
covered Period of coverage: From To

If no, I hereby undertake the liability arising out of Workmen's Compensation Act and Rules made there under.

C. Details of workers to be engaged

No. of Workers

S. No.	Unskilled*	Semi-skilled*	Skilled*	Clerical / Supervisory

*** Number to be indicated**

I/We shall fulfill all obligations arising from and under all relevant law in force from time to time. I/We undertake to keep the TPSODL indemnified against any loss or liability arising out of failure of my / our abiding the relevant laws.

The name of my / our representatives is to enter the TPSODL Premises on my behalf.

Date:

**(Signature of the Business Associate
or his Authorized Representative)**

This Business Associate is / will be engaged in TPSODL.

(Signature and seal of

Officer I/c of the Work)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 50 of 105

Form X

Undertaking

I _____ hereby undertake that all the dues in respect of my employment with M/s _____ for the period of _____ to _____ have been settled and final payments including retrenchment benefit have been made to me in full.

(_____)

Date:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 51 of 105

Form XI

Undertaking

With reference to the contract job awarded by M/s TP Southern Odisha Distribution Limited to M/s _____ vide work order No. _____ dated _____

I _____ on behalf of

M/s _____ hereby undertake:

1. that the dues in respect of the workmen/ employee(s) engaged by us for the said contract, payable as per the provisions of relevant statute pertaining to

- i. wages/ salary
- ii. PF & ESI, Berhampur Labour Fund
- iii. All other statutory obligation

has been paid /settled in full and no amount/ compliance is due/ pending.

2. That in case any dispute / claim is raised by the concerned workers i.r.o. any dues / payments, M/s _____ will settle the same on its own and such liability will be borne by M/s _____

3. That M/s _____ hereby indemnify M/s TPSODL from any future liability i.r.o. any statutory obligation in respect of said contract.

Date:

()

Authorized Signatory

For M/s _____

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 52 of 105

FORM- VI A

Notice for Commencement /Completion of contract work

I/We, Sh. / M/s _____ (Name and Address of the Contractor) hereby intimate that the contract work _____ (name of work) in establishment of the _____ (name and address of the Principal Employer) for _____ which License No. _____ dated _____ has been issued to me/us by the Licensing Officer _____ (name of the Headquarters), has been commenced / completed with effect from _____ date / on date.

Signature of Contractor

With Office Seal

The Inspector

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 53 of 105

FORM XXIV

[See Rule 82(1)]

Return to be sent by the Contractor to the licensing Officer (in duplicate)

Half -Yearly Ending_____

1. Name and address of the Contractor
2. Name and address of the Establishment
3. Name and address of the Principal Employer
4. Duration of Contract: From _____ to _____
5. No. of days during the half year on which
 - (a) the establishment of the principal employer had worked
 - (b) the contractor's establishment had worked
6. Maximum No. of contract labour employed on any day during the half –year:

Men	Women	Children	Total

7.
 - (i) Daily hours of work and spread over
 - (ii) (a) whether weekly holiday observed and on what day
 - (b) if so, whether it was paid for
 - (iii) No. of man – hours of overtime worked

8. No. of man days worked by

Men	Women	Children	Total

9. Amount of wages paid

Men	Women	Children	Total

10. Amount of deductions from wages, if any

Men	Women	Children	Total

Whether the following have been provided –

- (i) Canteen : _____
- (ii) Rest rooms : _____

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 54 of 105

(iii) Drinking water : _____

(iv) Crèches : _____

(v) First Aid : _____

Signature of contractor

Place _____

Date _____

GENERAL CONDITIONS OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 55 of 105

ANNEXURE – H

UNDERTAKING FOR COMPETENCE OF WORKMEN

Name of Associate :

Tender No. :

Item :

With reference to the tender mentioned above, I/We _____,
 hereby undertake that the workmen/ employee(s) engaged by M/s
 _____ for the job against said tender shall be competent in all
 respect, commensurate to the nature of job.

Date:

 ()

Authorized Signatory

For M/s

Seal

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 56 of 105

ANNEXURE-I

BUSINESS ASSOCIATE FEEDBACK FORM

With an objective to improve our internal processes and systems, and serve you better, we solicit your valuable feedback & suggestions. It is estimated that it will take about 10 minutes to complete this survey. We assure you that your feedback shall be kept confidential. Please send the duly filled feedback form in the "TPSODL addressed - attached envelop"

You are associated with us as

☐ OEMs
 ☐ Service Contractor
 ☐ Material Suppliers
 ☐ Material & Manpower Supplier

You are associated with us for

☐ Less than 1 year
 ☐ More than 1 year but less than 3 years
 ☐ More than 3 years

Your office is located at

☐ Berhampur
 ☐ Within 200 kms from Berhampur
 ☐ More than 200 kms from Berhampur

Your nearly turnover with TPSODL

☐ Less than 25 Lacs
 ☐ 25 Lacs to 1 Crore
 ☐ More than 1 Cr.

Additional information

Your Name	
Your Designation	
Your Organization	
Contact Nos.	
Email	

We once again thank you for your participation in this survey. Please spare 10 minutes to give your feedback on following pages (Section A to E)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 57 of 105

SECTION - A

(Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.).

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
1	You receive all relevant queries / tenders from us in timely manner.						
2	We provide you enough lead time to respond to our queries / tenders.						
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.						
4	All following elements of our contract / purchase order are rational :						
4.1	Scope of Work						
4.2	Delivery / Execution Schedule						
4.3	Payment Terms						
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	TPSODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	TPSODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPSODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	TPSODL Engineer-in-Charge timely certifies the jobs executed/						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 58 of 105

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
	material supplied						
11	TPSODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job						
12	BIRD (Bill Inward Receipt Desk)* initiative has improved payment disbursement process (under development)						
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?						
14	TPSODL never defaults on contractual terms						
15	In TPSODL Contracts closure is done within set time limit						
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience						
17	Bank Guarantees are released in time bound manner						
18	Our processes related to payment / account settlement are effective.						
19	You get payments on time						
20	TPSODL Employees follow Ethical behavior						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 59 of 105

SECTION - B

(Please rate the following parameters on a scale of 1 to 5, where 1 - Minimum; 5 - Maximum)

SN	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of TPSODL employees you interact with from following team?						
1.1	Project Engineering						
1.2	Division / Sub-Division						
1.3	Projects/HOG						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing						
1.7	Accounts / Finance						
1.8	Administration						
1.9	IT & Automation						
2	How would you rate TPSODL in comparison to your other clients in terms of fairness of treatment and transparency with its Business Associates?						
3	How would you rate TPSODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates						
4	How would you rate TPSODL in comparison to your other clients in terms of building long term & mutually relationship with its Business Associates						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 60 of 105

SECTION-C

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

SNo	Parameters	Certainly NO	Probably NO	Probably YES	Certainly YES	Remarks/ Suggestion
1	Based on your experience with TPSODL, would you like to continue your relationship with TPSODL?					
2	If someone asks you about TPSODL, would you talk "positively" about TPSODL?					
3	Would you refer TPSODL name to others in your community, fraternity and society as a professional & dynamic organization?					

SECTION - D

If we ask you to rate us on a scale of 1 to 10, how will you rate TPSODL, that truly represents your overall satisfaction with us (please tick appropriate box) -

1	2	3	4	5	6	7	8	9	10

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 61 of 105

SECTION – E

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

Please spare your thoughts for TPSODL's improvement in particular areas of weaknesses, particularly relating to some great practices, attitudes that you have seen elsewhere in Indian and International Organizations, which you recommend TPSODL to adopt. Please give your valuable salient recommendations.

Please spare your thoughts for TPSODL's improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, attitudes that you have observed / experienced elsewhere in Indian/ International organization.

Recommendation	<i>Please tick (✓) your top 5 expectations out of the following 10 points listed below -</i>	
(Please list down improvement you expect from TPSODL)	<i>Timely payment</i>	
1	<i>Flexibility in Contracts/PO</i>	
	<i>Clarity in PO,s & Contracts</i>	
2	<i>Timely response to quarries</i>	
	<i>Timely certification of works executed</i>	
3	<i>Clarity in Specs, drawings, other docs etc.</i>	
	<i>Adequate information provided on website for tender notification, parties qualified etc.</i>	
4	<i>Timely receipt of material at site for execution</i>	
	<i>Performance Guarantee/EMD released in time</i>	
5	<i>Inspection & quality assurance support for timely job completion</i>	

We thank you for your time and courtesy!!

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 62 of 105

ANNEXURE-J

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process fair and transparent, TPSODL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. TPSODL shall provide the user id and password to the authorized representative of the bidder. *(Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).*
2. TPSODL will make every effort to make the bid process transparent. However, the award decision by TPSODL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPSODL, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPSODL.
6. In case of intranet medium, TPSODL shall provide the infrastructure to bidders. Further, TPSODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be outrightly rejected by TPSODL.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPSODL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by TPSODL.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 64 of 105

send payment information)

Name of the Authorized Signatory :

Contact Person's Name :

Official Correspondence Address :

We confirm that we will bear the charges, if any, levied by our bank for the credit of NEFT/RTGS amounts in our account. Any change in above furnished information shall be informed to TPSODL well in time at our own. Further, we kept TPSODL indemnified for any loss incurred due to wrong furnishing of above information.

Thanking you,

For _____

(Authorized Signatory)

(Signature with Rubber Stamp)

Certification from Bank:

We confirm that we are enabled for receiving NEFT/RTGS credits and we further confirm that the account number (specify Bank a/c no.) of (Please mention here name of the account holder), the signature of the authorized signatory and the MICR and IFSC Code of our branch mentioned above are correct.

This also is certified that the above information is correct as per Bank record

(Manager's/ Officers Signature under Bank Stamp)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 65 of 105

ANNEXURE-L

CONTRACTOR SAFETY MANAGEMENT SYSTEM

1. OBJECTIVE

The objective of the Contractor Safety Management System is to lay down clear guidelines for all Business Associates (including their associates, staff and agents) which would facilitate them to observe all statutory rules and regulations, comply with applicable standards of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010 & (safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations, 2011, TPSODL Safety Manual and Guidelines and thus, ensure creation of safe working environment for all stakeholders of our network.

2. SCOPE

All contracts (minor and major) will be subject to the provisions of this document.

Minor Contracts: Contracts which satisfy all the criteria listed under the head "Minor Contracts".

Major Contracts: Contracts which satisfy any two or more criteria listed under the head "Major Contracts"

Criteria	Minor Contracts	Major Contracts
Value of Contract	< Rs. 1500000/- (less than Rs. Fifteen Lac)	>= Rs. 1500000/- (Equal or more than Rs. Fifteen Lac)
Period	Period less than 1 year	Any period
Working on energized electrical equipment	No	Yes
Working on height (above 1.8 Mtrs from ground)	No	Yes
Work involving construction activity	No	Yes
Working with hazardous goods or chemicals	No	Yes
Work involving danger to general public	No	Yes

Note: Exceptions for major and minor contract are – in house software development, supply of material or equipment but no direct or indirect installation of the same material, administration contracts (courier, water supply, printing, security, transport, etc.), minor civil work like plastering at ground level or flooring, etc. The facility management (housekeeping) contract will always be treated as a minor contract.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 66 of 105

3. INFORMATION REQUIRED AT TIME OF VENDOR REGISTRATION OR BEFORE COMMENCEMENT OF CONTRACT

- 3.1 Business Associate is required to fill the Safety Management System Questionnaire as per *annexure 1* and submit along with the vendor registration process / bid / tender document. The filled questionnaire will be scrutinized by Engineer In-charge / indenting group and recommend suitability of the BA with respect to safety requirements. The fulfilment of statutory requirements for vendor registration pertaining to labour laws etc. shall be done by BA Cell on being referred to it.
- 3.2 Business Associate is required to take suitable risk control measures mentioned against the identified Hazards and Risk document provided for all contracts as per *annexure 2*. The primary objective of this is to evaluate the understanding of the BA towards risk mitigation and employment of safe work procedures. BA is required to conduct the Hazard identification and Risk Assessment study as per the procedure and deploy more or other measures if deemed necessary.
- 3.3 Business Associate shall comply with **Statutory Requirements related to Safety and Occupational Health** and submit the "Safety Undertaking" as per *annexure 4*.

4. GENERAL SAFETY CONDITIONS REQUIRED TO BE FULFILLED BY BUSINESS ASSOCIATES

The requirements of the contractor safety management system applicable to the minor or major contracts related to various groups are as following –

- 4.1 Maintenance of Distribution Network – *Annexure 3.1*
 - 4.2 Distribution Projects – *Annexure 3.2*
 - 4.3 EHV Projects – *Annexure 3.3*
 - 4.4 Maintenance of Sub transmission network – *Annexure 3.4*
 - 4.5 Civil / Generation Projects – *Annexure 3.5*
 - 4.6 Meter Management Group (MMG), Revenue Recovery Group (RRG), Energy Auditing Group, AML, MRG, etc. – *Annex3.6*
 - 4.7 Maintenance and Operation of Street Light. – *Annexure 3.7*
1. *Please note that hydra cranes used by any dept should be ACE Model No. FX 150 ACE SX 150, Escorts Model No. TRX 1550 or contemporary. Use of old generation hydra cranes like ACE 14XW or ACE 12 XW, etc are prohibited.*

(Details as per Annexure attached)

Note: For minor contracts, the BA shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver all duties and responsibilities of Safety Supervisor as detailed in this document.

The Business Associate (BA) having major contract will appointing Safety supervisor, engineer / manager for the TPSODL work. The BA shall make all necessary arrangements for getting their workforce safety trained and competency checked from the concerned official of TPSODL before deployment in the field. BA Cell shall recommend the suitability after competency checked by Engineer In-charge and SAFETY group (or his representative) of TPSODL. After getting the clearance from concerned official, BA cell and receiving temporary I-card issued by TPSODL, Business Associate shall commence the working.

Safety Representative of Business Associates will formally become the nodal point for safety concerns for TPSODL. **BA shall not frequently transfer or terminate the services of any of the safety representatives appointed for TPSODL work site. BA needs to ensure**

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 67 of 105

that Safety representative is available at all points of time; failing which the work being carried out in the interim (period when Safety representative is not available) shall be treated as working under improper supervision and due penal provisions shall be initiated against the BA. BA will be required to provide all applicable infrastructure and power to ensure smooth working of the safety representative to maintain a sound safety management system. **In all contracts safety representative will not be assigned any other activity at site apart from the works related to safety management. The duties are detailed in clause 5.5 of this document.** TPSODL will be auditing the facilities provided to the BA's safety team time to time.

The Safety Representative of the BA shall be required to meet and follow the instructions of the Engineer In-charge and SAFETY Group of TPSODL. He shall be responsible for providing the MIS and/or any other relevant information, as and when desired, within the stipulated time frame as per the requirements of TPSODL. Any non-conformance to safety will lead to the negative marking or issue of safety violation challan/ tokens which shall affect the monthly evaluation and performance of BA.

All contracts where BA has to depute vehicle for their staff and equipment to move from one location to other, the BA shall ensure that vehicle complies all required statutory clearances and requirement as per The Motor Vehicle Act, 1988 as well as TPSODL Road Safety Policy and are in good & safe state of working.

5. QUALIFICATION AND EXPERIENCE OF THE SAFETY AND SITE PERSONNEL

Qualification and experience required for the safety and site personnel are as following:

5.1 Safety Supervisor: It is mandatory that educational qualification of safety supervisor be ITI (of relevant trade) / Diploma (Any branch of engineering) and he has a working experience on electrical system / relevant field of work at least 5 yrs for ITI and 3 years for Diploma holder. Having formal experience of the safety systems will be an added advantage

5.2 Safety Engineer: It is mandatory that educational qualification of safety engineer be at least Diploma (relevant branch) and he has working experience on electrical system of at least 3 yrs. Having the formal experience of the safety systems will be an added advantage.

5.3 Safety Manager: The educational qualification of safety manager should be graduate engineer with working experience on electrical system / network of at least 3 yrs. OR Diploma in Industrial Safety with working experience of 05 years including at least 02 years on electrical network.

However, clause 5.1, 5.2 and 5.3 are not applicable for minor contracts. In such cases, BA shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver required duties of Safety Representative (as per clause 5.5) in addition to other duties without diluting the importance of safety.

5.4 Site Skilled Personnel: For all responsibility related to site activities and operations, the BA shall employ only qualified and skilled persons and shall comply the provisions of section 19 & 29 of Southern Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010. Persons holding valid approvals only by any Government approved agency or a competency assessment panel or a team set up by

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 68 of 105

TPSODL shall be allowed to perform the High Risk / High Hazard activities (refer page 1). The skill / qualification required for the electrician and electrical supervisor are given in *annexure 5*. The contracts related to maintenance of Distribution Network, Distribution Projects, EHV Projects, maintenance of Sub-Transmission Network, MMG & EAG, maintenance and operation of streetlights, shall preferably have at least 20 per cent of ITI qualified electricians in the first year of the contract. This figure shall preferably be incremented by 15 per cent every subsequent year.

Note: For the competency assessment may please refer the work instructions. An employee shall have to necessarily undergo the competency assessment check once in every eighteen months.

5.5 Requirements from the Safety Representative(s) of the Business Associate:

- 5.5.1 Safety training of 2 hrs/employee/month and one day of safety induction training to all new employees joining the BA will be conducted by the BA as per Safety training modules of TPSODL.
- 5.5.2 Safety Talk / toolbox talk before start of shift to BA employees.
- 5.5.3 Ensuring the availability & proper usage of the standard safety equipment (PPE)
- 5.5.4 Periodic inspection of PPE to ensure their serviceability and maintaining the 10% buffer stock of standard PPEs.
- 5.5.5 Ensuring the adherence to standard operating procedures of TPSODL as mentioned in TPSODL Safety standard and O & M and concerned function's manual.
- 5.5.6 Safety inspections / audits as per the process of TPSODL
- 5.5.7 Working in close coordination SAFETY Group of TPSODL.
- 5.5.8 Reporting of unsafe acts, unsafe conditions, near miss, incident or accident to Engineer In-Charge and SAFETY Group of TPSODL immediately after its occurrence.
- 5.5.9 Regular HIRA at site and comply the control measures as stated in the detailed HIRA as per the *annexure 2*. Also, deployment of JSA based checklist shall be ensured.
- 5.5.10 Ensuring compliance with safety and other laws as may be applicable and providing for safety assurance.

5.6 Training and Syllabus: The BA shall not deploy any person at workplace / site or send newly recruited personnel directly to concerned official for competency assessment without Safety Induction Training.

5.6.1 All new BA employees have to necessarily undergo one and half days Safety training and Competency assessment at training centre of BA cell. This training will be conducted once in a week. After the completion of Safety training & Competency assessment I-card will be issued to all competent BA employees

5.6.2 BA is expected to initially train and judge the capability of the workman at his own end before further recommending the workmen for Competency assessment. If any BA workman sent for competency assessment. In case any BA workman fails in the Competency test at concerned official, it will be deemed that BA has not imparted sufficient training at his end and actual cost of training ₹ 7500/ BA employee/ failed attempt will be recovered.

5.6.3 The workers who have imparted Safety Training and issued I-Cards of TPSODL, are not deployed at TPSODL worksites/ voluntarily left the job by workers/ used somewhere else other than TPSODL by the BA, in that case Management reserves the rights to intervene and recover the actual cost of training i.e. ₹ 7500/BA employee. (*Exempted for attrition rate of BA workers less than or equal to 10% of total workforce deployed at TPSODL*)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 69 of 105

- 5.7 It is desired that Safety representative of the BA to impart the general safety training to each employee of duration 2 hrs per month. The training will be organized at BA level and the record to be sent to engineer in-charge and SAFETY group of TPSODL every month. Please refer schedule and syllabus in *annexure 6*.

List of Personal Protective Equipment (PPE) and Maintenance schedule: BA shall commence the project or any work only when the required PPE are made available to the team of employees involved in the work. Each PPE of BA shall be checked / inspected by the safety representative / supervisor at zone before the work start or as prescribed in the list. Safety representative shall regularly check the healthiness of each PPE allocated to lineman. Suitable record shall be maintained at zone. Defective PPE shall be immediately replaced or within 24 hours by the BA. In no case linemen or any other official of BA may be allowed to work with defective PPE. It is preferred that BA ensures minimum stock of each PPE at zone for immediate replacement with defective one. The PPE shall be IS / BS / CE marked and exactly as per the standard or specification mentioned in the *annexure 7*. Working without PPE / non-standard PPE shall be treated as safety violation and penalty as stated in section 6.0 of this document. If TPSODL finds that BA has not provided the adequate / appropriate PPE to their staff, TPSODL reserves the rights to stop the work and call the BA to provide appropriate PPEs at the risk. If the BA fails to provide the required PPEs at the risk then the same shall be provided by TPSODL at the actual cost of the PPE. The amount shall be charged to BA and same shall be first recovered from the current bill of BA or any future payment to be made to BA. In the event of any balance amount still left for recovery, the same shall be adjusted against retention amount or by invoking bank guarantee submitted by BA.

- 5.8 **Safety Audit / Inspection & HIRA:** The BA shall get the required safety inspection / audit conducted by his technical team comprising of safety representative as per the *annexure 8*. The safety representative will be required to conduct the HIRA (Hazard Identification and Risk Assessment) as per *annexure 2* of the process and work undertaken at least two times in a year or every time if a new process / activity / machine is introduced or whenever an accident take place. The risk identified to be addressed suitably with –

- Engineering Control
- Management Control, and
- Personal Protective Equipment.

The safety representative of BA shall inform and educate for the identified risk and hazard control methods to employees, supervisor and engineer as well as the engineer in-charge and SAFETY group of TPSODL.

- 5.9 **Safety Performance and Safety MIS:** The BA shall maintain good practice of safety all through the contract duration. Safety shall always be of paramount importance during the contract period. Safety performance will be monitored on yearly basis throughout the period and no relaxation will be given for bad performance. BA with good track record and excellent performance will be rewarded suitably as per clause 6.0 of this document. The BA has to provide monthly "Performance Report – Safety" to engineer in-charge and SAFETY group TPSODL this shall be part of monthly bill along with training details. Performa of the report is enclosed as *annexure 9*.

- 5.10 **Pre – Employment Medical Check-up and Fitness of employees engaged for the critical works:** The BA shall submit the health fitness certificate for all those workers involved in climbing the pole or working at height for following diseases:

5.10.2 Epilepsy

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 70 of 105

5.10.3 Colour blindness

5.10.4 Deafness

5.10.5 Vertigo & height phobia

Every year BA will give an undertaking stating that all the employees are fit to work and have not developed aforesaid diseases. The Record of such medical check-ups shall be submitted to BA Cell before issue of temporary identity card. The records shall be maintained at BA Cell. All such medical check-ups shall be repeated once in a year for all workers involved in climbing the pole or working on electrical network.

6. REWARD AND PUNITIVE MEASURES

6.1 To support the enforcement of good SHE & DM practices by the Business Associate and to eliminate repeated or continuing safety violations, use of appropriate reward and punitive measures shall be made. Each unsafe act or violation of the safety guidelines as described in the Safety Manual of the TPSODL will be audit criteria of this system. Broadly the measures identified are following:

- 6.1.1 Working without PPE/ Safety Gadgets
- 6.1.2 Working without proper tools and tackles, barricading, Poor condition of Crane / Hydra / Vehicle, using without certification / Licence, Incompetent driver/ Helper
- 6.1.3 Working without creation of effective safety zone
- 6.1.4 Improper Supervision at worksite, Lineman/ Supervisor working without competency
- 6.1.5 Working without adherence to PTW process or authorization/ not adherence to SOPs / W.I. of TPSODL.
- 6.1.6 Improper Working at height equal to or above 1.8 mtrs without taking proper fall protection measures/ Poor condition of Ladder

6.2 Measures of Reward and Punitive Measures

The Engineer In-Charge, NSO, SC, ASOs, CSI / SIs and SHE &DM group will conduct the surprise audits of the work / project and if any non-conformance is found the same will be booked and entered in the format "Safety Violation Record" *annexure 10*. The flow of the information is given below:

Safety Violation Escalation & Monitoring process	
Action	Responsibility
Safety Violation form has been filled and counter foil sent to SAFETY team for information. The main form is to be given to BA supervisor / Engineer in-charge. <i>(Automatically generated if Site audit done through Mobile App.)</i>	Engineer In-charge/ NSO / SC / SAFETY Group /CSI/ ASO/ Any authorised TPSODL official.
↓	
Entry of the violation in the master record and sending the information to concerned Manager, HoG, HoD, Head and Chief (O &S). <i>(Automatically generated if Site audit done through Mobile App.)</i>	SAFETY Group
↓	
Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA,	Engineer In-charge

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 71 of 105

<i>if any.</i>	
↓	
HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted.	SAFETY Group
↓	
The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees.	SAFETY Group with approval of CFO/Chief (O & S) /CEO&MD

The safety violations have been rated from 1 to 5 (figure 6.3) as per the gravity of the violation. If the same violation is repeated it may escalate into a higher penalty. If a particular Business Associate employee violates safety norms three times, he shall not be allowed to work in TPSODL for a period of one year from the date of the 3rd violation.

6.3 Safety Violation Escalation Matrix

6.3.1

Consequence of Safety Violation Observed (Not related to Incident/ Accident)		Violation				
S.No.	Safety Violation	1st	2nd	3rd	4th	Subsequent Violations
1	Working without PPE (Helmet/Gloves/Safety Harness/ Safety Shoes etc.)	A	B	C	D	Will attract the same penalty as applicable in the 4th violation.
2	Improper Working at Height	A	B	C	D	
3	Working without proper tools and tackles	A	B	C	D	
4	Poor condition of Crane/Hydra/ Vehicle/Incompetent driver/ Helper	A	B	C	D	
5	Violation of SOP/ WI	B	C	D	E	
6	Working without adherence to PTW process or authorization/ Safety Zone	C	D	E		
Legend	Action to be taken	Responsibility		Penalty Amount (in Rs.)		The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
A	Warning letter	Engineer Incharge		Nil		
B	Levy of Penalty	Engineer Incharge		2,000		
C	Memo to BA & Levy of Penalty	Head of Group		4,000		
D	Memo to BA & Levy of Penalty	Head of Department		10,000		
E	Memo to BA, Levy of Penalty and termination of Contract	Head of Department		1,00,000		
Figure 6.3 (1a)-Penalty Matrix for Safety violation (Applicable for Minor Contracts)						

Figure 6.3 (1a)-Penalty Matrix for Safety violation (Applicable for Minor Contracts)

Consequence of Safety Violation Observed (Not related to Incident/ Accident)		Violation				
S.No.	Safety Violation	1st	2nd	3rd	4th	Subsequent Violations
1	Working without PPE (Helmet/Gloves/Safety Harness/ Safety Shoes etc.)	B	C	D	D	Will attract the same penalty as applicable in the 4th violation.
2	Improper Working at Height	B	C	D	D	
3	Working without proper tools and tackles	A	B	C	D	
4	Poor condition of Crane/Hydra/ Vehicle/Incompetent driver/ Helper	B	C	D	E	
5	Violation of SOP/ WI	C	D	E		
6	Working without adherence to PTW process or authorization/ Safety Zone	C	D	E		

Legend	Action to be taken	Responsibility	Penalty Amount (in Rs.)	The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
A	Levy of Penalty	Engineer Incharge	5,000	
B	Memo to BA & Levy of Penalty	Engineer Incharge	10,000	
C	Memo to BA & Levy of Penalty	Head of Group	25,000	
D	Memo to BA & Levy of Penalty	Head of Department	50,000	
E	Memo to BA, Levy of Penalty and termination of Contract	Head of Department	1,00,000	

Figure 6.3 (1b)-Penalty Matrix for Safety violation (Applicable for Major Contracts)

Figure 6.3 (1b)-Penalty Matrix for Safety violation (Applicable for Major Contracts)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 72 of 105

Once the BA reaches the “BLACK” (color – “5”) category, i.e. highest level of safety violation, “Termination” notice to BA will be issued from the office of the Head of Department (equivalent to GM/ Sr. GM level) and further, *if required*, continuation / extension of contract will only be initiated by Functional Chief / Head of the department (equivalent to Sr. GM / Chief level) and approved by CEO & MD. Till the extension, the contract will remain suspended.

TPSODL encourages the reportage of the safety violation during the contract work by BA. Any TPSODL employee can register a safety violation against the BA in the “Safety Violation Form” *annexure 10*. Initially the observer has to fill the form and handover the counterfoil (lower portion) of the document to the supervisor of the BA, inform the site engineer of TPSODL and send the top portion of the Safety Violation Form to SAFETY group for the further necessary action against the BA. **The cumulative nos. of Safety Violations pertaining to any particular BA shall be calculated on yearly basis.**

Safety violations resulting in incident / accident will be treated as per gravity of the injury / fatality and its impact as well as type i.e. minor or Major. Consequences of incident / accident are shown in the matrix (figure 6.3(2) for major and 6.3(3) for minor) below. In case of any accident, findings and recommendations of Accident Enquiry Committee will be final and binding and will supersede the arbitration clause of GCC.

Consequence Of an Incident / Accident (In case of MAJOR contract)		Incident / Accident				Action Required
Sl. No	Type of the injury	1st	2nd	3rd	4th	
1	Slight injury (First Aid Case)	F (Strengthening of process through continuous improvement in the work procedure)				Take risk reduction measures
2	Minor injury (No or Hospitalization less then 48 Hrs)	F	G	G	H	
3	Major injury (Bone injury or burn or Hospitalization more then 48 Hrs)	G	G	H	I	
4	Single fatality	J	K			Intolerable
5	Multiple fatalities (Two or more fatalities during one event)	K				
Legend	Action to be taken	Responsibility		Penalty (in Rs.)		The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
F	Memo to BA and levy of penalty	Engineer Incharge		5,000/-		
G	Memo to BA and levy of penalty	Head of Group		20,000/-		
H	Memo to BA and levy of penalty	Head of Group		50,000/-		
I	Memo to BA and levy of penalty	Head of Department		2,00,000/-		
J	Memo to BA and levy of penalty	Head of Department		5,00,000/-.		
K	Memo to BA, levy of penalty, termination of contract and black listing of BA	Functional Head		10,00,000/-		
Figure 6.3 (2) - Penalty Matrix for Incident / Accident in Major Contracts						

Figure 6.3 (2) - Penalty Matrix for Incident / Accident in Major Contracts

(For example: In major contracts, if there is first incidence of major injury say bone injury (Cat. 3) where worker was hospitalized for more than 48 hrs then a penalty of amount Rs.20000/- will be deducted from the current bill produced for the payment. This penalty will be similar for first two incidents. However, it will increment to next higher category i.e. Rs. 50,000/- on subsequent incidents as per the above matrix)

Consequence Of an Incident / Accident (In case of <u>MINOR</u> contract)		Incident / Accident				Action Required
Sl. No	Type of the injury	1st	2nd	3rd	4th	
1	Slight injury (First Aid Case)	L (Strengthening of process through continuous improvement in the work procedure)				Take risk reduction measures
2	Minor injury (No or Hospitalization less then 48 Hrs)	L	M	M	N	
3	Major injury (Bone injury or burn or Hospitalization more then 48 Hrs)	M	M	N	O	
4	Single fatality	P	Q			Intolerable
5	Multiple fatalities (Two or more fatalities during one event)	Q				
Legend	Action to be taken	Responsibility		Penalty (in Rs.)		The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
L	Memo to BA and levy of penalty	Engineer Incharge		5,000/-		
M	Memo to BA and levy of penalty	Engineer Incharge		10,000/-		
N	Memo to BA and levy of penalty	Head of Group		25,000/-		
O	Memo to BA and levy of penalty	Head of Department		1,00,000/-		
P	Memo to BA and levy of penalty	Head of Department		3,00,000/-		
Q	Memo to BA, levy of penalty, termination of contract and black listing of the BA	Functional Head		5,00,000/-		
Figure 6.3 (3) - Penalty Matrix for Incident / Accident in Minor Contracts						

(For example: In minor contracts, if a worker meets with a non-fatal accident say bone injury (Cat. 3) where he was hospitalized for more than 48 hrs then a penalty of amount Rs. 10,000/-, will be charged from the current bill produced for the payment. This penalty will be similar for first two incidents. However, it will increment to next higher category i.e. Rs. 25,000/- on subsequent incidents as per the above matrix.)

In case of single or multiple fatalities described under legends J&K of 6.3(2) and P&Q of 6.3(3), the concerned BA may be debarred from extension of contract or participate in new contract. In such event the approval of Chief (O & S) will be necessary for extension or award of new contract to concerned BA.

6.3.2 COMPENSATION FOR BA PERSONNEL

In the event of any untoward incident/ accident, the Business Associate shall ensure prompt medical assistance such as treatment, sickness benefit, etc. is provided to the victim(s) as per the Employees' Compensation Act, 1923 or Employees' State Insurance Act, 1948, as applicable. Also, the BA will be required to take adequate measures for compensating the victim(s) or his/her/their kin as follows:

Group Personal Accident (GPA) policy coverage of ₹ 15 Lacs to be taken by the respective BAs.

iii. It is mandatorily required to take the GPA policy coverage of ₹ 15 Lacs by the BA for his employees from a reputed insurance agency.

iv. TPSODL HR department will be the overall process owner and BA shall be required to coordinate with TPSODL HR department for policy implementation immediately post receipt of LOI / Work Order.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 74 of 105

I. For Death or Permanent / Total Disablement

The BA shall take an insurance coverage of at least Rs. 15 lakhs for each engaged employee, to cover any incidence of Death or Permanent / Total Disablement (Permanent/Total Disability shall be considered as defined under Employees' Compensation Act, 1923). In the event of any such unfortunate incident, the BA would ensure that adequate compensation is paid immediately to the family of the victim(s) from his own resources. This compensation shall be covered under the insurance policy subscribed by the BA mentioned earlier and the arrangement should be such that it would get reimbursed to the BA by the insurance agency subsequently.

II. For Permanent Partial Disablement and Temporary Total Disablement

The compensation in this case will be as per provisions of the Employees' Compensation Act, 1923 or Employees' State Insurance Act, 1948, as applicable.

Accordingly, the BA shall obtain a suitable Insurance Policy on award of Contract and submit documentary evidence of the policy to the BA Cell before commencement of work. The BA shall ensure that the Insurance policy is active at all times and all employees are covered in all respects till the conclusion of contract period or till working with TPSODL. The BA shall submit a copy of the policy after periodic renewals to the BA Cell.

However, on occurrence of such unfortunate incident, if it is found that the victim(s) is/are not covered under any insurance policy, the BA shall be liable to pay the entire sum of Rs. 15 lakhs from his own resources.

Further, in case of an accident resulting in Death or Permanent / Total Disablement while on duty, the appointed BA Nodal Officer will ensure that the BA complies with all statutory provisions and benefits i.e. PF, Compensation, Gratuity etc., and that all these are made available to the employees' nominee(s) as per the stipulated timelines.

6.3.3 TPSODL rewards the BA with good track record of safety management. It is proposed that BA complying with Contractors Safety Management, Safety Manual and Safety process will be rewarded suitably as per the procedure, rule and regulations of the TPSODL. In any case major accident is reported during an assessment period BA will not be eligible for this reward scheme. Assessment of contracts will be once in year. Generally, the assessment cycle is calendar year and guidelines will be declared time to time.

Abbreviations Used in the Document

TPSODL	TP Southern Odisha Distribution Limited
BA	Business Associate
HIRA	Hazard Identification & Risk Assessment
JSA	Job Safety Analysis
EHV	Extra High Voltage
SAFETY	Safety, Occupation Health, Environment & Disaster

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 75 of 105

	Management
MMG	Meter Management Group
EAG	Energy Audit Group
PPE	Personal Protective Equipment
SOP	Standard Operating Procedures
CSI/SI	Circle Safety In-charge / Safety In-charge
ASO	Area Safety Officer
NSO	Nodal Safety Officer
SC	Safety Coordinator
HoG / HoD	Head of Group / Head of Department
AGM / GM / VP	Assistant General Manager / General Manager / Vice President
CFO / Chief (O & S)/ CEO & MD	Chief Finance Officer / Chief (Operating & Safety) / Chief Executive Officer & Managing Director
COS	Corporate Operation Services
CAP	Centralized Account Payable System
PTW	Permit To Work
GCC	General Conditions of Contract.

- END -

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 76 of 105

Annexure 1 (Refer Para 3.1)

Business Associate Safety Management System Questionnaire

Certification				
The information provided in this questionnaire is a summary of the company's occupational health and safety management system.				
Company Name:				
Turnover and experience:		Name of top officer:		
Date:		Position		
Contract Details				
Contract Name		Contract Number:		
Business Associates Safety Management System Questionnaire	Marks	Yes	No	Score achieved
<i>Safety Policy and Management</i>				
- Is there a written company Safety policy? - If yes provide a copy of the policy, if No please refer Note 1.	1			
- Does the company have an Safety Management system - If yes provide details, if No please refer Note 1.	1			
- Is there a company Safety Management System manual or plan? - If yes provide a copy of the content page(s), if No please refer Note 1.	2			
- Are Safety and occupational health responsibilities clearly identified for all levels of Management and staff? - If yes provide details, if No please refer Note 1.	2			
<i>Safe Work Practices and Procedures</i>				
- Has the company prepared safe operating procedures or specific safety instructions relevant to its operations and relevant work as per contract? - If yes provide a summary listing of procedures or instructions, if No please refer Note 2.	1			

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS		
Rev. No	3	Page 77 of 105	

Certification				
- Comments				
- Is there a register of injury or accident? - If yes provide a copy (format)	1			
- Is there a documented incident or accident investigation procedure? - If yes provide a copy of a standard incident report form, if No please refer Note 2. - Comments	1			
<i>Safety Training</i>				
- Describe how occupational health and safety training is conducted in your company If No please refer Note 1.	2			
- Is a record maintained of all training and induction programs undertaken for employees in your company? - If yes provide examples of safety training records, if No please refer Note 2.	1			
- Are regular safety inspections / audits are undertaken at worksites? -If yes provide details (formats), if No please refer Note 3.	1			
- Is there a procedure by which employees can report hazards at workplaces? - If yes provide details if No please refer Note 1.	1			
<i>Safety Monitoring</i>				
- Is there an officer / supervisor responsible for monitoring workplace / worksite safety?	1			

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS		
Rev. No	3	Page 78 of 105	

Certification				
- If yes provide details				
<i>Safety Performance Monitoring</i>				
- Are employees regularly provided with information on company health and safety performance?	1			
- If yes provide details				
- Has the company ever been convicted of an occupational health and safety offence?	NO Marks (Negative mark ONE for each case)			
- If yes provide details				
- Has there been any major accident of employee at TPSODL site in past	NO Marks (Negative mark ONE for each case)			
- Has there been any fatal accident of employee at TPSODL site in past. - (Note: Bid evaluation committee has to take cognizance of the incident and shall evaluate the bid only after formal approval of competent authority i.e. CTO. - In case of yes please refer Note 4.	NO Mark (Negative mark FIVE for each case)			
Minimum of 75% marks is required for qualification.		Total Marks achieved		
<i>Company Reference</i>				
1. Name of company 2. Name of company				

Note

1: If company does not have formal procedure on Safety Management System than vendor may submit proposed Safety road map along with safety action plan and brief safety policy on his letter head signed by head of the organization.

2: The vendor may submit the same in the Safety Action Plan.

3: The vendor may utilize the same format of TPSODL or on request SAFETY group will assist the vendor in developing the audit system. For other points also vendor may take the assistance of SAFETY group for development of Safety management system.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 79 of 105

4: The vendor may submit the Safety Improvement Plan and Safety Action Plan for his employees based on following points.

- i. Action plan for enhancing safety awareness*
- ii. Action plan for safety training of employee*
- iii. Action plan for increasing safety audit in field*
- iv. Action plan for provision and utilization of safety PPE.*
- v. Action plan for fatality reduction.*
- vi. Action plan for enhanced supervision at site*
- vii. Action plan for making employee more responsible and accountable for safety.*
- viii. Action plan for availability and utilization of all required tool and equipment.*
- ix. Safety Improvement done in last two years, specially highlighting those which have been taken after the fatal accident along with results.*
- x. Safety initiatives planed or started recently.*
- xi. Any other point.*

Based on above points and documentary evidences vendor will be required to submit a detailed report in support of his bid. The bid evaluation committee and competent authority will scrutinize the facts and the evidence submitted. If found satisfactory competent authority i.e. CTO may accord his approval for bid opening otherwise his tender shall be disqualified.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 80 of 105

Annexure 2 (Refer Para 3.2 and 5.8)

Risk Assessment Form

Business Associate:
Scope of the work:
BA's Representative:
Telephone:
Signature:
Date:

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures
Working at Height	Fall from height	2	1. Mandatory usage of JSA checklist prior to start of work 2. Use appropriate ladder 3. Use full body safety harness having double lanyard. 4. Use Electrical Safety Shoes if working on electrical network otherwise use safety shoes. 5. Use Safety helmet. 6. Use PPE as per the annexure 7 of this CSM document 7. Refer Work instruction related to Working at Height for other details 8. Use of metal scaffold to be ensured in height work (cup lock type) 9. Deploy competent workforce who are medically fit

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 81 of 105

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures
Working on electrical equipment / network	Electric flash / electrocution	3	1. Mandatory usage of JSA checklist prior to start of work 2. Use Electrical Safety Shoes while working on electrical network. 3. Use Electrical Safety gloves of appropriate voltage rating. 4. Use face shield / visor attached with helmet. 5. Use Safety helmet. 6. Use PPE as per the annexure 7 of this CSM document 7. Mandatory usage of Insulated tools & tackles on electrical system 8. Mandatory compliance for Lock Out & Tag out system. Refer Work instruction related to Working on electrical equipment / network for other details
Excavation / Civil work	Collapse of soil, fall in excavated pit leading to Injury	2	1. Use safety shoes. 2. Use Safety helmet. 3. Use PPE as per the annexure 7 of this CSM document 4. Hard Barricading of the worksite. 5. Refer Work instruction related to excavation / civil work for other details
Material lifting & Mechanical Erection work	Fall of material/object, Topple of crane,	2	1. Mandatory compliance of crane checklist 2. Visual condition check of lifting tools and tackles such as wire rope sling, belt sling, chain, pulley block, D-shackles, etc. shall be ensured. 3. The operator's physical fitness and alertness should be judged by sup. / EIC. 4. Use PPE as per the annexure 7 of this CSM document 5. Refer Work instruction related to Material lifting & Mechanical Erection work
Road Safety	Road Accidents	3	1. Mandatory compliance of TPSODL Road Safety policy

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 82 of 105

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures

Note: This information for the general indication purpose. The detailed risk assessment shall be conducted before start of the work by the authorized representative of the BA. The report of same shall be submitted to engineer in-charge along with annexure 4 of the CSM document.

Guidelines for filling the Risk Assessment Form

- *Specific Task/Activity* - The documentation of each major task associated with the contract.
- *Potential Hazards* - The identification of hazards associated with each activity or task to be carried out.
- *Class of Risk* - Each hazard should be evaluated as a level of risk, described as Risk Class 1, 2 or 3 defined above.
- *Control Measure* - The identification and documentation of actions required to eliminate or reduce the hazards that could lead to accident or injury.

Hazard / Risks shall be classified according to the following schedule:

- Class 1: Potential to cause injury treatable with first aid
- Class 2: Potential to cause death or permanent injury
- Class 3: Potential to cause more than one or more lost time injuries.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 83 of 105

Annexure 3.1 (Refer Para 4.0)

General Safety Conditions for the Maintenance of Distribution Network Contracts:

A BA awarded a contract (O&M) work of maintenance of distribution network will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPSODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPSODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPSODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPSODL approved list in *annexure 7*.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPSODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPSODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPSODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in a district. In case the BA has been awarded work in more than one district, then the following safety structure will be adopted.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 84 of 105

Annexure 3.2 (Refer Para 4.0)

General Safety Conditions for the Distribution Projects Major Contracts:

A BA awarded a major contract work of TS&P in area of a circle will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1.
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPSODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPSODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPSODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPSODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPSODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPSODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPSODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in the area. In case the BA has been awarded work in more than one circle, then the following safety structure will be adopted.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 85 of 105

Annexure 3.3 (Refer Para 4.0)

General Safety Conditions for the major EHV Projects Contracts:

A BA awarded a major contract work of EHV projects will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPSODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPSODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPSODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPSODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPSODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPSODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPSODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in the area. In case the BA has been awarded work in more than one circle, then the following safety structure will be adopted.
- BA shall refer Construction Safety Manual in TPSODL Safety Manual for details.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 86 of 105

Annexure 3.4 (Refer Para 4.0)

General Safety Conditions for the Maintenance of Sub – Transmission Network Contracts:

A BA awarded a major contract work of maintenance of sub – transmission network in area of a power system will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPSODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPSODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPSODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPSODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPSODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPSODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPSODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Coordinator for managing a complete safety management system in the area. In case the BA has been awarded work in more than one area power system, then the following safety structure will be adopted.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 87 of 105

Annexure 3.5 (Refer Para 4.0)

General Safety Conditions for the major contract work in Civil / Generation Projects:

A BA awarded a major contract work of / in civil or Generation project will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPSODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPSODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPSODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPSODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPSODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPSODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPSODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor (for workforce up to 100 at site) / a safety engineer (for workforce up to 250 at site) / safety manager (for more than two safety engineers) for managing a complete safety management system at the project site. In case the BA has been awarded more than one major contracts, then the following safety structure will be adopted.
- BA shall refer Construction Safety Manual in TPSODL Safety Manual for details.



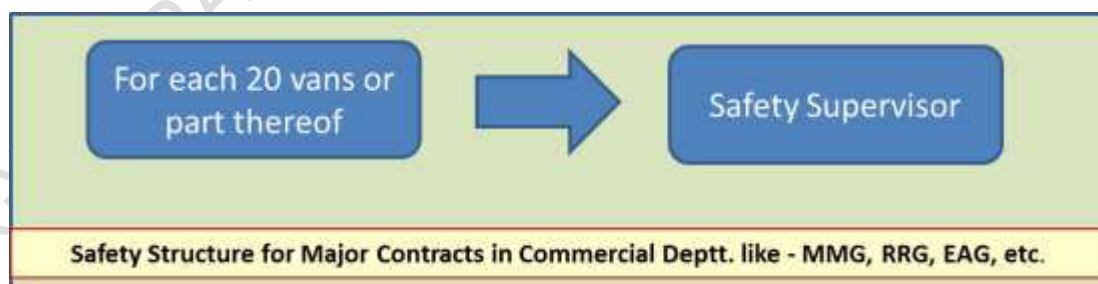
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 88 of 105

Annexure 3.6 (Refer Para 4.0)

General Safety Conditions for the major contract work in Commercial Department like - MMG, RRG, EAG, etc.:

A BA awarded a major contract work in meter management group & energy auditing group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPSODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPSODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPSODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPSODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPSODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPSODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPSODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system for the work as per the following safety structure.
- The BA for the RRG work shall depute one Safety supervisor.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 89 of 105

Annexure 3.7 (Refer Para 4.0)

General Safety Conditions for the major contract work in O&M of street light group:

A BA awarded a major contract work in operation and maintenance of street light group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPSODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPSODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPSODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment PPE as per the TPSODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPSODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPSODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPSODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- Each BA shall ensure to depute a Safety Supervisor for managing a complete safety management system for the work awarded as per the below structure.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 90 of 105

Annexure 4 (Refer Para 3.3)

Safety Undertaking by way of Affidavit

I _____ s/o _____ R/o _____ (AUTHORIZED REPRESENTATIVE/PARTNER/DIRECTOR/PROPRIETOR) of M/S _____ (name of company/firm)___ having its office at (Complete address of Company), authorized vide power of attorney dated -----/Board resolution dated----/letter of authority dated----, hereinafter referred to as **Contractor [or Business Associate (BA)]** which expression shall, unless it be repugnant to or inconsistent with the meaning or context thereof, be deemed to include its heirs, executors, administrators, and assigns do hereby affirm and undertake as under :

1. The present undertaking shall remain in force from the date of execution of contract awarded by TPSODL and shall be valid till the date of termination of the said contract by either parties. The undertaking is binding on me (contractor) as well as my sub-contractor and its employees, representatives etc.
2. That I(the contractor) will be responsible and liable to comply and abide by all the safety rules, instructions and regulations as may be specified and laid down by The TP Southern Odisha Distribution Limited (TPSODL) so as enable TPSODL to achieve its goal of Zero On site incidences.
3. That the Contractor shall be fully responsible for ensuring occupational health and safety of its employees, representatives, agents as well as of its subcontractor's employees, at all times during the discharge of their respective obligations under the contract including any methods adopted for performance of their tasks / work.
4. That Contractor shall ensure ,at its own expense to arrange for and procure, implement all requisite accident prevention tools, first aid boxes, personal protective equipment, fire extinguisher, safety training, Material Safety Data Sheet, pre-employment medical test, etc. for operations & activities including as & when so specified by TPSODL specifically. , failing which TPSODL shall be entitled, but not obliged, to provide the same and recover the actual cost thereof from the Contractor's payments.
5. That the Contractor shall engage adequate and competent Safety – Supervisor / Engineer / Manager / Skilled persons at site as per the Para 5 (Qualification and experience of safety personnel) and Annexure 3 of Contract Safety Management.
6. That the Contractor shall engage the competent Site – Supervisor with each group of workers for safe and correct workmanship, proper co-ordination of material and site work as per contract.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 91 of 105

7. That the Contractor shall immediately replace supervisor in case it is found to be not up to the level of skill and experience required as in skill and experience required in *annexure 5* of this document, but any such replacement shall be only with the prior concurrence of TPSODL .
8. That the Contractor and its subcontractors shall abide by all the safety guidelines as per Safety Manual, Contract Safety Management and other guidelines issued from time to time by TPSODL during the contract period.
9. That in case the Contractor and/or any of its Subcontractor fail to ensure the compliance as required in terms of this undertaking the Contractor shall keep and hold TPSODL / its directors / officers / employees indemnified against any / all losses / damage / expense / liability / fines / compensation / claims / action / prosecutions or the like which might be suffered by TPSODL or to which TPSODL might get exposed to as a result of any breach /wilful negligence /deliberate default on the part of the Contractor /Subcontractor in complying with the same. Contractor shall also furnish any press release, clarification etc. if sought by TPSODL for any near miss or safety violations, accidents, which are attributable to fault of Contractor.

DEPONENT VERIFICATION

Verified at Berhampur on this _Day of _____20__ that the contents of the above affidavit are true and correct and nothing material has been concealed therefrom

DEPONENT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 92 of 105

Annexure 5 (Refer Para 5.4)

SKILL / QUALIFICATION REQUIRED FOR ELECTRICIAN AND ELECTRICAL SUPERVISOR

Skill / Qualifications Required for Electrician (*Certificate of Competency Class-II*):

1. Formal education in ITI – Wireman/ Electrician trade.

OR

2. Working experience of minimum three years of practical wiring.

OR

3. Have completed three years apprenticeship course through Apprenticeship Advisor, Govt. of Odisha / other state Govt. in the trade of Lineman / Wireman / Electrician.
4. A candidate must have attained the age of Eighteen years.

Skill / Qualifications Required for Electrical Supervisor (*Certificate of Competency Class-I*):

1. Have at least five years' experience of practical wiring after passing the certificate of competency class-II i.e. electrician.

OR

2. Recognized Degree or Diploma or equivalent qualification in Electrical Engineering from any Technical institute / College or University recognized by the Board.

AND

Must have completed the training/job in rectifying the common defects in electrical line and power installation for a period of one and three years after passing Degree or Diploma respectively

OR

3. Possessing the valid certificate of certificate of competency class – 1 (Electrical Supervisor)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 93 of 105

Annexure 6 (Refer Para 5.6)

Training Module for BAs Worker & Supervisor

Training for BA Supervisor

Duration – 02 Hrs / Month

Methodology: Lecture and Practical Demonstration of Safety Zone Creation

Session: 1

Topic: Electrical Safety Aspects

Sub Topics:

1. Learning specifics of HT & LT Network of zone
2. Major type of HT / LT / service lines / street light maintenance works
3. Understanding the need of Safety
4. Understanding the safe process of maintenance:
 - Planning of the maintenance job
 - Availability of men, material & machine, PPEs, Safety gear and approved PTW
 - Briefing of the job by the supervisor of the TPSODL
 - Identification of Risks associated with the maintenance work and planning for controlling measures by TPSODL supervisor
 - Creation of safety zone by TPSODL supervisor and satisfying that the network is dead – Use of Neon Tester, Shorting Chain and Safety Tagging
 - Start of the work – Right person for the right job
 - Alert supervision
 - Completion of the job – Check points
 - Energization of network
 - Actions to be taken in case of some accident

Session: 2

Topic: Use of Electrical Testing Equipment

Methodology: Lecture and Practical Demonstration

Sub Topics:

1. Meggar, Hi Pot, Clamp On Meter, Neon Tester, Discharge Rod, Line tester etc.

Session: 3

Topic: Awareness of Electrical Safety Aspects

- A. Understanding the need of this Training and Safety
- B. Learning specifics of HT & LT Network
- C. Major type of work to be carried out in zones
- D. Switching Operations (Do's & Don'ts) including Street Light Switching
- E. Working on Height (*practical demo also*)
- F. Understanding the Safe Process of Maintenance / Working:
 - Planning of the job
 - Availability of men, material & machine, PPEs, Safety gear and approved PTW
 - Briefing of the job by the supervisor
 - Permit to Work
 - Safety Tagging and Lock Out Tag out

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 94 of 105

- Identification of Risks associated with the work to be carried out and planning for controlling measures by proper supervision
- Concept of “**Safety Zone**”
- Identification and use of Neon Tester, Shorting Chain, Clamp on Meter, Hi Pot, Meggar etc.
- Completion of the job – Check points
- Accident Theory & Incident Reporting
- Actions to be taken in case of some accident

Session: 4

Topic: Identification, Demonstration and Usages of Tools, PPEs and other Safety Gears and demonstration of working on HT pole

Session: 5

Topic: Practical demonstration of Safety Zone creation

FREQUENCY

Regular Safety Training Program

- It will be conducted for all field & supervisor staff of BA in such a manner that all BA Personnel attend at least two hours safety training during every month.

One Day Induction Safety Training Programs:

- This training will be for the new BA's personnel, who have been cleared by the Cross Functional Panel to undergo Safety training and who are likely to be deployed at various work sites of TPSODL by the BA, as a part of AMC / Work Contract.

Duration / Periodicity:

- Duration and periodicity has been defined above. However, this is subject to change at the discretion of TPSODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 95 of 105

Annexure 7 (Refer Para 5.7)

LIST OF PERSONAL PROTECTIVE EQUIPMENT AND TESTING FREQUENCY

Sl. No.	Name of PPE	IS / EN Standard	Testing Frequency	Remarks	Ref Brand & Model
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298 (Part-2)	Monthly and visual check every day for any crack or damage in the leather or sole.		BATA (Model No.- Endura L/C) Liberty (Model No. – 7198-01 HT Barton Black – Warrior)
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	Monthly and visual check every day for any crack in shell.		Karam (PN Safetech) Joseph Leslie Accent Industries Honeywell
03	Full body harness (Safety belt)	EN 361	Monthly and visual check every day of the bends and the harness.		Karam (PN Safetech) Joseph Leslie Accent Industries
04	Electrical Safety Gloves	EN: 60903 CE marked	Weekly and visual check for any crack and blow test before every work.	Manufactured not beyond 12 months.	Make Sparian / Sumitech / CATU supplied with inner cotton glove with over glove of split leather.
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	Monthly and visual check every day for any crack in shell.	Clear acrylic visor attached with safety helmet.	Karam (PN Safetech) Joseph Leslie Accent Industries Honeywell
06	Fireproof jacket for chest protection		Monthly and visual check every day.		
07	Safety Chain for shorting cum earthing.	As per TPSODL standard	Weekly and visual check before every work.	Made of brass, Total length – 5.5 meters and made of 12 SWG.	

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 96 of 105

Note:

1. Any other Personal Protection Equipment required beyond above list will be according to BIS or EN Standards.
2. All Personal Protection Equipment will be checked by the engineer in-charge or SAFETY group of TPSODL.
3. Safety Representative of the BA has to maintain the record of the availability, condition and checking of the PPEs.
4. All tools required as per the contract must be according to respective IS / EN standards.
5. TPSODL may revise or add the above list of PPE and their specifications as and when feel necessary. The information about new specifications /models will be circulated by the Engineer In-charge (EIC), which shall adhere by the business associated in the shortest possible time. The EIC shall issue a memo / instruction to BA with timeline for implementation. Any delay will be treated as non- compliance / safety violations. Refer picture of each PPE given in next page.

Pictures of PPE for reference purpose.

Sl. No.	Name of PPE	IS / EN Standard	Picture
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298(Part-2) and with test report of electrical resistance.	
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	
03	Full body harness (Safety belt) The straps at shoulder and thigh shall have full pad for comfort. The back shall be so designed that harness straps do not tangle with each other.	EN 361:2002 EN 358: 2000 IS: 3521:1991/2002	

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 97 of 105

04	Electrical Safety Gloves – Composite type Soft electrical gloves as per size of individual.	EN: 60903 CE marked	
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	
06	Fireproof jacket for chest protection		
07	Safety Chain for shorting cum earthing.	As per TPSODL standard	
08	Reflective jacket to each workman	As per TPSODL standard	

Note: Picture shown are for indicative purpose only. Actual product may differ.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 98 of 105

Annexure 8 (Refer Para 5.8) LIST OF AUDITS TO BE CONDUCTED

Audits	Responsibility	Freq.	Ref. Doc.
Permit to Work & Field Audit	BA Safety Representative	Weekly	F04 (COR P - 12)
Tool Bag & PPE's Audit		Weekly	F06 (COR P - 12)
First Aid Box Maintenance Record		Fortnightly	F08 (COR P - 12)
Fire Extinguisher Record <i>(Applicable for the BA involved in major construction works and have storage of flammable material at worksite)</i>		Monthly	F09 (COR P - 12)
Safety Talk Register		Weekly	F18 (COR P - 12)
Site Safety Audit		Daily	F29A (COR P - 12)

Note:

1. (BA Safety Representative has to use the formats as per Safety process COR – P – 12 of TPSODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 99 of 105

Annexure 9 (Refer Para 5.9)

PERFORMANCE REPORT – SAFETY

FOR THE MONTH OF.....

Name of BA:

Name of the Project and Purchase order No:

Date of commencement of work:

Man Hour Worked in this month (No. of employees X 8 Hrs + Overtime):

Cumulative Man Hour worked:

Total Number of Minor Injury (this month): Minor Injury (Total)

Major Injury (this month): Major Injury (Total):

Detail of the Incident / Sub Standard Acts and Condition

Activity	This Month	Cumulative (Total)	Day Lost (this month)	Days Lost (Cumulative)
No. of the Incident				
No. of lost time injuries				
No. of dangerous occurrences				
No. of near miss reported				
Substandard Act/Conditions observed			Attach details of observation of this month	
Safety Violation Notice received (from TPSODL) (both in numbers and in Rs.)	No.	No.	No. of violation letter received and compliance report for the TPSODL.	
	Rs.	Rs.		

Note: Cumulative means total from date of commencement of work according to the contract.

Detail of the Accident / Near Miss Incidents:

Date and Time	Type of the incident	Name of Employee	Brief Description	Corrective and Preventive actions recommended

Details of the Safety Violations:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 100 of 105

Date and Location	Brief Description	Name of employee involved	Action Taken

Detail of the Safety Talk / Toolbox Talk / Safety Training

Date and Location	Topic (s)	Total Number of employees (Worker / Supervisor)	Number of participants (Worker / Supervisor)

Detail of the Safety Meeting

Date and Location	Number of participants	Topics discussed	Major Observations / Innovation

Detail of the Safety Inspection /Audit: (as per TPSODL site audit checklist F29A(COR-P-12)

Date	Area / Location	Major Observations	Recommendations	Action Taken

Any other Safety, Occupational Health, Environment & Disaster Management Promotional Activity (During this month):

Date	Location	Activity	Level of Participation	Number of participations

Signature of the BA Safety Representative
HoG

Signature of ZM /

Name, E. No. and Date

Name, E. No. Date.

Note: The original form to be deposited with Engineer in-charge and a copy to SAFETY group on or before 5th of every month along with bill. List of training of the current month and status of PPE to be also mentioned individual wise.

BA may include additional lines if required. The TPSODL may revise the format as and when deemed required.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 101 of 105

ANNEXURE-M
VENDOR APPRAISAL FORM

TO BE SUBMITTED BY VENDOR (To be filled as applicable)			
VENDOR:			
1.0	DETAILS OF THE FIRM		
	1.1	NAME (IN CAPITAL LETTERS)	:
	1.2	TYPE OF CONCERN (PROPRIETORY) Partnership, Pvt. Ltd., Public Ltd. etc.	:
	1.3	YEAR OF ESTABLISHMENT	:
	1.4	LOCATION OF OFFICE POSTAL ADDRESS TELEGRAPHIC ADDRESSES, TELEX NO. FAX NO.	:
	1.5	LOCATION OF MANUFACTURING UNITS	:
		i) UNITS 1	:
		ii) OTHER UNITS	:
2.0	PRODUCTS MANUFACTURED		:
3.0	TURNOVER DURING THE LAST 3 YEARS (TO BE VERIFIED WITH THE LATEST PROFIT & LOSS STATEMENT).		:
4.0	VALUE OF FIXED ASSETS		:
5.0	NAME & ADDRESS OF THE BANKERS		:
6.0	BANK GUARANTEE LIMIT		:
7.0	CREDIT LIMIT		:
8.0	TECHNICAL		
	8.1	NO. OF DESIGN ENGINEERS (INDICATE NO. OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	8.2	NO. OF DRAUGHTSMEN	:
	8.3	COLLABORATION DETAILS (IF ANY)	:
		8.3.1 DATE OF COLLABORATION	:
		8.3.2 NAME OF COLLABORATOR	:
		8.3.3 RBI APPROVAL DETAILS	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 102 of 105

		8.3.4 EXPERIENCE LIST OF COLLABORATORS	:
		8.3.5 DURATION OF AGREEMENT	:
	8.4	AVAILABILITY OF STANDARDS / DESIGN PROCEDURES / COLLABORATOR'S / DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT	:
	8.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	8.6	QUALITY OF DRAWINGS	:
9.0	MANUFACTURE		
	9.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	:
	9.2	POWER (KVA)	:
		MAINS INSTALLED	:
		UTILISED	:
		STANDBY POWER SOURCE	:
	9.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENT AS APPLICABLE)	:
		9.3.1 MATERIAL HANDLING	:
		9.3.2 MACHINING	:
		9.3.3 FABRICATION	:
		9.3.4 HEAT TREATMENT	:
		9.3.5 BALANCING FACILITY	:
		9.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:
	9.4	SUPERVISORY STAFF	:
	9.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	:
	9.6	NO. OF SHIFTS	:
	9.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	:
	9.8	WORKMANSHIP	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 103 of 105

	9.9	MATERIAL IN STOCK AND VALUE	:	
	9.10	TRANSPORT FACILITIES	:	
	9.11	CARE IN HANDLING	:	
10.0	INSPECTION / QC / QA / TESTING			
	10.1	NUMBER OF PERSONNEL (INDICATE NO. OF YEARS OF EXPERIENCE)	:	
	10.2	INDEPENDENCE FROM PRODUCTION	:	
	10.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:	
	10.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:	
	10.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:	
	10.6	STAGE INSPECTION AND DOCUMENTATION	:	
	10.7	SUB-ASSEMBLY & DOCUMENTATION	:	
	10.8	FINAL INSPECTION AND DOCUMENTATION	:	
	10.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	:	
	10.10	TYPE TEST FACILITIES	:	
	10.11	ACCEPTANCE TEST FACILITIES	:	
	10.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	:	
	10.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC. (AS APPLICABLE)	:	
	10.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:	
	10.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNISED LABORATORIES	:	
		i) FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	:	
		ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:	
11.0	EXPERIENCE (INCLUDING CONSTRUCTION / ERECTION / COMMISSIONING) TO BE FURNISHED IN THE FORMAT INDICATED IN APPENDIX)			:
12.0	SALES, SERVICE AND SITE ORANISATIONAL DETAILS			:
13.0	CERTIFICATE FROM CUSTOMERS (ATTACH COPIES OF DOCUMENTS)			:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 104 of 105

14.0	POWER SITUATION	:
15.0	LABOUR SITUATION	:
16.0 *	APPLICABILITY OF SC/ST RELAXATION (Y/N) IF YES, SUPPORTING DOCUMENTS TO BE ATTACHED	
17.0	ORGANIZATIONAL DETAILS 1. PF NO 2. ESI NO 3. INSURANCE FOR WORK MAN COMPENSATION ACT NO 4. ELECTRICAL CONTRACT LIC NO 5. ITCC / PAN NO 6. SALES TAX NO 7. WC TAX REG. NO	:
18.0	DOCUMENTS TO BE ENCLOSED: 1. FACTORY LICENSE 2. ANNUAL REPORT FOR LAST THREE YEARS 3. TYPE TEST REPORT FOR THE ITEM 4. PAST EXPERIENCE REPORTS 5. ISO CERTIFICATE –QMS, EMS, OHAS, SA 6. REGISTRATION OF SALES TAX 7. COPY OF TIN NO. 8. COPY OF SERVICE TAX NO. 9. REGISTRATION OF CENTRAL EXCISE 10. COPY OF INCOME TAX CLEARANCE. 11. COPY OF PF REGISTRATION 12. COPY OF ESI REGISTRATION 13. COPY OF INSURANCE FOR WORK MAN COMPENSATION ACT NO 14. COPY OF ELECTRICAL CONTRACT LIC NO 15. COPY OF PAN NO 16. COPY OF WC TAX REGISTRATION 17. DOCUMENTS IN SUPPORT OF SC/ST RELAXATION AT S.NO.16.0 18. GST Registration No	

* Classification of BA s under SC/ST shall be governed under following guidelines:

- **Proprietorship/ Single Ownership Firm:** Proprietor of the firm should be from SC/ST community. Governing document shall be Proprietorship Deed.
- **Partnership Firm:** Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed.
- **Private Limited Company:** Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

NOTE: Certification from SC/ST Commission shall be required for deciding upon SC/ST status of a person.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	3	Page 105 of 105

ANNEXURE-N
MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:

Tender Enquiry No.:

To,

Chief (Procurement & Stores)

TP Southern Odisha Distribution Limited,
Berhampur

Sir,

WHEREAS M/s. [name of OEM], who are official manufacturers of having factories at [address of OEM] do hereby authorize M/s [name of bidder] to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us

.....

and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the Special Conditions of Contract or as mentioned elsewhere in the Tender Document, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

We hereby confirm that in case, the channel partner fails to provide the necessary services as per the Tender Document referred above, M/s [name of OEM] shall provide standard warranty on the materials supplied against the contract. The warranty period and inclusion / exclusion of parts in the warranty shall remain same as defined in the contract issued to their channel partner against this tender enquiry.

Yours Sincerely,

For

Authorized Signatory

TPWODL	TP WESTERN ODISHA DISTRIBUTION LIMITED	
	WORK INSTRUCTION /OPERATING GUIDELINES	
Doc. Title	GENERAL CONDITIONS OF CONTRACT- COMPOSITE ORDERS	
Rev. No	1	Page 1 of 104

CONTENTS	
CLAUSE NO.	DESCRIPTION
1.0	ORGANIZATIONAL VALUES
2.0	ETHICS
3.0	CONTRACT PARAMETERS
3.1	Issue/ Award of Contract
3.2	Contract Commencement Date
3.3	Contract Completion Date
3.4	Contract Period/Time
3.5	Contract Execution Completion Date
3.6	Contract Execution Period/Time
3.7	Contract Price /Value
3.8	Contract Document
3.9	Contract Language
3.10	Reverse Auction
4.0	SCOPE OF WORK
4.1	Indemnity
4.2	Display of notice boards at work site
4.3	Disposal of waste at site
4.4	Deployment of workforce
4.5	Damage of Properties
4.6	Issuance of material
4.7	Company's right to use works
4.8	Rights of TPWODL to vary the scope work
5.0	PRICES/RATES/TAXES
5.1	For Supply part of Contract
5.2	For Service part of Contract
5.3	Changes in statutory Tax Structure
6.0	TERMS OF PAYMENT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 2 of 104

CONTENTS	
CLAUSE NO.	DESCRIPTION
6.1	Pre-Requisites for Payment
6.2	Bills & Invoices
6.3	Payment & Statutory Deductions
6.4	Guidelines for Raising Running/Final Bills
6.5	Quantity Variation
6.6	Full and Final Payment
7.0	MODE OF PAYMENT
8.0	SECURITY CUM PERFORMANCE DEPOSIT
9.0	STATUTORY COMPLIANCE
9.1	Compliance to Various Acts
9.2	SA 8000
9.3	Affirmative Action
9.4	MSME Development ACT 2006
9.5	Compliance to Labour Laws
9.6	Compliance to C&D Waste Management Rules & Environment (Protection) Amendment Rules
10.0	QUALITY
10.1	Knowledge of Requirements
10.2	Material/Equipment/Works Quality
10.3	Adherence to Rules & Regulations
10.4	Specifications and Standards
11.0	SAFETY
12.0	INSPECTION/PARTICIPATION
12.1	Right to Carry Out Inspection
12.2	Facilitating Inspection
12.3	Third Party Nomination
12.4	Waiver of Inspections
12.5	Incorrect Inspection Call
13.0	MDCC & DELIVERY OF MATERIALS

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 3 of 104

CONTENTS	
CLAUSE NO.	DESCRIPTION
13.1	Material Dispatch Clearance Certificate
13.2	Right to Rejection on Receipt
13.3	Consignee
13.4	Submission of Mandatory Documents on delivery
13.5	Dispatch and Delivery Instructions
14.0	GUARANTEE
14.1	Guarantee of Performance
14.2	Guarantee period
14.3	Failure in Guarantee period (GP)
14.4	Cost of repairs on failure in GP
14.5	Guarantee Period for Goods Outsourced
14.6	Latent Defect
14.7	Support beyond the Guarantee Period
15.0	LIQUIDATED DAMAGES
15.1	LD Waiver Request
15.2	Material Recovery
16.0	ASSIGNMENT OR SUBCONTRACTING
17.0	UNLAWFUL ACTIVITIES
18.0	CONFIDENTIALITY
18.1	Documents
18.2	Geographical Data
18.3	Associate's Processes
18.4	Exclusions
18.5	Violation
19	INTELLECTUAL PROPERTY RIGHTS
20	INDEMNITY
21	LIABILITY & LIMITATIONS
21.1	Liability
21.2	Limitation of Liability

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 4 of 104

CONTENTS	
CLAUSE NO.	DESCRIPTION
22.0	FORCE MAJEURE
23.0	SUSPENSION OF CONTRACT
23.1	Suspension for Convenience
23.2	Suspension for Breach of Contract Conditions
23.3	Compensation in lieu of Suspension
24.0	TERMINATION OF CONTRACTS
24.1	Termination for default/breach of contract
24.2	Termination for convenience of associate
24.3	Termination for Convenience of TPWODL
25.0	Dispute resolution and Arbitration
25.1	Governing laws and jurisdiction
26.0	ATTRIBUTES OF GCC
26.1	Cancellation
26.2	Severability
26.3	Order of Priority
27.0	INSURANCE
28.0	ERRORS AND OMISSIONS
29.0	TRANSFER OF TITLES
30.0	SUGGESTIONS & FEEDBACK
31.0	CONTACT POINTS
32.0	LIST OF ANNEXURES

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 5 of 104

1.0 ORGANIZATIONAL VALUES

The Tata Group has always been a value driven organization. These values continue to direct the Group's growth and businesses. The Six core Tata Values underpinning the way we do business are:

Integrity - We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.

Understanding - We must be caring, respectful, compassionate and humanitarian towards our colleagues and customers around the world and always work for the benefit of India.

Excellence - We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of goods and services we provide.

Unity - We must work cohesively with our colleagues across the group and with our customers and partners around the world to build strong relationships based on tolerance, understanding and mutual co-operation.

Responsibility - We must continue to be responsible and sensitive to the countries, communities and environments in which we work, always ensuring that what comes from the people goes back to the people many times over.

Agility - We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 ETHICS

In our effort towards Excellence and in Management of Business Ethics at TPWODL, an Ethics Management Team is constituted.

The main objective of the Ethics Management Team is to:

1. Record, address and allay the issues and concerns on ethics raised by different stakeholders like employees, consumers, vendors, associates etc. by initiating immediate corrective actions.
2. Ensure proper communication of the ethics policies and guidelines through prominent displays at all offices of TPWODL and through printed declarations in all concerned documents where external stakeholders are involved.
3. Ensure proper framework of policies as preventive measures against any ethics violation recorded by them.
4. Prepare and submit MIS of all issues and concerns, corrective and preventive actions on monthly basis to the top management for their information.
5. All Associates and Stakeholders are requested to register any grievance on ethics violation on TPWODL website www.tpWesternodisha.com

3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 6 of 104

TPWODL awards the contract to the Associate in writing in the form of Purchase order or Rate Contract (RC) hereafter referred as Contract, through in any or all of following modes- physical handover / post / e-mail / web document / fax with all the attachments/enclosures which shall be part of the contract document

On receipt of the contract, the associate shall return to TPWODL copy of the contract document duly signed by legally authorized representative of associate, within two days of Effective Date of Contract for contracts having contract execution time less than 30 days and within five days for all other contracts.

3.2 Contract Commencement Date

The date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.3 Contract Completion Date

The date of expiry of Guarantee Period (detailed in section 12 of this document) shall be deemed as the Contract Completion Date.

3.4 Contract Period/Time

The period from Contract Commencement Date to Contract Completion Date shall be deemed as the Contract Period/Time.

3.5 Contract Execution Completion Date

The stipulated date for completing the execution of all items in the schedule of quantities (Supply, Service and or both as applicable) shall be deemed as the Contract Execution Completion Date.

3.6 Contract Execution Period/Time

The Period from Contract Commencement Date to Contract Execution Completion Date shall be the Contract Execution Period/Time. Timely Completion of Works/Timely Delivery of Materials is the essence of the contract. The period from effective date of contract to the date stipulated for completion of delivery of all items/completion of all the works/services, as per schedule of quantities of the contract is defined as contract execution completion time. The Delivery of Materials /The Completion of Works, as applicable, should be achieved in all respects as per schedules of quantities and all the terms and conditions of the contract, in the contract execution time.

Any revision/amendment in the originally stipulated contract execution time has to be approved by authorized representative of TPWODL.

3.7 Contract Price /Value

The total all inclusive price/value mentioned in the LOI/PO/RC of the contract document is the Contract Price/Value and is based on the quantity, unit rates and prices quoted and awarded and shall be subject to adjustment based on actual quantities supplied/actual measurement of work done and accepted and certified by the authorized representative of the company unless otherwise specified in schedule of quantities or in contract documents.

3.8 Contract Document

The Contract Document shall mean and include but not limited to the following:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 7 of 104

- NIT/Tender Enquiry, QR, Instruction to Bidders, Special Condition of Contract (SCC) of tender, GCC, Technical & Commercial Specifications including relevant annexure and attachments).
- Bids & Proposals Received from Associate including relevant annexure/attachments.
- Letter of Intent (LOI/RC/PO) with agreed deviations from the tender/bid documents.
- All the Inspection and Test reports, Detailed Engineering Drawings.
- Material Dispatch Clearance Certificate (MDCC).
- Minutes of Meeting (MoM)

3.9 Contract Language

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language.

The Contract documents and all correspondence between the TPWODL, Third Parties associated with the contract, and the Associate shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi, and local languages.

3.10 Reverse Auction

TPWODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached in Annexure J. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form as mentioned in the Annexure J as a token of acceptance for the same.

Bid validity will stand get automatically extended from the date of latest Negotiation event i.e. Reverse Auction or Manual Negotiation and accordingly bid shall be valid further

- i. For minimum 45 days if original bid validity duration is lesser than 45 days at latest negotiation date.
- ii. For actual bid validity duration if original bid validity is more than 45 days at latest negotiation date.

4.0 SCOPE OF WORK

All the activities that are to be undertaken by the Associate to realize the contractual deliverables in completeness form Scope of Work. Following clauses list, but not limited to, major requirements of the scope of work.

The associate shall satisfy himself and undertake fully the technical/commercial requirements of items to be supplied as listed in the Schedule of Quantities together with the tests to be performed /test reports to be furnished before dispatch, arrangement of stage and final inspections during manufacturing as per terms and conditions of contract, technical parameters & delivery terms and conditions including transit insurance to be met in order to fully meet TPWODL's requirements.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 8 of 104

Completeness: Any supplies and services which might have not been specifically mentioned in the Contract but are necessary for the scope mentioned in Special Terms & Conditions and/or completeness of the works at the highest possible level, including any royalties, license fees & compensation to be paid, whether incurred by the associates or by a third party for the work covered in the scope, regardless of when incurred, shall be supplied/provided by the associate without any extra cost and within the time schedule for efficient, smooth and satisfactory operation and maintenance of the works at the highest possible level under Indian conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this Contract.

TPWODL have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by submitting a request in writing to the Associate. The Associate shall, within fifteen days of receipt of such request from the TPWODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPWODL requests a change, the Contract price and time shall be adjusted upwards or downwards, as the case may be and shall be mutually agreed to. The associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes as requested till adjustment of contract price and time schedule where so applicable in terms of or otherwise directed by the TPWODL.

4.1 Indemnity

Associates shall undertake to fully indemnify TPWODL (also referred to as the Company in the GCC) against all kinds of liabilities or damages, of whatsoever nature, including compensation arising from any accident to the person or property of those in Associate's employment or to any other person or properties including those of TPWODL, arising due to reasons attributable to any, act, omission or negligence of the Associate the Associates, for the entire period of contract including period of guarantee.

Within 7 days of award of work, the Associates shall submit Indemnity Bond in the format as per Annexure-E to Order Issuing Authority.

Contract having value more than Rs 2 Cr per Annum, Associates shall submit Indemnity Bond on Rs 100/- Non Judicial Stamp Paper in the format as per Annexure- E to Order Issuing Authority.

4.2 Display of Notice Boards at Work Sites

The Associate shall put up display notice board at each project site where the works are in progress indicating the information given below:

- Name of the Project.
- Estimated Cost of Project.
- Date of Commencement.
- Expected date of completion.
- Name of Associate and his telephone number.
- Name of Engineer-in-Charge and his telephone number.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 9 of 104

4.3 Disposal of Waste at Site

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change.

The associates shall follow the below criteria for disposal of waste at site during the execution of project.

- Associate shall ensure that the detailed project plan include the waste management, segregation of all designated waste material (Recyclable/ Non-Recyclable), collecting, storing, disposing and transferring the same to pre-arranged facility/destination in timely and safe manner as per environmental legislations during the execution of project. The project plan shall also include the innovative construction practice to eliminate or minimize waste, protect surface/ground water, control dust and other emissions to air and control noise during the execution of project. The copy of same shall be given to EIC before the commencement of project.
- The purchase policy of BA shall encourage the procurement of material with recycled and minimum packaging of goods during delivery. Associate shall provide the appropriate means for site to site transportation of materials to avoid damage and litter generation.
- Associate shall educate and inform to its project team about the requirement and responsibilities for waste minimization and disposal in general and provide training of practices that support this. Waste management should be treated like a safety program.
- In the event that area of contaminated or biological hazard is identified, Associate shall ensure that plant, equipment, personnel and any activity associated with the work is carried out in consultation with EIC of TPWODL.
- Associate shall ensure that the residents living near the site are kept informed about proposed working schedule and shall informed timings and duration of any abnormal noise full activity that is likely to happen.
- Associate shall ensure the regular maintenance and monitoring of vehicles and equipment for efficient fuel use so that emissions and noise are within acceptable limits to avoid air pollution.

4.4 Deployment of Work Force

Associate shall deploy adequate labour as considered necessary by TPWODL for execution of the contract including Sundays and Holidays whenever required to do so with no extra cost to TPWODL. However, prior permission shall be taken from the site Engineer to carry out the work beyond normal working hours or on Sundays and Holidays. Female employees shall not be deployed beyond normal working hours/days and no child labour shall ever be deployed. Associate shall depute full time qualified and experienced engineers to supervise the work at site. All such staff shall be maintained from commencement to completion of all works to the entire satisfaction of the Engineer-in-Charge. Associate's employees deployed for the works under this contract will not be considered in Company's employment at any time. Associate shall continue to be responsible for all such employees, their safety, all types of statutory compliances related thereto and in any other manner whatsoever. The company

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 10 of 104

will stand indemnified by the Associate in respect of all the above. At the same time Company upon noticing any breach or default on any statutory compliances, may at their sole discretion, decide to act in a manner as deemed fit at the risks and costs of the Associate.

TPWODL shall have the right to instruct the Associate to change the Sub- Associates or skilled /unskilled workers in case the conduct, the workmanship or speed of the work is not satisfactory.

Associates shall submit duly signed undertaking regarding engagement of competent staff / employee commensurate to the nature of job to Engineer-in-charge in the format attached as Annexure – H.

4.5 Damages to Properties

The Associates shall take necessary steps to ensure that the equipment and installations of the Company, third parties, including other utility services like water supply pipelines; open drains telephone cables etc. are not damaged during execution of the works. The Associates shall be responsible for all such damages and shall have to repair/ replace and/or compensate for the entire claims in respect of such damages at its own cost.

4.6 Issuance of Material

The material issued to the Associate shall be in the custody of the Associates who shall be fully responsible for the same. After completion of the works, the Associates will reconcile the material. Any cost of material which is short or damaged/lost will be deducted from Associate bill/ deposits.

4.7 Company's Right To Use Works

If Taking Over Certificate is delayed for any reason, for which TPWODL's decision shall be final and binding upon the Associate, the Company shall be entitled to use the works or portion thereof without affecting Associate's responsibility and liability to complete the balance works as per company's directives from time to time, though Associate shall be afforded reasonable opportunity by the company to enable Associates to complete all balance works required for issuance of 'Taking Over Certificate' by the company.

4.8 Rights of TPWODL to vary the scope work

TPWODL shall have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by communicating the intent to do so in writing to the Associate. On receipt of such communication the Associate shall, within the time frame specified in the contract shall provide TPWODL with a reasonably detailed estimate of the cost of the change in scope outlined in the TPWODL communication. The change in the Contract price and time shall be revised upwards or downwards, as the case may be, and shall be mutually agreed to. The Associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes in the scope of work till such time revision of Contract price and time schedule are approved and communicated to the associate by TPWODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 11 of 104

Any change in the Scope of Work and/or Terms & Conditions of the order shall be intimated by TPWODL through an amendment to the contract. The amendment shall be treated valid only if signed by the authorized signatory of the original contract.

5.0 PRICES/ RATES/ TAXES

5.1 For Supply part of Contract

Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPWODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPWODL store/site & unloading & delivery at TPWODL stores/TPWODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices/rates shall remain firm till actual completion of entire supply of goods/material/equipment as per contract is achieved and shall remain valid till the completion of the contract.

The prices shall remain unchanged irrespective of TPWODL making changes in quantum in all or any of the schedules of items of contract.

5.2 For Service part of Contract

The Prices and Rates are inclusive of cost of materials supplied as per contract terms and for which MDCC is issued by TPWODL and to the extent required for completion of works, cost of service executed as per schedule of quantities, cost of testing as per contract terms, cost of documentations including all relevant test certificates and other supportive documents to be furnished as per contract terms. The rates shall remain firm till actual completion of contract.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices shall remain unchanged irrespective of TPWODL making changes in quantum in all or any of the schedules of items of contract.

5.3 Changes in Statutory Tax Structure

If rate of any or all of the statutory taxes and duties applicable to the contract changes, such changes shall be incorporated by default if the changes occur within the contract execution time and shall be applicable if the contract is executed by the Associate within the Contract Execution Time.

For execution of contracts beyond contract execution time, where the delay is not attributable to TPWODL no upward revision in tax /duties shall be considered irrespective of changes in the statutory tax structure either within the contract execution time or beyond. However, in such cases, benefits due to any downward revisions in statutory tax rates shall be passed on to TPWODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 12 of 104

6.0 TERMS OF PAYMENT

- A. 5% of the Release Order/ Purchase Order price shall be paid as initial interest free advance on fulfillment of the following by the Associate:
 - a) Acceptance of PO/ LOI.
 - b) Submission of advance payment BG of 15% of the Release Order/ Purchase Order price which shall remain valid till the advance is fully adjusted.
 - c) Submission of Contract Performance Bank Guarantee of 5/10% of the RC/ PO price valid till 30 days after taking over of the works.
- B. 10% of the Release Order/ Purchase Order price shall be paid as interest free advance against approval of drawings under Category-1 of major drawings, Quality Plans, Pert Chart, Field Quality Plan, posting of Project Manager and commencement of the first mile stone of the work mutually agreed including C-3 Form, and submission of a true copy of 'Erection All Risk Insurance Policy' taken for the awarded jobs. The drawing list shall be mutually agreed at the time of award of work.
- C. 50% on account payment of the total of item wise cost of material Release Order/ Purchase Order shall be paid against receipt of material at site in good condition and certification by TPWODL along with bills complete in all respects viz. MDCCs etc.
- D. 20% on account payment of the actual executed value shall be paid against mechanical completion of erection on prorata basis against monthly bills and 70% on account of the actual executed value shall be paid against the service line item including composite line item. In case this milestone is not completed beyond 120 days for reasons attributable to TPWODL, the payment corresponding to supply part shall be released subject to submission of BG of equivalent amount by the BA valid for a period of further 12 months. If required, it shall be extended by the BA on request of TPWODL.
- E. 15% payment of the actual executed Release Order/ Purchase Order shall be paid after completion of acceptance test and Taking Over of the complete systems specified in the enquiry, including clearance of Electrical Inspection, compliance of final punch point and after reconciliation & adjustment of payments, if any, towards Quantities of materials issued from purchaser's stock and consumed by the contractor for expeditious completion of the job. In case this milestone is not completed beyond 120 days beyond schedule for reasons attributable to TPWODL, the payment corresponding to supply part shall be released subject to submission of BG of equivalent amount by the BA valid for a period of further 12 months. If required, it shall be extended by the BA on request of TPWODL.

The Contractor shall submit all Operation & Maintenance manuals and "As Built Drawings" etc. and shall also submit Equipment Warranty Bank Guarantee (EWBG) equivalent to 5/10% of actual executed contract price before the release of this last payment and return of CPBG. The validity of EWBG shall be for a period of 15 months from the date of taking over of the works or specified guarantee period in drawing/tender/technical specification documents etc. whichever is later. The associate shall also submit 'No Demand Certificate' at the time of receipt of full and final payment.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 13 of 104

6.1 Pre-Requisites for Payment

- Associate should have completed execution of that part of contract, for which payment is sought, to the satisfaction of TPWODL's Engineer-in-Charge responsible for the contract and obtained certification for execution of the work.
- Associate has undertaken joint measurement of the work executed along with TPWODL's Engineer-in-charge
- Associate's bills/invoices submitted have been certified by Engineer-In-Charge.

6.2 Bills & Invoices

Unless specified otherwise in the special conditions of contract, Associate shall raise not more than one invoice/contract per month for the services rendered in the prescribed Tax Format and the invoice shall be submitted within 15 days of the following month at Bill Inward Receipt Desk (BIRD) Receipt Desk / Invoice Desk / Office of CFO, TPWODL located at TPWODL Corporate Office, Burla, Sambalpur, Odisha, India – 760 004

All Bills shall be supported by joint measurement of work done, quality test report and a copy of wage sheet, if applicable (showing proof of having disbursed wages as per applicable law) and a copy of statement substantiating that statutory payments having been affected.

Bills/ invoices shall mention Associate's 'Sales, Service, WCT Tax Registration Number, PAN number as applicable.

Final bill submission after completion of project or execution of job must be within 30 days from the actual date of completion/execution of work awarded.

6.3 Payment & Statutory Deductions

Payment shall be released within 30 days from the submission of the bills. The associate shall submit "No Demand Certificate" in the format as per Annexure-D at the time of receipt of full and final payment. In case any non-compliance to contract conditions comes to TPWODL's notice, TPWODL will be entitled to deduct 30% of estimated wages plus 20% of wages as TPWODL's overheads. Associates would be obliged to provide the copy of monthly wage sheet in any case, failing which no payment shall be made. TPWODL at their sole discretion may deposit the PF etc. with statutory authorities. TPWODL will deduct the amounts of TDS as per statutory requirement under the income tax act and the DVAT Act and certificates (wherever applicable) will be issued to associate accordingly.

In case of non-submission of PAN No TDS @ 20% shall be deducted from all payable amounts for which no TDS certificate shall be issued. TDS once deducted as above shall not be revised in any condition.

6.3.1 Statutory Deductions

TPWODL will deduct the amounts of TDS, TCS as per statutory requirement under the income tax act, the Goods and Services tax act, BOCW Act, or any other applicable tax act and certificates (wherever applicable) will be issued to associate accordingly. For consumption of TPWODL's Water and Electricity by Associate for execution of Contract, Associate shall pay 0.5% & 1.0% respectively of contract value and it shall be deducted from the running bills. The Engineer-in-Charge as stated in the Order shall be responsible for certification of the work executed and the bills. Bills (including original) shall be submitted in

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 14 of 104

triplicate at Bill Inward Receipt Desk (BIRD) / Invoice Desk / Office of CFO, TPWODL located at TPWODL Corporate Office, Corporate Office, Burla-768017, Odisha,

6.4 Guidelines for Raising Running/Final Bills

Contract Value Up to 5 Lakhs	One Final Bill
Contract Value More than 5 lakhs	Monthly Running Bill & One Final Bill

All Bills shall be processed only when all bank Guarantees are in place and before payments of Final Bill Associate have to furnish NDC.

6.5 Quantity Variation

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by TPWODL and not on the basis of contract quantity.

6.6 Full and Final Payment

Full & Final Payment in all contracts shall be made subject to the associate submitting "No Demand Certificate" in the format as per Annexure-D.

7.0 MODE OF PAYMENT

Payment shall be made through RTGS mode for which Business Associated shall submit the details of Bank Account and other details as per annexure K. Further, for any payments made, TPWODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate.

The quantities of items indicated are estimated and preliminary. However, payments shall be made on the basis of actual quantity of work carried out and measured jointly by the Company and the Associate. Associates shall be responsible to organize joint measurements of works with TPWODL Engineer-in-Charge before raising any bill of work done. In the event Associate fails to do so, TPWODL at their sole discretion, may take measurements of work done and proceed as deemed fit and in such an event Associate's right to lodge any subsequent claim shall stand forfeited.

8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 15 days from the effective date of issue of PO/RC, Security cum Performance Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPWODL for:

(a) 5% of the PO value if purchase order value is more than Rs 5 Crores.

(b) 10% of the PO value if purchase order value is less than Rs 5 Crores.

This shall remain valid till the end of the Guarantee Period of contract, plus one month.

(c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.

- For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 15 of 104

TPWODL while processing the invoice and shall be released after completion of Guarantee Period plus one month.

- For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable.
- In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPWODL. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. Guarantee Period plus one month.

9.0 STATUTORY COMPLIANCE

9.1 Compliance to Various Acts

Associate should ensure adherence to all applicable laws, rules and regulation applicable under this contract from time to time. In case of violation any risk, costs etc shall be in associates account and keep TPWODL indemnified always till completion of contracts.

9.2 Social Accountability

TPWODL expects its Associates to follow guidelines of best practices on the following aspects

1. Child Labour
2. Forced or Compulsory Labour
3. Health & Safety
4. Freedom of Association & Right to Collective Bargaining
5. Discrimination
6. Disciplinary Practices
7. Working Hours
8. Remuneration
9. Management System

9.3 Affirmative Action

TPWODL appreciate and welcome the engagement/employment of persons from SC/ST community or any other deprived section of society by their business associates.

Relaxation in Contract Clauses under Affirmative Action for SC/ ST Business Associates**

TPWODL believes that inclusive growth is the key to sustainable development, and to promote the same Policy on Affirmative Action for Scheduled Caste & Scheduled Tribe Communities has been adopted across the company.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 16 of 104

Under the same pre-text, and to promote entrepreneurship among SC/ST community TPWODL has taken initiative by proposing relaxations in contract clauses as per below:

S. No.	Initiative	for SC/ ST BA's	Guideline Document
1	Tender Fees	100% waiver for SC/ST community	All Open Tenders
2	Earnest Money Deposit	50 % relaxation of estimated EMD value	All limited and Open Tenders
3	Performance Bank Guarantee	25% relaxation in PBG for order value above 50 lacs else 50% relaxation	All limited and Open tenders
4	Turnover	25% relaxation in company turnover under qualifying requirement criteria	All Open Tenders

****Classification of BAs under SC/ST shall be governed under following guidelines:**

- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be duly audited balance Sheet for the last FY bearing the name of proprietor.
- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and audited balance sheet/ ITR for last FY.
- Private limited company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Certification from SC/ST commission shall be required for deciding upon SC/ST status of a person.

9.4 MSME Development ACT 2006

Provisions for Firms falling in The Micro, Small and Medium Enterprise Development Act 2006:-

- i. Business Associate is requested to inform the TPWODL if they fall under provisions of the Micro, Small and Medium Enterprises Development Act, 2006 legislation, and provide necessary documents to TPWODL. The Associate also needs to mention the relevant details on their invoice / bill.
- iii. Business Associate shall submit the self-undertaking of registration in MSME category at the time of bidding as well as on an annual basis to TPWODL, enabling them to avail the consequent benefits, failing which TPWODL may take appropriate action against such defaults.
- iv. Business Associates falling in MSME category are exempted from submitting the Tender Fee when participating in TPWODL tenders. Also they are eligible to submit concessional EMD at 50% of the EMD otherwise applicable.

9.5 Compliance to Labour Laws

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 17 of 104

Bidder needs to ensure compliance to applicable labour laws including timely disbursement of wages. In case wages are not disbursed as per the stipulated timelines, then TPWODL shall pay the wages to BA employees on behalf of BA. Apart from deducting the amount of wages paid, TPWODL shall deduct an additional service charge equivalent to 25% of the wages paid from the payment due to BA.

9.6 Compliance to Construction and Demolition Waste Management Rules & Environment (Protection) Amendment Rules

BA is liable to follow the Construction and Demolition Waste Management Rules- 2016, Environment (Protection) Amendment Rules- 2018 and Guidelines on dust mitigation measures in handling construction material and C&D wastes issued by CPCB.

Following are some main points of above Rules/Guidelines for Construction work, cable laying jobs etc.

1. Barricading to be provided at site to cover complete area.
2. Construction material and waste should be inside the closed area made by using barricading.
3. Water sprinkling/fine spray from nozzles to be done to suppress the dust.
4. The board of Dust mitigation measures shall be displayed at site for public viewing with required details.
5. Loose sand or soil and construction material that causes dust shall be covered.
6. Transport material that are easily wind borne need to be covered by a sheet made of either jute, tarpaulin, plastic or any other effective material.
7. All areas for storing C&D waste/construction material to be demarcated and preferably barricaded particularly those materials that have potential to be dust borne.
8. Grinding and cutting of building materials in open area shall be prohibited.
9. Construction material and waste should be stored only within earmarked area and roadside storage of construction material and waste shall be prohibited.
10. No uncovered vehicles carrying construction material and waste shall be permitted.
11. Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures to be notified at the site.

10.0 QUALITY

10.1 Knowledge of Requirements

The Associate shall be deemed to have carefully examined and to have knowledge of the equipment, the general and other conditions, specifications, schedules, drawings, etc. forming part of the Contract and also to have satisfied himself as to the nature and character of the work to be executed and the type of the equipment and duties required including wherever necessary of the site conditions and relevant matters and details. Any information thus procured or otherwise obtained from TPWODL/Consultants shall not in any way relieve the Associate from his responsibility and executing the works in accordance with the terms of contract.

10.2 Material/Equipment/Works Quality

The items / works under the scope of the Associate shall be of the best quality and workmanship according to the latest engineering practice and shall be manufactured from

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 18 of 104

materials of best quality considering strength and durability for their best performance and, in any case, in accordance with the specifications set forth in this Contract. All material shall be new. Substitution of specified material or variation from the process of fabrication/construction/manufacture may be permitted but only with the prior written approval of the TPWODL.

10.3 Adherence to Rules & Regulations

The Associate shall procure and/or fabricate/erect all materials and equipment in accordance with all requirements of Central and State enactment, rules and regulations governing such work in India and at site. This shall not be construed as relieving the Associate from complying with any requirement of TPWODL as enumerated in the Contract which may be more rigid than and not contrary to the above mentioned rules, nor providing such construction as may be required by the above mentioned rules and regulations. In case of variance of the Technical Specification from the laws, ordinance, rules and regulations governing the work, the Associate shall immediately notify the same to the TPWODL. It is the sole responsibility of the Associate, however, to determine that such variance exists. Wherever required by rules and regulations, the Associate shall also obtain the statutory authorities' approval for the plant, machinery and equipment to be supplied by the Associate.

10.4 Specifications and Standards

The Associate shall follow all codes and standards referred in the Contract Document. Codes and standards of other may be followed by the Associate with the prior written approval of TPWODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name and qualities of the bought out items without the prior written approval of the TPWODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPWODL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

11.0 SAFETY

All Associates shall strictly abide by the guidelines provided in TPWODL's Contractor Safety Management System (CSMS) as applicable at all stages during the contract period. Associate shall execute the contracts ensuring the following in and as order of priority:

- Safety of Human Beings.
- Safety of equipment/Assets.
- Timely Completion of Contract.

Safety related requirements as mentioned in our Contractor Safety Management System is attached as annexure L and is an integral part of this GCC.

12.0 INSPECTION/PARTICIPATION

12.1 Right to Carry Out Inspection

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 19 of 104

TPWODL reserves the right to send its representatives for inspection or participation at various stages of contract execution listed below, applicable as per contract construction.

- During basic design and detail engineering of material/ Equipment carried out by Associate /Outsourced Agencies.
- During manufacturing stages of the product at Associate's/Associate's Outsourced Agency's Plant/Facility.
- During Pre-dispatch Inspection and Testing of finished/manufactured product at Associate's/Associate's outsourced Agency's Plant/Facility.
- During Installation & Commissioning Activities/Stages.
- Prior to Clearing of the completed installation for commissioning.
- Any other stage as find appropriate by TPWODL during contract execution time.

All inspections and participations shall be carried out within maximum of two weeks of TPWODL giving written intimation to the Associate or receiving appropriate advance written inspection call from the Associate, unless otherwise specified elsewhere in the contract document.

12.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TPWODL's engineers to get acquainted with the technical know-how and the methods and practices adopted by the Associate in basic and detail engineering. The Associate shall provide documents, drawings, calculations etc. as may be required by TPWODL's Engineers.

The Associate shall provide free of charge office accommodation, office facilities, secretarial services, communication facilities, general and drawing office stationery, etc. as may be reasonably required by the TPWODL's engineers. Similarly, facilities shall also be provided by Associate's outsource agencies/partners/authorized dealers (collectively termed as sub-associates) if such basic and detail engineering activities are carried out in the design offices of sub-Associates.

The Associate shall be responsible for the safety of employees of TPWODL/Third Party Agency when they are at the Associate's /Associate's outsource agency's plant or facility for carrying out/witnessing inspection/testing. All statutory safety precautions as applicable shall be followed by the Associate during Inspection Testing. If TPWODL inspectors are not satisfied with the safety arrangements at the plant, TPWODL have the right to call off inspection till such time corrective action is taken by the Associate.

Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc.-as specified in the contract document and submit copies of the test certificates to TPWODL along with the inspection call, for scrutiny of TPWODL.

The Associate and TPWODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 20 of 104

provide compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TPWODL for receiving clearance for dispatch of materials.

12.3 Third Party Nomination

TPWODL also may nominate a third party for the purpose of carrying out the inspection and such an agency shall be entitled to all the rights and privileges of TPWODL as far as conducting the inspection.

12.4 Waiver of Inspections

TPWODL on its own discretion shall chose to waive off any inspection and ask the Associate to submit all the test reports as applicable as per contract specifications, related to inspection and testing of the goods ordered for scrutiny and clearance for dispatch.

12.5 Incorrect Inspection Call

In case it is observed that the material offered for inspection is not ready at the time of TPWODL inspection visit rendering it as futile, all costs towards such inspection shall be recovered from the BA. Taxes as applicable on such recoveries shall be borne by the BA.

13.0 MDCC & DELIVERY OF MATERIALS

13.1 Material Dispatch Clearance Certificate

Associate shall deliver material/goods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate (hereafter termed as MDCC) issued by designated authority of TPWODL. Material delivered at TPWODL stores or at project site without a valid MDCC issued by the designated official of TPWODL shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documented during pre-dispatch inspection and testing at Associate's/ Sub-Associate's plant/ facility. In case Pre-dispatch inspection is waived at the discretion of TPWODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.

The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, sea, rail and road or any other means.

All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall take special precautions to prevent rusting of steel and iron parts during transit by sea. Gas seals or other materials shall be utilized by the associate for protection against moisture during transit of all Plant and Equipment.

Each Equipment or parts of Equipment shall be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the associate, item description, quantity, item / package identification.

All packing cases, containers, packing and other similar materials shall be new and supplied free by the associate and it shall not be required to be returned to the associate.

Notwithstanding anything stated in this clause, the associate shall be entirely responsible for loss, damage or depreciation or deterioration to the materials and supplies due to faulty

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 21 of 104

and/or insecure packing or otherwise during transportation to the Site until otherwise provided herein.

In case of the consignments dispatched by road, the associate shall ensure that it or its sub-contractors:

- i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.
- ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

Timelines for inspection and MDCC is as below:

S. No.	Inspection	MDCC issuance time including inspection time (max.)
1	Outside Sambalpur	12 days
2	Within Sambalpur	5 days
3	Waiver*	3 working days

* Associate is expected to raise the inspection call assuming that Inspection shall be carried out by TPWODL. The decision for waiver of inspection shall be on sole discretion of TPWODL.

13.2 Right to Rejection on Receipt

Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPWODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPWODL.

If delivery of the material is beyond the agreed time, Liquidated damage clause, mentioned in this GCC separately shall be applicable; but the period for levy of LD shall be considered as per the original delivery schedule and not from the agreed timelines for material rectification.

13.3 Consignee

Unless otherwise specified in the Contract Document / Purchase Order/ Release Order, Materials/Goods/Equipment shall be consigned to "Stores-In-Charge", TPWODL Sambalpur

13.4 Submission of mandatory documents on Delivery

Following documents shall be mandatorily submitted by BA along with supply of material to TPWODL stores/site:

S. No.	Documents	Requisite
1	Invoice copy in original	With all consignments
2	LR copy	Wherever required
3	Packing list	With all consignments
4	MDCC	With all consignments
5	Purchase order / Release order	Signed copy

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 22 of 104

6	Test certificates	With all consignments
7	Inspection/JVR report	In case pre-dispatch inspection is conducted
8	Device data in CD as per template for metering items	Wherever applicable

13.5 Dispatch and Delivery Instructions

S. No.	Instructions
1	Purchase order/ Release order no. shall be mentioned on invoice and on material
2	TPWODL material code and material description shall be mentioned in invoice and on material.
3	"Property of TPWODL" shall be embossed on material.
4	The material shall be properly sealed and packed in standard packing as per purchase order terms & conditions.
5	The weight and quantity of material shall be mentioned wherever applicable
6	The material supplied shall be co-related with the packing list.
7	The name plate detail on equipment shall include Material code, Material description, specification detail of material [as applicable], Serial No. Year of manufacturing, PO/RO no. and date, "PROPERTY OF TPWODL, Sambalpur", Guarantee period and Associate's name.
8	In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at TPWODL Western store. For heavy item(s), crane will be provided by TPWODL [unloading cost will be recovered from the associate].
9	The driver should have valid License and one helper in truck. All the documents of truck like registration papers, PUC etc. should be available in Truck.
10	BA representative should accompany the material and get it unloaded / stacked in his presence wherever possible.

14.0 GUARANTEE

14.1 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied/service or work rendered under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract. for a specific period termed as Guarantee Period (as elaborated elsewhere in this clause) The Associate should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

14.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TPWODL for the equipment/material/service/work and where standard specifications are not part of contract documents or guarantee period is not specified in the standard specifications,, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC, Guarantee Period will be 15 Months from the Date of

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 23 of 104

Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

14.3 Failure in Guarantee Period (GP)

If the equipment and material supplied/service or work rendered under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied/service or work rendered under the contract within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied/service or work rendered under the contract, failed in Guarantee Period, TPWODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPWODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.

If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/ damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by TPWODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPWODL within 7 days of reporting the issue by TPWODL. Thereafter, the total time for supply of new equipment/ material shall be equal to the original delivery period of that equipment/ material as specified in the Contract. In case the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.

14.4 Cost of repairs on failure in GP

The cost of repairs/rectification /replacement, apart from the actual cost of repairs/rectification/replacement is also inclusive of all associate costs of required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable, to be borne by the Associate. The Associate has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

14.5 Guarantee period for Goods Outsourced

If the Associate outsources partly equipment/materials/services from third party as mutually agreed upon at the pre award stage of contract, TPWODL shall have the benefit of any additional guarantee period if provided by the third party for the part supplied/executed by them.

14.6 Latent Defect

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 24 of 104

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

14.7 Support beyond the Guarantee Period

The Associate shall ensure availability of spares and necessary support for a period of at least 10 years post completion of guarantee period of equipment supplied against the contract.

15.0 LIQUIDATED DAMAGES

Liquidated damages @1% of the total executed contract value per week or part thereof, for the period of delay in integrated completion, subject to maximum 10% of the value of the contract shall become leviable without prejudice to other rights of the TPWODL. This amount shall be recoverable from any amount due or becoming due to the Business Associates under this or any other contract. In specific cases, TPWODL reserves the right to apply LD only on the unexecuted portion of the supply and works for standalone use, provided full quantity is executed within a maximum 30% additional time. Deduction of LD shall be on landed cost i.e. contract value inclusive of taxes and in pursuant statutory compliance GST would be applicable at the stipulated rate and the same shall be borne by Business Associate. In case of LD deduction, a GST invoice shall be issued by TPWODL as a proof of deduction/ recovery.

15.1 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD. Request submitted beyond the timeline shall not be entertained.

15.2 Material Recovery

In case of any recoveries for materials or services (for material free issued by TPWODL and not reconciled by BA or for services claimed and paid in excess at the time of running bills), the total cost which shall be recovered from the BA, shall be the gross amount of material or services (i.e. including taxes) plus applicable taxes as prevailing at the time of such recoveries.

16.0 ASSIGNMENT OR SUBCONTRACTING

Associates shall not assign/subcontract/outsource the schedule of activities of contract TPWODL enters with the associate, in part or full, without TPWODL's prior written approval. However, outsourcing of materials/equipment/services by Associate to make the integrated product for which TPWODL's has placed the contract with the associate from suppliers, makes and agencies which have been mutually agreed upon during contract pre-award stage is permitted subject to following conditions.

In such cases where outsourcing is done by the Associate

- Shall ensure that outsourced suppliers comply with the technical and financial qualification requirements specified by TPWODL in the contract document
- Shall furnish all particulars about the proposed outsourcing agencies and the details of the goods/services/work outsourced to the Associate while seeking approval of

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 25 of 104

TPWODL for inclusion for outsourcing. The Associate shall give approval or shall refuse approval in writing within thirty (30) days of receipt of such request. However, the Associate shall not be entitled for any additional contract execution time whatsoever in lieu of the process for approval for outsourcing agencies and shall be held responsible for any delay in the project execution time.

- Shall remain jointly and severally liable for any action, deficiency, and/or negligence on the part of his outsourcing agencies. The approval extended by the Associate to outsourcing agencies recommended by the Associate shall not discharge the later from his Contract obligations.

Shall submit to the Associate unpriced copies of purchase orders with technical specifications included in the orders, placed on outsourcing agencies as soon as the respective orders have been placed by the Associate.

17.0 UNLAWFUL ACTIVITIES

The Associate shall have to ensure that none of its employees are engaged in any unlawful activities (whether covered under the scope of the present GCC or not) subversive of the TPWODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPWODL, in accordance with the terms of the present GCC.

18.0 CONFIDENTIALITY

Associate and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

18.1 Documents

All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Associate by the TPWODL in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TPWODL and shall not be used or disclosed to third parties by the Associate for any purpose other than for which they have been supplied or prepared. The Associate may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the TPWODL.

18.2 Geographical Data

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPWODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TPWODL and upon execution of confidentiality agreements satisfactory to the TPWODL with such third parties prior to disclosure.

18.3 Associate's Processes

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 26 of 104

Title to secret processes if any developed by the Associate on an exclusive basis and employed in the design of the equipment shall remain with the Associate. TPWODL shall hold in confidence such processes and shall not disclose such processes to the third parties without prior approval of the Associate and execution by such third parties of secrecy agreements satisfactory to the Associate prior to disclosure. Upon completion of contract, such processes shall become the property of the TPWODL. Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPWODL under the Contract shall be passed on to the TPWODL. The TPWODL shall have the right to use these for construction, erection, start-up, Trial Run, operation, maintenance, modifications and/or expansion of the works including for the manufacture of spare parts.

18.4 Exclusions

The provision of Clauses 16.1 to 16.3 shall not apply to information:

- Which at the time of disclosure are in the public domain which later on become part of public domain through no fault of the party concerned, or
- Which were in the possession of the party concerned prior to disclosure to him by the other party, or
- Which were received by the party concerned after the time of disclosure without restriction on disclosure or use, from a third party who did not acquire such information directly or indirectly from the other party or has no obligation of confidentiality for such information.

18.5 Violation

In case of violation of this clause, the Associate is liable to pay compensation and damages as may be determined by the competent authority of TPWODL.

19.0 INTELLECTUAL PROPERTY RIGHTS

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Associate acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark, copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with the TPWODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPWODL.

Moreover, the Associate undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Associate shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages arising from any legal proceeding/s, or otherwise. No liability of TPWODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPWODL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

20.0 INDEMNITY

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 27 of 104

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPWODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPWODL is held liable for by any court judgement. In this connection, the TPWODL shall pass on all claims made against him to the Associate for settlement.

The Associate assumes responsibility for and shall indemnify and save harmless the TPWODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPWODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under the Contract or for which the Associate has assumed responsibilities under the Contract including those imposed under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract. The Associate shall execute, deliver and shall cause his Sub-Associate and suppliers to execute and deliver, such other further instruments and to comply with all the requirements of such laws and regulation as may be necessary there under to conform and effectuate the Contract and to protect the TPWODL.

The TPWODL shall not be held responsible for any accident or damages incurred or claims arising, due to the Associate's error there from prior to completion of work. The Associate shall be liable for such accidents and after completion of work for such accidents as the case may be due to negligence on his part to carry out Work in accordance with Indian laws and regulations and the specifications set forth herein.

21.0 LIABILITY & LIMITATIONS

21.1 Liability

Except for any specific liability which may be identified in the Contract and which may be payable hereunder, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or in connection with the Performance of the Work or supply of Goods ***unless caused by Associate's negligence, willful misconduct or breach of contract.***

TPWODL shall have no liability or any special, incidental, indirect or consequential Damages for any loss of Business Contracts, revenues or other financial loss arising out of this Contract.

21.2 Limitation of Liability

The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.

22.0 FORCE MAJEURE

Force Majeure applies if the performance by either Party ("the Affected Party") of its obligations under Contract is materially and adversely affected.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 28 of 104

“Force Majeure” shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

- Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, embargo, blockade, revolution, riot, bombs, religious strife or civil commotion, etc.
- Politically motivated sabotage, or terrorism, etc.
- Action or Act of Government or Governmental agency for which remedy is beyond the control of the affected parties.
- Any act of God.

Note: Causes like power breakdown/ shortages/fire/strikes, accidents etc. do not fall under Force Majeure.

Time being the essence of the Contract, if either party is prevented from the performance of its obligations in whole or in part due to an event of Force Majeure, then provided Notice of happening of any event by the Affected Party is given to the other party within seven (7) days from the date of occurrence of such event, which DIRECTLY has impact on works and submitted details and quantum of resulting effect, but at the same time had made all possible efforts to mitigate and overcome effects thereof, the Affected Party's performance under this Contract shall be suspended until such event ceases and the Scheduled Completion shall be delayed accordingly.

If Force Majeure event(s) continue for a period of more than three months, the parties shall hold consultation to discuss the further course of action.

Neither party shall be considered to be in default or in breach of its obligation under the Contract to the extent that performance of such obligation by either party is prevented by any circumstances of Force Majeure which arise after effective date of Contract.

Neither party can claim any compensation from the other party on account of Force Majeure.

23.0 SUSPENSION Of CONTRACT

23.1 Suspension for Convenience

TPWODL may, at any time and at its sole option, suspend execution of all or any portions of the schedule of items of contract to be supplied/work to be executed by Associate under the contract by providing to the Associate at least two business days written notice for contracts having contract completion period less than sixty days and at least seven business days' notice for all other contracts.

Upon receipt of any such notice, the Associate shall respond as follows as applicable as per contract construction.

- Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 29 of 104

- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPWODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.
- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

On receipt of resumption notice from TPWODL, the Associate shall resume execution of contract as specified in the resumption notice, within the time frame specified in the resumption notice,

23.2 Suspension for Breach of Contract conditions.

TPWODL shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 27 for breach/default of contract conditions.

23.3 Compensation in lieu of Suspension

If the suspension of the contract in whole or in part is for convenience of TPWODL and not due to any breach of contract conditions by the associate, TPWODL at its discretion shall consider compensating all reasonable additional costs incurred by Associate in lieu of suspension of whole or part of contract, on representation of the Associate providing justified estimates of such additional costs and such estimates are found acceptable and approved by competent authority of TPWODL.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 24.3) by the Associate, Associate shall not be entitled for any compensation for any cost incurred in lieu of suspension of whole or part of contract and also shall be liable for compensating all the losses arising to TPWODL in lieu of suspension of contract. Resumption notice shall be subject to the Associate taking corrective action for the breach of contract conditions within the time frame and as per the terms specified in the suspension notice.

24 TERMINATION OF CONTRACTS

24.1 Termination for Default/Breach of Contract

The contract / PO shall be subject to termination by TPWODL in case of breach of the contract by the Associate which shall include but not be limited to the following:

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution / completion of the contracted work /PO or failure in ensuring adherence to any delivery schedules, in deviation of the contract/ PO.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 30 of 104

- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPWODL and within the timeframe as specified in the contract document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.
- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.
- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPWODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPWODL.

If the default or breach as specified under clause 24 (except sub clause g thereof) be committed by the associate for the first time, TPWODL shall issue, along the with notice of default or breach, a warning notice instructing the associate to take remedial/corrective action within the time frame stipulated in the warning notice and not to repeat the same in future. The timeframe for corrective action by the associate shall be specific to the nature of breach of contract and the same shall not be objected to by the Associate. If the Associate fails to comply with the instructions in the warning notice or in taking corrective action to the satisfaction of TPWODL then TPWODL may terminate the entire or part of contract at its discretion by issuing termination notice without incurring any liability on this ground.

In case the contract is terminated for any breach of the nature specified in clause 24 g stated above, TPWODL shall have the right to terminate all the contracts TPWODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPWODL available to it under law.

Without prejudice to its right to terminate for breach of contract, TPWODL may, without assigning any reason, terminate the Contract in whole or in part at any time at its discretion while the contract is in force by serving a written notice of two weeks to the Associate.

In the event of TPWODL having proceeded with termination of the contract the associate shall comply and proceed further in the following manner:

- i) Associate shall discontinue the supply, on the expiry of the said period of two weeks.
- ii) Associate shall ensure that no further steps are being taken towards discharge of the obligations, terms and conditions as contained in the contract/PO. This shall include initiation of actions not limited to discontinuation of other allied and associated arrangements which

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 31 of 104

the associate might have entered with third parties for due discharge of its obligations under the contract with TPWODL.

iii) The Associate shall perform thereafter such tasks as may be necessary to preserve and protect the terminated portion of the material/service/work in progress and the materials and equipment at TPWODL sites or in transit thereto. However, the associate shall continue to fulfill its contractual obligations with regard to the part of contract not terminated.

iv) It shall be open for TPWODL to conduct a joint assessment with the associate of the material ,supplies, equipment ,works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.

v) It shall be open to TPWODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested by the associate.

In case of termination of the contract the parties agree to be governed inter alia by the following:

a) In case TPWODL exercises its right of termination as stated above the associate shall not dispute or object to the same.

b) The Associate shall be entitled to receive and claim only such payments OR sums of money from TPWODL as may be found payable to it in regard to works executed by it under the terms of the contract and no other claim of any nature whatsoever shall be made by the Associate.

c) All such provisions which the parties have agreed to survive and prevail even after termination of the contract shall remain effective despite the termination.

In the event of such termination, TPWODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPWODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPWODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPWODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPWODL under law against the associate.

Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct , TPWODL shall be entitled to bar the associates its agents , affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPWODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPWODL.

24.2 Termination for convenience of Associate

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPWODL has full right to accept, reject or partially accept such request. This convenience will be available to associate only after one year from the contract effective date. For this purpose, associate will provide a notice period of 90 days to

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 32 of 104

TPWODL, Associate will have to pay TPWODL a 'termination convenience fee' equivalent to 5% of unexecuted contract value.

24.3 Termination for Convenience of TPWODL

TPWODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPWODL shall pay the Associate for all the supplies/ services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

25.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavor to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Sambalpur. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the arbitration proceedings unless otherwise directed in writing by TPWODL or suspended by the arbitrator. Further, TPWODL shall continue making such payments as may be found due and payable to the associate for such works.

25.1 Governing law and jurisdiction

The parties shall be subject to the jurisdiction of the courts of law in Sambalpur and any matter arising here from shall be subject to applicable law in force in India.

26.0 ATTRIBUTES OF GCC

26.1 Cancellation

The Company reserves the right to cancel, add, delete at its sole discretion, all or any terms of this GCC or any contract, order or terms agreed between the parties in pursuance without assigning any reasons and without any compensation to the Associates.

26.2 Severability

If any portion of this GCC is held to be void, invalid, or otherwise unenforceable, in whole or part, the remaining portions of this GCC shall remain in effect.

26.3 Order of Priority

In case of any discrepancies between the stipulations in General Conditions of the Contract (GCC) and Special Conditions of Contract (SCC), the GCC shall stand superseded by the SCC to the extent stipulated hereinabove while balance portion of respective clauses of GCC shall continue to be applicable.

27.0 INSURANCE

The Associate shall arrange accident insurance policy for his foreign experts/specialists/personnel deputed to Site and Associate's/his sub-Associates' manufacturing works as well as for his Indian engineers and supervisory staff. The Associate

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 33 of 104

shall also take out for his Indian workmen, where applicable, a separate policy as required under Workmen's Compensation Act.

Associates shall be responsible to suitably insure their entire work-force (to the extent of at least meeting requirements under Workmen Compensation Act) Tools, Plant, Third party liability at the project site, All Risk comprehensive insurance for the entire works (insurance for free issue items will be in TPWODL scope) for total contract (PO/RO) value or any other such risks during execution of works, till the works are handed over to the company, in consultation with TPWODL and shall submit copies of such insurances to the Engineer-in-Charge for review / acceptance before commencing the work. Engineer-in-charge must ensure compliance to insurance requirement by Associate before commencement of works. TPWODL shall stand fully indemnified in this respect.

BA will also ensure purchase of Special Covid Insurance policy of ₹ 5 lacs for the legal heir(s) of deceased BA employees (in case of death due to Covid- 19)

- i. BA to take appropriate Special Covid Insurance policy from a reputed insurance agency prevailing in the market so that all the BA employees are covered under the purview of ₹ 5,00,000/- compensation, in case of death due to Covid -19.

BA shall be required to purchase the policy immediately post receipt of LOI / Work Order.

- ii. If it is found that the BA employee(s) is/are not covered under the purview of Special Covid Insurance Policy, the concerned BA shall be liable to pay the entire sum of ₹ 5,00,000/-.
- iii. Cost of the Covid Insurance policy shall be borne @50% each by the BA and TPWODL. BA will be reimbursed @50% of the Annual Premium based on the original money receipt and policy copy.

28.0 ERRORS AND OMISSIONS

The Associate shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the TPWODL or not. However, any error in design/drawing arising out of any incorrect data/written information from TPWODL will not be considered as error and omissions on part of the Associate.

29.0 TRANSFER OF TITLES

The title of ownership and property to all equipment, installations, erections, constructions materials, drawings & documents shall pass to the TPWODL after Commissioning and complete handing over-taking over.

However, such passing of title of ownership and property to the TPWODL shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract including loss or damages and all risks, which shall vest with the Associate.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 34 of 104

The Associate shall take all corrective measures arising out of discrepancies, errors and omissions in drawings and other information within the time schedule and without extra cost to the TPWODL.

The Associate shall also be responsible for any delay and/or extra cost if any, in carrying out engineering, and site works by other agencies arising out of discrepancies, errors and omissions stated in as well as of any late revision/s of drawings and information submitted by the Associate.

30.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TPWODL; be it our Company, our services or our people. Each and every concern, issue, query and suggestion from you will help us to become a better company to work with and shall help us develop a strong bonding of trust and a long term relationship with you.

You may send your feedback by filling up our Business Associate Feedback Form enclosed herewith as Annexure-I. You can also log on to our website www.tpWesternodisha.com to provide your feedback according to the guidelines mentioned below:

31.0 CONTACT POINTS

In case Business Associate needs information with respect to payments or has any grievances, same may be lodged by log on to our website www.tpWesternodisha.com

32.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
1.	Performa for Bid Security Bank Guarantee	A
2.	Performa for Advance Payment Bank Guarantee	B
3.	Performa for Performance Bank Guarantee (CP cum EP)	C
4.	Performa for No Demand Certificate by Associate	D
5.	Performa for Indemnification on Statutory Compliance	E
6.	Performa For Application For Issuance of Consolidated TDS Certificate	F
7.	HR Service Level Agreement	G
8.	Under taking for competence of workmen	H
9.	Business Associate Feedback Form	I
10.	Acceptance Form For Participation In Reverse Auction Event	J
11.	NEFT or RTGS payment request form	K
12.	Contractor Safety Management System	L
13.	Vendor Appraisal Form	M
14.	Manufacturers Authorization Form	N

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 35 of 104

ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

TP Western Odisha Distribution Limited

Burla

WHEREAS, (Name of the Bidder) _____ (hereinafter called "the BIDDER") has submitted his bid dated _____ for the (Name of Contract) _____ (hereinafter called "the BID").

KNOW ALL men by these presents we (Name of the Bank) _____ of (Name of the Country) _____ having our registered office at _____ (hereinafter called "the BANK") are bound unto TP Western Odisha Distribution Limited (TPWODL) in the sum of _____ for which payment well and truly to be made to the TPWODL the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20_____.

The CONDITIONS of this obligation are:

i) If the Bidder withdraws his Bid during the period of bid validity specified in the Proforma of Bid

or

ii) If the Bidder having been notified of the acceptance of his Bid by the TPWODL during the period of _____ bid validity fails or refuses to furnish the Contract Performance Bank Guarantee, in accordance with the Instructions to Bidders.

We undertake to pay the TPWODL up to the above amount upon receipt of its first written demand, provided that in its demand the TPWODL will note that amount claimed by it is due to it owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date (No of days as mentioned in tender enquiry) days after the closing date of submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

DATE.....

SIGNATURE

OF

THE

BANK.....

WITNESS.....

SEAL.....

(Signature, Name & Address)

(At least 2 witnesses)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 36 of 104

ANNEXURE-B

PROFORMA FOR ADVANCE PAYMENT BANK GUARANTEE

(On Rs.100/- Stamp Paper)

Note:

- (a) Format shall be followed in toto
- (b) Claim period of six months must be kept up
- (c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Western Odisha Distribution Limited

Burla

Advance Payment B.G.No.....

Contract No.....dated.....

1. You have entered into a Contract with No _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the supply and delivery of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, you have agreed to make an advance payment of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on "the Vendor" furnishing you with an irrevocable, unconditional and acceptable bank guarantee to be valid till the date of receipt of "the said equipment" covered by your above mentioned contract. For this purpose you have agreed to accept our guarantee.
3. In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a further period of three months from the date of expiry.
5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 37 of 104

not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at sambalpur branch and claim will also be payable at Sambalpur Branch **(to be confirmed by Sambalpur Branch by a letter to that effect)**
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____
(Rupees _____ only) and the guarantee will remain in force up to and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within one month from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 200_____

Witness

1. _____

Bank's rubber stamp

Banks full address

2. _____

Designation of Signatory

Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 38 of 104

ANNEXURE- C

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

(On Rs.100/- Stamp Paper)

Note:

- (a) Format shall be followed in toto
- (b) Claim period of one month must be kept up
- (c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Western Odisha Distribution Limited

Burla

CP cum EP BG No.....

Order/Contract No.....dated.....

1. You have entered into a Contract No _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the supply cum erection / civil work of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for 10% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose, you have agreed to accept the guarantee.
3. In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____ % (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a **further period of three month** from the date of expiry.
5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 39 of 104

available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Sambalpur branch and claim will also be payable at Sambalpur Branch (to be confirmed by Sambalpur Branch by a letter to that effect in case BG is from the branch outside Sambalpur)
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____ (Rupees _____) only and the guarantee will remain in force up to and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within one months from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 200__

Witness

1. _____

Bank's rubber stamp

Banks full address

2. _____

Designation of Signatory

Bank official number

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 40 of 104

ANNEXURE-D

PROFORMA FOR “NO DEMAND CERTIFICATE” BY ASSOCIATE

(On Company's Letter head or with Company Seal)

(To be submitted by the Associate to TPWODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project

Order/ Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

We, M/s. _____ (Associate) do hereby acknowledge and confirm that we have received the full and final payment due and payable to us from TPWODL, in respect of our aforesaid Order No _____ dated _____ including amendments, if any, issued by TPWODL to our entire satisfaction and we further confirm that we have no claim whatsoever pending with TPWODL under the said contract / W.O.

Notwithstanding any protest recorded by us in any correspondence, documents, measurement books and / or final bills etc., we waive all our rights to lodge any claim or protest in future under this contract.

We are issuing this “NO DEMAND CERTIFICATE” in favor of TPWODL, with full knowledge and with our free consent without any undue influence, misrepresentation, coercion etc.

Dated

Signature

Place

Name

Designation

(Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 41 of 104

ANNEXURE – E

PROFORMA FOR “INDEMNIFICATION ON STATUTORY COMPLIANCES”

(To be submitted by the successful Bidder within seven days of award of work)

(Certificate No. CCP/001)

Name of the Project

Letter of Award / Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

By this confirmation we, _____
(Associate) are formally bound to M/s. TPWODL towards any sum which may be imposed, levied or hereinafter recovered by the Provident Fund Organization under the provisions of the Employees of the Provident Fund and Miscellaneous Provisions Act 1952 in respect of employees employed by us.

We well and truly bind ourselves and our heirs executors administrators and representatives jointly severally and respectively for the above payment only to be paid to M/s. TPWODL.

AND WHEREAS we, _____ (Associate)
is making compliance of the Employees Provident Fund and Miscellaneous Provisions Act 1952, have entered into the above written bond for the indemnity to M/s. TPWODL against all losses from the acts or default of the said Associate in respect of compliance of the Provident Fund Act.

Similarly, we hereby confirm that we have complied with all statutory and local laws and nothing is outstanding with regard to Local Sales Tax, Labor Laws, Local Municipal dues, Electricity dues etc. We have entered into the above written bond for the indemnity to M/s. TPWODL against all losses from the acts or default of the said Associate in respect of compliance of the Local Sales Tax Laws, Local Laws, Labor Laws, Local Municipal Dues, Electricity dues etc.

NOW THE CONDITION, of the above written bond is as such that if the Associate during the period of this contract commits any default or fails to make payment of Contributions in respect of his employees to the Employees Provident Fund Organization, he shall indemnify the Principal Employer M/s. TPWODL from all and every loss and damage caused to them from any act, omissions or negligence of the said Associate in respect of compliances under the Employees Provident Fund and Miscellaneous Provisions Act, 1952.

IN WITNESS to the above written bond we have here to set our hands, with our free consent.

Dated

Place

Signature

Name

Designation (Company Seal)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 42 of 104

ANNEXURE-F

**PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS
CERTIFICATE**

To be printed on the letterhead

To,

TP Western Odisha Distribution Limited,

Burla

Sub: Application for issuance of Consolidated TDS Certificate for the FY _____

Dear Sir,

I / we hereby request / authorize you to issue me / us a consolidate TDS Certificate for the financial year _____ against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961.

For and on behalf of

Signature

Name

Address

Contact No. (Land Line)

(Mobile)

PAN #

Assessing authority

ATTACH THE COPY OF PAN CARD

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 43 of 104

ANNEXURE - G

SERVICE LEVEL AGREEMENT

(To be adhered to by Business Associates (BAs) in TPWODL on Human Resource Issues)

1.0 The following shall be adhered to by the Business Associates during his / its association with TPWODL:

Shall Abide by Tata Core Values:

- a) **Integrity** – We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.
- b) **Understanding** – We must be caring, show respect, compassion and humanity to our colleagues and customers and always work for the benefit of the communities we serve.
- c) **Excellence** – We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of services we provide.
- d) **Unity** – We must work cohesively with our colleagues across the group and with our customers and partners to build strong relationships based on tolerance, understanding and mutual co-operation.
- e) **Responsibility** – We must continue to be responsible and sensitive to the communities and environments in which we work and always ensuring that what comes from the people; goes back to the people many times over.
- f) **Agility**- We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 The Business Associate / his manager / supervisor who is responsible for managing the project site / performance contract etc. in TPWODL would also ensure adherence of these values by his employees / persons deployed by him in connection with his works undertaken in TPWODL.

3.0 The Business Associates are required to:

- a) Support and respect the protection of human rights and make sure that they are not complicit in human right abuses.
- b) Respect freedom of association and effective recognition of the right to collective bargaining.
- c) Not to resort to any form of forced and compulsory labour.
- d) Shall ensure abolition of child labour in his area of work.
- e) There is no discrimination in respect of employment and occupation in respect of his employees.
- f) Support precautionary approach to environmental challenges.
- g) Promote greater environmental responsibility by himself and his employees in his areas of work.
- h) Deploy and defuse environmental friendly technologies while carrying out the works.
- i) Work against corruptions in all its form including extortion and bribery by himself and his employees.

4.0 The Business Associates are required to adhere to all applicable labour Laws with special reference to the following:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 44 of 104

- a) No person below the age of 18 years and no child labour will be engaged directly or indirectly for executing the work connected with the business of TPWODL.
- b) Minimum wages along with other statutory dues like PF, ESI, etc. as applicable to the workers shall be made within the prescribed period of 7th / 10th day of the following month.
- c) Deduction / deposit / record keeping and all other requirements under Employees PF Act 1952, Employees State Insurance Act 1948 and other applicable acts (if any) shall be adhered to.
- d) Only statutorily authorized deductions (if any) shall be made in accordance with the relevant statutes.
- e) All the provisions of Contract Labour (R&A) Act 1970 shall be complied with in respect of the workers engaged for TPWODL work. The work will be commenced only after completing necessary formalities for obtaining Labour License (if applicable).
- f) Necessary registers / records, filing of returns etc. shall be maintained for verification by Statutory / TPWODL authorities.
- g) Payment of wages shall be made only in presence of and with certification of authorized representative of TPWODL or shall be made in the form of cheque / bank transfer to the employee.
- h) During the period of contract, the Business Associate will arrange for deployment of his supervisor / manager for total supervision and control of the work and their manpower. All the activities related to their manpower e.g. attendance, leave, wage disbursement etc. will be done under the supervision & control of Business Associates, while adhering to the prescribed standard / norms of production / productivity & quality. During execution of the work, Business Associate shall engage only such qualified / skilled manpower as may be envisaged / required for ensuring level of production / service into the contract / work order.
- i) Clearances as follows shall be obtained from IR & Welfare Group:
 - i. Clearance for commencement (before start of the work).
 - ii. No Objection Certificate (after completion / before final settlement).
 - iii. Copies of PF / ESI Challans shall be deposited with IR & Welfare Group every month
- j) The Business Associate shall indemnify TPWODL from any liabilities under applicable Labour Statutes.
- k) The Business Associate shall ensure safety and health of his employees and shall also maintain hygienic working environment / condition in his area of work.
- l) The Business Associate and his employee shall abide by Laws of Land and shall not violate any applicable provisions.
- m) The Business Associate appreciates with and acquiesces to the right of TPWODL as principal employer to fulfil any of his legal obligations, if he fails to do so under applicable labour laws and deduct the same from his running bills / final payments / encashing security deposit / Bank Guarantee as the case may be. If there is any further shortfall TPWODL has the right to recover the same from the Business Associate.
- n) The Business Associate ensures that person employed by him adhere to the moral and legal conduct and shall not violate any standard conduct envisaged in the premise of

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 45 of 104

TPWODL by all such as, Transparency, Safety, Discipline, Integrity etc. The Business Associate or his employees should refrain from corrupt practices, giving or taking bribe in connection with any TPWODL business.

5.0 The 'Statutory Compliance Enforcement System' in TPWODL is detailed below for adherence by all concerned. Business Associate Cell (BA Cell) will be the process owner for implementation of the system with the help of concerned Engineer I/c or Officer I/c.

- a) Statutory Compliance being a professed value in TPWODL Code of Conduct, the concerned Engineer / Officer in charges are requested to adhere to the provisions and advise respective Business Associates in their domain to comply in letter and spirit.
- b) Immediately after issuance of letter of intent, the authorized representative of the Business Associate will report to BA Cell for completion of statutory requirements.
- c) Normally, the work will be started only after 'Clearance for Commencement of Work (CCW)' is issued by BA Cell to the Business associate. However, in exceptional exigencies in engineer I/c / Officer I/c may direct the Business Associate to start the work and inform BA Cell about the same. Statutory requirements in this case may be completed in parallel.
- d) First monthly bill will be released only after producing CCW to the finance department. Similarly closure of work and final settlement will be affected after issuance of no objection certificate from BA Cell group.

6.0 Requirements for 'Clearance for Commencement of Work' (CCW):

- a) Submission of filled up Form 'A' for database (Annexure-1).
- b) Copy of PF Code allocation letter.
- c) Copy of ESI Code allocation letter.
- d) Submission of duly filled up Form IV CL(R&A) act (In case more than or equals to 20 workers during the period of contract).
- e) Submission of duly filled up Form VI A (Notice of Commencement).
- f) Copy of insurance cover note under WC Act 1923 (if applicable).
- g) Copy of Contract Agreement.
- h) Copy of indemnity bond (if applicable).
- i) Affidavit with regard to payment of wages through cheque / bank transfer only.

7.0 Requirements during execution of work:

- a) Copy of receipt of application for license / license (if applicable).
- b) Copy of PF Challan (latest by 26th day of every Month).
- c) Copy of ESI Challan (latest by 26th day of every Month).
- d) Copy of Wage disbursement sheet / Bank statement.
- e) Filing / Maintenance of all statutory registers / reports / returns for inspection by Statutory/ TPWODL authorities.
- f) Certification of wage disbursement by authorized representative of TPWODL.
- g) Copy of 'Labour Welfare Fund' deposit certificate / Challan.
- h) Insuring safe working practices at the workplace.

8.0 Requirements for 'No Objection Certificate' (NOC) for closure of work:

- a) Submission of duly filled up Form VI A (Notice of Completion).
- b) Copy of Half yearly / Annual return for ESI / PF / CL(R&A).

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 46 of 104

- c) Consolidated copy of wage sheet of last month indicating full & final settlement of all dues like retrenchment benefit, bonus, leave encashment etc. Copy of individual declaration by employees in Form X regarding termination of employment.
- d) Confirmation certificate regarding filling up of form for transfer / withdrawal of PF by the concerned workers.

In case any of the above are deviated / not complied with the Letter of Award/Order shall be liable to be withdrawn / cancelled.

Enclosure:

- 1) Form A
- 2) Form X
- 3) Form XI
- 4) Form VI A
- 5) Form XXIV

GENERAL CONDITIONS OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 47 of 104

FORM (A)

[To be submitted by the Business Associate to the Principal Employer within a week from LoA issuance]

A. Details of the Agency

1. Name of Agency :
2. Nature of work :
3. Local Address with Ph.No. :
(With Father's name) :
4. Permanent Address (Full) :
5. PF code no. & Place :
6. ESI Code no. & Place :
7. Name and address of :
Sub-contractor (if any)

B. Details of Work

8. Name of work (as specified in LOI/LOA) :
9. LOI/LOA Nos. & Dates :
10. Period of contract (Specify Dates) :
[Including Extension period, if any] :
11. Work Area [Department / Location] :
12. Name / Cell no. of Officer I/c :
13. Maximum No. of workers and staff to be engaged on any day during the year.
 - Supervisory Staff :
 - Workers :
14. Do you have any other contract in TPWODL : Yes/No
If yes, furnish details:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 48 of 104

15. Details of Workmen's compensation Policy, if applicable

Name of Insurance Company
Policy No Number of persons
 covered Period of coverage: From To

If no, I hereby undertake the liability arising out of Workmen's Compensation Act and Rules made there under.

C. Details of workers to be engaged

No. of Workers

S. No.	Unskilled*	Semi-skilled*	Skilled*	Clerical / Supervisory

*** Number to be indicated**

I/We shall fulfill all obligations arising from and under all relevant law in force from time to time. I/We undertake to keep the TPWODL indemnified against any loss or liability arising out of failure of my / our abiding the relevant laws.

The name of my / our representatives is to enter the TPWODL Premises on my behalf.

Date:

**(Signature of the Business Associate
 or his Authorized Representative)**

This Business Associate is / will be engaged in TPWODL.

(Signature and seal of

Officer I/c of the Work)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 49 of 104

Form X

Undertaking

I _____ hereby undertake that all the dues in respect of my employment with M/s _____ for the period of _____ to _____ have been settled and final payments including retrenchment benefit have been made to me in full.

(_____)

Date:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 50 of 104

Form XI

Undertaking

With reference to the contract job awarded by M/s TP Western Odisha Distribution Limited to M/s _____ vide work order No. _____ dated _____

I _____ on behalf of

M/s _____ hereby undertake:

1. that the dues in respect of the workmen/ employee(s) engaged by us for the said contract, payable as per the provisions of relevant statute pertaining to
 - i. wages/ salary
 - ii. PF & ESI, Burla Labour Fund
 - iii. All other statutory obligation
 has been paid /settled in full and no amount/ compliance is due/ pending.
2. That in case any dispute / claim is raised by the concerned workers i.r.o. any dues / payments, M/s _____ will settle the same on its own and such liability will be borne by M/s _____
3. That M/s _____ hereby indemnify M/s TPWODL from any future liability i.r.o. any statutory obligation in respect of said contract.

Date:

()

Authorized Signatory

For M/s _____

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 51 of 104

FORM- VI A

Notice for Commencement /Completion of contract work

I/We, Sh. / M/s _____ (Name and Address of the Contractor) hereby intimate that the contract work _____ (name of work) in establishment of the _____ (name and address of the Principal Employer) for which License No. _____ dated _____ has been issued to me/us by the Licensing Officer _____ (name of the Headquarters), has been commenced / completed with effect from _____ date / on date.

Signature of Contractor

With Office Seal

The Inspector

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 52 of 104

FORM XXIV

[See Rule 82(1)]

Return to be sent by the Contractor to the licensing Officer (in duplicate)

Half -Yearly Ending_____

1. Name and address of the Contractor
2. Name and address of the Establishment
3. Name and address of the Principal Employer
4. Duration of Contract: From _____ to _____
5. No. of days during the half year on which
 - (a) the establishment of the principal employer had worked
 - (b) the contractor's establishment had worked
6. Maximum No. of contract labour employed on any day during the half –year:

Men	Women	Children	Total

7.
 - (i) Daily hours of work and spread over
 - (ii) (a) whether weekly holiday observed and on what day
 - (b) if so, whether it was paid for
 - (iii) No. of man – hours of overtime worked

8. No. of man days worked by

Men	Women	Children	Total

9. Amount of wages paid

Men	Women	Children	Total

10. Amount of deductions from wages, if any

Men	Women	Children	Total

Whether the following have been provided –

- (i) Canteen : _____
- (ii) Rest rooms : _____

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 53 of 104

(iii) Drinking water : _____

(iv) Crèches : _____

(v) First Aid : _____

Signature of contractor

Place _____

Date _____

GENERAL CONDITIONS OF CONTRACT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 54 of 104

ANNEXURE – H

UNDERTAKING FOR COMPETENCE OF WORKMEN

Name of Associate :

Tender No. :

Item :

With reference to the tender mentioned above, I/We _____,
 hereby undertake that the workmen/ employee(s) engaged by M/s
 _____ for the job against said tender shall be competent in all
 respect, commensurate to the nature of job.

Date:

 ()

Authorized Signatory

For M/s

Seal

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 55 of 104

ANNEXURE-I

BUSINESS ASSOCIATE FEEDBACK FORM

With an objective to improve our internal processes and systems, and serve you better, we solicit your valuable feedback & suggestions. It is estimated that it will take about 10 minutes to complete this survey. We assure you that your feedback shall be kept confidential. Please send the duly filled feedback form in the "TPWODL addressed - attached envelop"

You are associated with us as

☐ OEMs
 ☐ Service Contractor
 ☐ Material Suppliers
 ☐ Material & Manpower Supplier

You are associated with us for

☐ Less than 1 year
 ☐ More than 1 year but less than 3 years
 ☐ More than 3 years

Your office is located at

☐ Sambalpur
 ☐ Within 200 kms from Sambalpur
 ☐ More than 200 kms from Sambalpur

Your nearly turnover with TPWODL

☐ Less than 25 Lacs
 ☐ 25 Lacs to 1 Crore
 ☐ More than 1 Cr.

Additional information

Your Name	
Your Designation	
Your Organization	
Contact Nos.	
Email	

We once again thank you for your participation in this survey. Please spare 10 minutes to give your feedback on following pages (Section A to E)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 56 of 104

SECTION - A

(Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.).

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
1	You receive all relevant queries / tenders from us in timely manner.						
2	We provide you enough lead time to respond to our queries / tenders.						
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.						
4	All following elements of our contract / purchase order are rational :						
4.1	Scope of Work						
4.2	Delivery / Execution Schedule						
4.3	Payment Terms						
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	TPWODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
8	TPWODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPWODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						
10	TPWODL Engineer-in-Charge timely certifies the jobs executed/						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 57 of 104

S. No.	Parameters	1	2	3	4	5	Remarks/ Suggestion
		Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	
	material supplied						
11	TPWODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job						
12	BIRD (Bill Inward Receipt Desk)* initiative has improved payment disbursement process (under development)						
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?						
14	TPWODL never defaults on contractual terms						
15	In TPWODL Contracts closure is done within set time limit						
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience						
17	Bank Guarantees are released in time bound manner						
18	Our processes related to payment / account settlement are effective.						
19	You get payments on time						
20	TPWODL Employees follow Ethical behavior						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 58 of 104

SECTION - B

(Please rate the following parameters on a scale of 1 to 5, where 1 - Minimum; 5 - Maximum)

SN	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of TPWODL employees you interact with from following team?						
1.1	Project Engineering						
1.2	Division / Sub-Division						
1.3	Projects/HOG						
1.4	Inspection & Quality Assurance						
1.5	Stores						
1.6	Metering & Billing						
1.7	Accounts / Finance						
1.8	Administration						
1.9	IT & Automation						
2	How would you rate TPWODL in comparison to your other clients in terms of fairness of treatment and transparency with its Business Associates?						
3	How would you rate TPWODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates						
4	How would you rate TPWODL in comparison to your other clients in terms of building long term & mutually relationship with its Business Associates						

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 59 of 104

SECTION-C

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

SNo	Parameters	Certainly NO	Probably NO	Probably YES	Certainly YES	Remarks/ Suggestion
1	Based on your experience with TPWODL, would you like to continue your relationship with TPWODL?					
2	If someone asks you about TPWODL, would you talk "positively" about TPWODL?					
3	Would you refer TPWODL name to others in your community, fraternity and society as a professional & dynamic organization?					

SECTION - D

If we ask you to rate us on a scale of 1 to 10, how will you rate TPWODL, that truly represents your overall satisfaction with us (please tick appropriate box) -

1	2	3	4	5	6	7	8	9	10

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 60 of 104

SECTION – E

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

Please spare your thoughts for TPWODL's improvement in particular areas of weaknesses, particularly relating to some great practices, attitudes that you have seen elsewhere in Indian and International Organizations, which you recommend TPWODL to adopt. Please give your valuable salient recommendations.

Please spare your thoughts for TPWODL's improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, altitudes that you have observed / experienced elsewhere in Indian/ International organization.

Recommendation	<i>Please tick (✓) your top 5 expectations out of the following 10 points listed below -</i>	
(Please list down improvement you expect from TPWODL)	<i>Timely payment</i>	
1	<i>Flexibility in Contracts/PO</i>	
	<i>Clarity in PO,s & Contracts</i>	
2	<i>Timely response to quarries</i>	
	<i>Timely certification of works executed</i>	
3	<i>Clarity in Specs, drawings, other docs etc.</i>	
	<i>Adequate information provided on website for tender notification, parties qualified etc.</i>	
4	<i>Timely receipt of material at site for execution</i>	
	<i>Performance Guarantee/EMD released in time</i>	
5	<i>Inspection & quality assurance support for timely job completion</i>	

We thank you for your time and courtesy!!

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 61 of 104

ANNEXURE-J

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process fair and transparent, TPWODL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. TPWODL shall provide the user id and password to the authorized representative of the bidder. *(Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).*
2. TPWODL will make every effort to make the bid process transparent. However, the award decision by TPWODL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPWODL, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPWODL.
6. In case of intranet medium, TPWODL shall provide the infrastructure to bidders. Further, TPWODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be outrightly rejected by TPWODL.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPWODL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by TPWODL.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 63 of 104

send payment information)

Name of the Authorized Signatory :

Contact Person's Name :

Official Correspondence Address :

We confirm that we will bear the charges, if any, levied by our bank for the credit of NEFT/RTGS amounts in our account. Any change in above furnished information shall be informed to TPWODL well in time at our own. Further, we kept TPWODL indemnified for any loss incurred due to wrong furnishing of above information.

Thanking you,

For _____

(Authorized Signatory)

(Signature with Rubber Stamp)

Certification from Bank:

We confirm that we are enabled for receiving NEFT/RTGS credits and we further confirm that the account number (specify Bank a/c no.) of (Please mention here name of the account holder), the signature of the authorized signatory and the MICR and IFSC Code of our branch mentioned above are correct.

This also is certified that the above information is correct as per Bank record

(Manager's/ Officers Signature under Bank Stamp)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 64 of 104

ANNEXURE-L

CONTRACTOR SAFETY MANAGEMENT SYSTEM

1. OBJECTIVE

The objective of the Contractor Safety Management System is to lay down clear guidelines for all Business Associates (including their associates, staff and agents) which would facilitate them to observe all statutory rules and regulations, comply with applicable standards of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010 & (safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations, 2011, TPWODL Safety Manual and Guidelines and thus, ensure creation of safe working environment for all stakeholders of our network.

2. SCOPE

All contracts (minor and major) will be subject to the provisions of this document.

Minor Contracts: Contracts which satisfy all the criteria listed under the head “Minor Contracts”.

Major Contracts: Contracts which satisfy any two or more criteria listed under the head “Major Contracts”

Criteria	Minor Contracts	Major Contracts
Value of Contract	< Rs. 1500000/- (less than Rs. Fifteen Lac)	>= Rs. 1500000/- (Equal or more than Rs. Fifteen Lac)
Period	Period less than 1 year	Any period
Working on energized electrical equipment	No	Yes
Working on height (above 1.8 Mtrs from ground)	No	Yes
Work involving construction activity	No	Yes
Working with hazardous goods or chemicals	No	Yes
Work involving danger to general public	No	Yes

Note: Exceptions for major and minor contract are – in house software development, supply of material or equipment but no direct or indirect installation of the same material, administration contracts (courier, water supply, printing, security, transport, etc.), minor civil work like plastering at ground level or flooring, etc. The facility management (housekeeping) contract will always be treated as a minor contract.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 65 of 104

3. INFORMATION REQUIRED AT TIME OF VENDOR REGISTRATION OR BEFORE COMMENCEMENT OF CONTRACT

- 3.1 Business Associate is required to fill the Safety Management System Questionnaire as per *annexure 1* and submit along with the vendor registration process / bid / tender document. The filled questionnaire will be scrutinized by Engineer In-charge / indenting group and recommend suitability of the BA with respect to safety requirements. The fulfilment of statutory requirements for vendor registration pertaining to labour laws etc. shall be done by BA Cell on being referred to it.
- 3.2 Business Associate is required to take suitable risk control measures mentioned against the identified Hazards and Risk document provided for all contracts as per *annexure 2*. The primary objective of this is to evaluate the understanding of the BA towards risk mitigation and employment of safe work procedures. BA is required to conduct the Hazard identification and Risk Assessment study as per the procedure and deploy more or other measures if deemed necessary.
- 3.3 Business Associate shall comply with **Statutory Requirements related to Safety and Occupational Health** and submit the "Safety Undertaking" as per *annexure 4*.

4. GENERAL SAFETY CONDITIONS REQUIRED TO BE FULFILLED BY BUSINESS ASSOCIATES

The requirements of the contractor safety management system applicable to the minor or major contracts related to various groups are as following –

- 4.1 Maintenance of Distribution Network – *Annexure 3.1*
 - 4.2 Distribution Projects – *Annexure 3.2*
 - 4.3 EHV Projects – *Annexure 3.3*
 - 4.4 Maintenance of Sub transmission network – *Annexure 3.4*
 - 4.5 Civil / Generation Projects – *Annexure 3.5*
 - 4.6 Meter Management Group (MMG), Revenue Recovery Group (RRG), Energy Auditing Group, AML, MRG, etc. – *Annex3.6*
 - 4.7 Maintenance and Operation of Street Light. – *Annexure 3.7*
1. *Please note that hydra cranes used by any dept should be ACE Model No. FX 150 ACE SX 150, Escorts Model No. TRX 1550 or contemporary. Use of old generation hydra cranes like ACE 14XW or ACE 12 XW, etc are prohibited.*

(Details as per Annexure attached)

Note: For minor contracts, the BA shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver all duties and responsibilities of Safety Supervisor as detailed in this document.

The Business Associate (BA) having major contract will appointing Safety supervisor, engineer / manager for the TPWODL work. The BA shall make all necessary arrangements for getting their workforce safety trained and competency checked from the concerned official of TPWODL before deployment in the field. BA Cell shall recommend the suitability after competency checked by Engineer In-charge and SAFETY group (or his representative) of TPWODL. After getting the clearance from concerned official, BA cell and receiving temporary I-card issued by TPWODL, Business Associate shall commence the working.

Safety Representative of Business Associates will formally become the nodal point for safety concerns for TPWODL. **BA shall not frequently transfer or terminate the services of any of the safety representatives appointed for TPWODL work site. BA needs to ensure**

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 66 of 104

that Safety representative is available at all points of time; failing which the work being carried out in the interim (period when Safety representative is not available) shall be treated as working under improper supervision and due penal provisions shall be initiated against the BA. BA will be required to provide all applicable infrastructure and power to ensure smooth working of the safety representative to maintain a sound safety management system. **In all contracts safety representative will not be assigned any other activity at site apart from the works related to safety management. The duties are detailed in clause 5.5 of this document.** TPWODL will be auditing the facilities provided to the BA's safety team time to time.

The Safety Representative of the BA shall be required to meet and follow the instructions of the Engineer In-charge and SAFETY Group of TPWODL. He shall be responsible for providing the MIS and/or any other relevant information, as and when desired, within the stipulated time frame as per the requirements of TPWODL. Any non-conformance to safety will lead to the negative marking or issue of safety violation challan/ tokens which shall affect the monthly evaluation and performance of BA.

All contracts where BA has to depute vehicle for their staff and equipment to move from one location to other, the BA shall ensure that vehicle complies all required statutory clearances and requirement as per The Motor Vehicle Act, 1988 as well as TPWODL Road Safety Policy and are in good & safe state of working.

5. QUALIFICATION AND EXPERIENCE OF THE SAFETY AND SITE PERSONNEL

Qualification and experience required for the safety and site personnel are as following:

5.1 Safety Supervisor: It is mandatory that educational qualification of safety supervisor be ITI (of relevant trade) / Diploma (Any branch of engineering) and he has a working experience on electrical system / relevant field of work at least 5 yrs for ITI and 3 years for Diploma holder. Having formal experience of the safety systems will be an added advantage

5.2 Safety Engineer: It is mandatory that educational qualification of safety engineer be at least Diploma (relevant branch) and he has working experience on electrical system of at least 3 yrs. Having the formal experience of the safety systems will be an added advantage.

5.3 Safety Manager: The educational qualification of safety manager should be graduate engineer with working experience on electrical system / network of at least 3 yrs. OR Diploma in Industrial Safety with working experience of 05 years including at least 02 years on electrical network.

However, clause 5.1, 5.2 and 5.3 are not applicable for minor contracts. In such cases, BA shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver required duties of Safety Representative (as per clause 5.5) in addition to other duties without diluting the importance of safety.

5.4 Site Skilled Personnel: For all responsibility related to site activities and operations, the BA shall employ only qualified and skilled persons and shall comply the provisions of section 19 & 29 of Western Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010. Persons holding valid approvals only by any Government approved agency or a competency assessment panel or a team set up by TPWODL

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 67 of 104

shall be allowed to perform the High Risk / High Hazard activities (refer page 1). The skill / qualification required for the electrician and electrical supervisor are given in *annexure 5*. The contracts related to maintenance of Distribution Network, Distribution Projects, EHV Projects, maintenance of Sub-Transmission Network, MMG & EAG, maintenance and operation of streetlights, shall preferably have at least 20 per cent of ITI qualified electricians in the first year of the contract. This figure shall preferably be incremented by 15 per cent every subsequent year.

Note: For the competency assessment may please refer the work instructions. An employee shall have to necessarily undergo the competency assessment check once in every eighteen months.

5.5 Requirements from the Safety Representative(s) of the Business Associate:

- 5.5.1 Safety training of 2 hrs/employee/month and one day of safety induction training to all new employees joining the BA will be conducted by the BA as per Safety training modules of TPWODL.
- 5.5.2 Safety Talk / toolbox talk before start of shift to BA employees.
- 5.5.3 Ensuring the availability & proper usage of the standard safety equipment (PPE)
- 5.5.4 Periodic inspection of PPE to ensure their serviceability and maintaining the 10% buffer stock of standard PPEs.
- 5.5.5 Ensuring the adherence to standard operating procedures of TPWODL as mentioned in TPWODL Safety standard and O & M and concerned function's manual.
- 5.5.6 Safety inspections / audits as per the process of TPWODL
- 5.5.7 Working in close coordination SAFETY Group of TPWODL.
- 5.5.8 Reporting of unsafe acts, unsafe conditions, near miss, incident or accident to Engineer In-Charge and SAFETY Group of TPWODL immediately after its occurrence.
- 5.5.9 Regular HIRA at site and comply the control measures as stated in the detailed HIRA as per the *annexure 2*. Also, deployment of JSA based checklist shall be ensured.
- 5.5.10 Ensuring compliance with safety and other laws as may be applicable and providing for safety assurance.

5.6 Training and Syllabus: The BA shall not deploy any person at workplace / site or send newly recruited personnel directly to concerned official for competency assessment without Safety Induction Training.

5.6.1 All new BA employees have to necessarily undergo one and half days Safety training and Competency assessment at training centre of BA cell. This training will be conducted once in a week. After the completion of Safety training & Competency assessment I-card will be issued to all competent BA employees

5.6.2 BA is expected to initially train and judge the capability of the workman at his own end before further recommending the workmen for Competency assessment. If any BA workman sent for competency assessment. In case any BA workman fails in the Competency test at concerned official, it will be deemed that BA has not imparted sufficient training at his end and actual cost of training ₹ 7500/ BA employee/ failed attempt will be recovered.

5.6.3 The workers who have imparted Safety Training and issued I-Cards of TPWODL, are not deployed at TPWODL worksites/ voluntarily left the job by workers/ used somewhere else other than TPWODL by the BA, in that case Management reserves the rights to intervene and recover the actual cost of training i.e. ₹ 7500/BA employee. (*Exempted for attrition rate of BA workers less than or equal to 10% of total workforce deployed at TPWODL*)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 68 of 104

- 5.7 It is desired that Safety representative of the BA to impart the general safety training to each employee of duration 2 hrs per month. The training will be organized at BA level and the record to be sent to engineer in-charge and SAFETY group of TPWODL every month. Please refer schedule and syllabus in *annexure 6*.

List of Personal Protective Equipment (PPE) and Maintenance schedule: BA shall commence the project or any work only when the required PPE are made available to the team of employees involved in the work. Each PPE of BA shall be checked / inspected by the safety representative / supervisor at zone before the work start or as prescribed in the list. Safety representative shall regularly check the healthiness of each PPE allocated to lineman. Suitable record shall be maintained at zone. Defective PPE shall be immediately replaced or within 24 hours by the BA. In no case linemen or any other official of BA may be allowed to work with defective PPE. It is preferred that BA ensures minimum stock of each PPE at zone for immediate replacement with defective one. The PPE shall be IS / BS / CE marked and exactly as per the standard or specification mentioned in the *annexure 7*. Working without PPE / non-standard PPE shall be treated as safety violation and penalty as stated in section 6.0 of this document. If TPWODL finds that BA has not provided the adequate / appropriate PPE to their staff, TPWODL reserves the rights to stop the work and call the BA to provide appropriate PPEs at the risk. If the BA fails to provide the required PPEs at the risk then the same shall be provided by TPWODL at the actual cost of the PPE. The amount shall be charged to BA and same shall be first recovered from the current bill of BA or any future payment to be made to BA. In the event of any balance amount still left for recovery, the same shall be adjusted against retention amount or by invoking bank guarantee submitted by BA.

- 5.8 **Safety Audit / Inspection & HIRA:** The BA shall get the required safety inspection / audit conducted by his technical team comprising of safety representative as per the *annexure 8*. The safety representative will be required to conduct the HIRA (Hazard Identification and Risk Assessment) as per *annexure 2* of the process and work undertaken at least two times in a year or every time if a new process / activity / machine is introduced or whenever an accident take place. The risk identified to be addressed suitably with –

- Engineering Control
- Management Control, and
- Personal Protective Equipment.

The safety representative of BA shall inform and educate for the identified risk and hazard control methods to employees, supervisor and engineer as well as the engineer in-charge and SAFETY group of TPWODL.

- 5.9 **Safety Performance and Safety MIS:** The BA shall maintain good practice of safety all through the contract duration. Safety shall always be of paramount importance during the contract period. Safety performance will be monitored on yearly basis throughout the period and no relaxation will be given for bad performance. BA with good track record and excellent performance will be rewarded suitably as per clause 6.0 of this document. The BA has to provide monthly “Performance Report – Safety” to engineer in-charge and SAFETY group TPWODL this shall be part of monthly bill along with training details. Performa of the report is enclosed as *annexure 9*.

- 5.10 **Pre – Employment Medical Check-up and Fitness of employees engaged for the critical works:** The BA shall submit the health fitness certificate for all those workers involved in climbing the pole or working at height for following diseases:

5.10.2 Epilepsy

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 69 of 104

- 5.10.3 Colour blindness
- 5.10.4 Deafness
- 5.10.5 Vertigo & height phobia

Every year BA will give an undertaking stating that all the employees are fit to work and have not developed aforesaid diseases. The Record of such medical check-ups shall be submitted to BA Cell before issue of temporary identity card. The records shall be maintained at BA Cell. All such medical check-ups shall be repeated once in a year for all workers involved in climbing the pole or working on electrical network.

6. REWARD AND PUNITIVE MEASURES

6.1 To support the enforcement of good SHE & DM practices by the Business Associate and to eliminate repeated or continuing safety violations, use of appropriate reward and punitive measures shall be made. Each unsafe act or violation of the safety guidelines as described in the Safety Manual of the TPWODL will be audit criteria of this system. Broadly the measures identified are following:

- 6.1.1 Working without PPE/ Safety Gadgets
- 6.1.2 Working without proper tools and tackles, barricading, Poor condition of Crane / Hydra / Vehicle, using without certification / Licence, Incompetent driver/ Helper
- 6.1.3 Working without creation of effective safety zone
- 6.1.4 Improper Supervision at worksite, Lineman/ Supervisor working without competency
- 6.1.5 Working without adherence to PTW process or authorization/ not adherence to SOPs / W.I. of TPWODL.
- 6.1.6 Improper Working at height equal to or above 1.8 mtrs without taking proper fall protection measures/ Poor condition of Ladder

6.2 Measures of Reward and Punitive Measures

The Engineer In-Charge, NSO, SC, ASOs, CSI / SIs and SHE &DM group will conduct the surprise audits of the work / project and if any non-conformance is found the same will be booked and entered in the format "Safety Violation Record" *annexure 10*. The flow of the information is given below:

Safety Violation Escalation & Monitoring process	
Action	Responsibility
Safety Violation form has been filled and counter foil sent to SAFETY team for information. The main form is to be given to BA supervisor / Engineer in-charge. <i>(Automatically generated if Site audit done through Mobile App.)</i>	Engineer In-charge/ NSO / SC / SAFETY Group /CSI/ ASO/ Any authorised TPWODL official.
↓	
Entry of the violation in the master record and sending the information to concerned Manager, HoG, HoD, Head and Chief (O &S). <i>(Automatically generated if Site audit done through Mobile App.)</i>	SAFETY Group
↓	
Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA,	Engineer In-charge

if any.	
↓	
HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted.	SAFETY Group
↓	
The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees.	SAFETY Group with approval of CFO/Chief (O & S) /CEO&MD

The safety violations have been rated from 1 to 5 (figure 6.3) as per the gravity of the violation. If the same violation is repeated it may escalate into a higher penalty. If a particular Business Associate employee violates safety norms three times, he shall not be allowed to work in TPWODL for a period of one year from the date of the 3rd violation.

6.3 Safety Violation Escalation Matrix

6.3.1

Consequence of Safety Violation Observed (Not related to Incident/ Accident)		Violation				
S.No.	Safety Violation	1st	2nd	3rd	4th	Subsequent Violations
1	Working without PPE (Helmet/Gloves/Safety Harness/ Safety Shoes etc.)	A	B	C	D	Will attract the same penalty as applicable in the 4th violation.
2	Improper Working at Height	A	B	C	D	
3	Working without proper tools and tackles	A	B	C	D	
4	Poor condition of Crane/Hydra/ Vehicle/Incompetent driver/ Helper	A	B	C	D	
5	Violation of SOP/ WI	B	C	D	E	
6	Working without adherence to PTW process or authorization/ Safety Zone	C	D	E		
Legend	Action to be taken	Responsibility		Penalty Amount (in Rs.)		The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
A	Warning letter	Engineer Incharge		Nil		
B	Levy of Penalty	Engineer Incharge		2,000		
C	Memo to BA & Levy of Penalty	Head of Group		4,000		
D	Memo to BA & Levy of Penalty	Head of Department		10,000		
E	Memo to BA, Levy of Penalty and termination of Contract	Head of Department		1,00,000		
Figure 6.3 (1a)-Penalty Matrix for Safety violation (Applicable for Minor Contracts)						

Figure 6.3 (1a)-Penalty Matrix for Safety violation (Applicable for Minor Contracts)

Consequence of Safety Violation Observed (Not related to Incident/ Accident)		Violation				Subsequent Violations
S.No.	Safety Violation	1st	2nd	3rd	4th	
1	Working without PPE (Helmet/Gloves/Safety Harness/ Safety Shoes etc.)	B	C	D	D	Will attract the same penalty as applicable in the 4th violation.
2	Improper Working at Height	B	C	D	D	
3	Working without proper tools and tackles	A	B	C	D	
4	Poor condition of Crane/Hydra/ Vehicle/Incompetent driver/ Helper	B	C	D	E	
5	Violation of SOP/ WI	C	D	E		
6	Working without adherence to PTW process or authorization/ Safety Zone	C	D	E		

Legend	Action to be taken	Responsibility	Penalty Amount (in Rs.)	The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
A	Levy of Penalty	Engineer Incharge	5,000	
B	Memo to BA & Levy of Penalty	Engineer Incharge	10,000	
C	Memo to BA & Levy of Penalty	Head of Group	25,000	
D	Memo to BA & Levy of Penalty	Head of Department	50,000	
E	Memo to BA, Levy of Penalty and termination of Contract	Head of Department	1,00,000	

Figure 6.3 (1b)-Penalty Matrix for Safety violation (Applicable for Major Contracts)

Figure 6.3 (1b)-Penalty Matrix for Safety violation (Applicable for Major Contracts)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 71 of 104

Once the BA reaches the “BLACK” (color – “5”) category, i.e. highest level of safety violation, “Termination” notice to BA will be issued from the office of the Head of Department (equivalent to GM/ Sr. GM level) and further, *if required*, continuation / extension of contract will only be initiated by Functional Chief / Head of the department (equivalent to Sr. GM / Chief level) and approved by CEO & MD. Till the extension, the contract will remain suspended.

TPWODL encourages the reportage of the safety violation during the contract work by BA. Any TPWODL employee can register a safety violation against the BA in the “Safety Violation Form” *annexure 10*. Initially the observer has to fill the form and handover the counterfoil (lower portion) of the document to the supervisor of the BA, inform the site engineer of TPWODL and send the top portion of the Safety Violation Form to SAFETY group for the further necessary action against the BA. **The cumulative nos. of Safety Violations pertaining to any particular BA shall be calculated on yearly basis.**

Safety violations resulting in incident / accident will be treated as per gravity of the injury / fatality and its impact as well as type i.e. minor or Major. Consequences of incident / accident are shown in the matrix (figure 6.3(2) for major and 6.3(3) for minor) below. In case of any accident, findings and recommendations of Accident Enquiry Committee will be final and binding and will supersede the arbitration clause of GCC.

Consequence Of an Incident / Accident (In case of MAJOR contract)		Incident / Accident				Action Required
Sl. No	Type of the injury	1st	2nd	3rd	4th	
1	Slight injury (First Aid Case)	F (Strengthening of process through continuous improvement in the work procedure)				Take risk reduction measures
2	Minor injury (No or Hospitalization less then 48 Hrs)	F	G	G	H	
3	Major injury (Bone injury or burn or Hospitalization more then 48 Hrs)	G	G	H	I	
4	Single fatality	J	K			Intolerable
5	Multiple fatalities (Two or more fatalities during one event)	K				
Legend	Action to be taken	Responsibility		Penalty (in Rs.)		The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.
F	Memo to BA and levy of penalty	Engineer Incharge		5,000/-		
G	Memo to BA and levy of penalty	Head of Group		20,000/-		
H	Memo to BA and levy of penalty	Head of Group		50,000/-		
I	Memo to BA and levy of penalty	Head of Department		2,00,000/-		
J	Memo to BA and levy of penalty	Head of Department		5,00,000/-		
K	Memo to BA, levy of penalty, termination of contract and black listing of BA	Functional Head		10,00,000/-		
Figure 6.3 (2) - Penalty Matrix for Incident / Accident in Major Contracts						

Figure 6.3 (2) - Penalty Matrix for Incident / Accident in Major Contracts

(For example: In major contracts, if there is first incidence of major injury say bone injury (Cat. 3) where worker was hospitalized for more than 48 hrs then a penalty of amount Rs.20000/- will be deducted from the current bill produced for the payment. This penalty will be similar for first two incidents. However, it will increment to next higher category i.e. Rs. 50,000/- on subsequent incidents as per the above matrix)

Consequence Of an Incident / Accident (In case of <u>MINOR</u> contract)		Incident / Accident				Action Required
Sl. No	Type of the injury	1st	2nd	3rd	4th	
1	Slight injury (First Aid Case)	L (Strengthening of process through continuous improvement in the work procedure)				Take risk reduction measures
2	Minor injury (No or Hospitalization less than 48 Hrs)	L	M	M	N	
3	Major injury (Bone injury or burn or Hospitalization more than 48 Hrs)	M	M	N	O	
4	Single fatality	P	Q			Intolerable
5	Multiple fatalities (Two or more fatalities during one event)	Q				
Legend	Action to be taken	Responsibility		Penalty (in Rs.)	The number of violations are to be calculated cumulatively over the contract period and not on monthly basis.	
L	Memo to BA and levy of penalty	Engineer Incharge		5,000/-		
M	Memo to BA and levy of penalty	Engineer Incharge		10,000/-		
N	Memo to BA and levy of penalty	Head of Group		25,000/-		
O	Memo to BA and levy of penalty	Head of Department		1,00,000/-		
P	Memo to BA and levy of penalty	Head of Department		3,00,000/-		
Q	Memo to BA, levy of penalty, termination of contract and black listing of the BA	Functional Head		5,00,000/-		
Figure 6.3 (3) - Penalty Matrix for Incident / Accident in Minor Contracts						

(For example: In minor contracts, if a worker meets with a non-fatal accident say bone injury (Cat. 3) where he was hospitalized for more than 48 hrs then a penalty of amount Rs. 10,000/-, will be charged from the current bill produced for the payment. This penalty will be similar for first two incidents. However, it will increment to next higher category i.e. Rs. 25,000/- on subsequent incidents as per the above matrix.)

In case of single or multiple fatalities described under legends J&K of 6.3(2) and P&Q of 6.3(3), the concerned BA may be debarred from extension of contract or participate in new contract. In such event the approval of Chief (O & S) will be necessary for extension or award of new contract to concerned BA.

6.3.2 COMPENSATION FOR BA PERSONNEL

In the event of any untoward incident/ accident, the Business Associate shall ensure prompt medical assistance such as treatment, sickness benefit, etc. is provided to the victim(s) as per the Employees' Compensation Act, 1923 or Employees' State Insurance Act, 1948, as applicable. Also, the BA will be required to take adequate measures for compensating the victim(s) or his/her/their kin as follows:

Group Personal Accident (GPA) policy coverage of ₹ 15 Lacs to be taken by the respective BAs.

i. It is mandatorily required to take the GPA policy coverage of ₹ 15 Lacs by the BA for his employees from a reputed insurance agency.

ii. TPWODL HR department will be the overall process owner and BA shall be required to coordinate with TPWODL HR department for policy implementation immediately post receipt of LOI / Work Order.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 73 of 104

I. For Death or Permanent / Total Disablement

The BA shall take an insurance coverage of at least Rs. 15 lakhs for each engaged employee, to cover any incidence of Death or Permanent / Total Disablement (Permanent/Total Disability shall be considered as defined under Employees' Compensation Act, 1923). In the event of any such unfortunate incident, the BA would ensure that adequate compensation is paid immediately to the family of the victim(s) from his own resources. This compensation shall be covered under the insurance policy subscribed by the BA mentioned earlier and the arrangement should be such that it would get reimbursed to the BA by the insurance agency subsequently.

II. For Permanent Partial Disablement and Temporary Total Disablement

The compensation in this case will be as per provisions of the Employees' Compensation Act, 1923 or Employees' State Insurance Act, 1948, as applicable.

Accordingly, the BA shall obtain a suitable Insurance Policy on award of Contract and submit documentary evidence of the policy to the BA Cell before commencement of work. The BA shall ensure that the Insurance policy is active at all times and all employees are covered in all respects till the conclusion of contract period or till working with TPWODL. The BA shall submit a copy of the policy after periodic renewals to the BA Cell.

However, on occurrence of such unfortunate incident, if it is found that the victim(s) is/are not covered under any insurance policy, the BA shall be liable to pay the entire sum of Rs. 15 lakhs from his own resources.

Further, in case of an accident resulting in Death or Permanent / Total Disablement while on duty, the appointed BA Nodal Officer will ensure that the BA complies with all statutory provisions and benefits i.e. PF, Compensation, Gratuity etc., and that all these are made available to the employees' nominee(s) as per the stipulated timelines.

6.3.3 TPWODL rewards the BA with good track record of safety management. It is proposed that BA complying with Contractors Safety Management, Safety Manual and Safety process will be rewarded suitably as per the procedure, rule and regulations of the TPWODL. In any case major accident is reported during an assessment period BA will not be eligible for this reward scheme. Assessment of contracts will be once in year. Generally, the assessment cycle is calendar year and guidelines will be declared time to time.

Abbreviations Used in the Document

TPWODL	TP Western Odisha Distribution Limited
BA	Business Associate
HIRA	Hazard Identification & Risk Assessment
JSA	Job Safety Analysis
EHV	Extra High Voltage
SAFETY	Safety, Occupation Health, Environment & Disaster

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 74 of 104

	Management
MMG	Meter Management Group
EAG	Energy Audit Group
PPE	Personal Protective Equipment
SOP	Standard Operating Procedures
CSI/SI	Circle Safety In-charge / Safety In-charge
ASO	Area Safety Officer
NSO	Nodal Safety Officer
SC	Safety Coordinator
HoG / HoD	Head of Group / Head of Department
AGM / GM / VP	Assistant General Manager / General Manager / Vice President
CFO / Chief (O & S)/ CEO & MD	Chief Finance Officer / Chief (Operating & Safety) / Chief Executive Officer & Managing Director
COS	Corporate Operation Services
CAP	Centralized Account Payable System
PTW	Permit To Work
GCC	General Conditions of Contract.

- END -

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 75 of 104

Annexure 1 (Refer Para 3.1)

Business Associate Safety Management System Questionnaire

Certification				
The information provided in this questionnaire is a summary of the company's occupational health and safety management system.				
Company Name:				
Turnover and experience:		Name of top officer:		
Date:		Position		
Contract Details				
Contract Name			Contract Number:	
Business Associates Safety Management System Questionnaire	Marks	Yes	No	Score achieved
<i>Safety Policy and Management</i>				
- Is there a written company Safety policy? - If yes provide a copy of the policy, if No please refer Note 1.	1			
- Does the company have an Safety Management system - If yes provide details, if No please refer Note 1.	1			
- Is there a company Safety Management System manual or plan? - If yes provide a copy of the content page(s), if No please refer Note 1.	2			
- Are Safety and occupational health responsibilities clearly identified for all levels of Management and staff? - If yes provide details, if No please refer Note 1.	2			
<i>Safe Work Practices and Procedures</i>				
- Has the company prepared safe operating procedures or specific safety instructions relevant to its operations and relevant work as per contract? - If yes provide a summary listing of procedures or instructions, if No please refer Note 2.	1			

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS		
Rev. No	0	Page 76 of 104	

Certification				
- Comments				
- Is there a register of injury or accident? - If yes provide a copy (format)	1			
- Is there a documented incident or accident investigation procedure? - If yes provide a copy of a standard incident report form, if No please refer Note 2. - Comments	1			
<i>Safety Training</i>				
- Describe how occupational health and safety training is conducted in your company If No please refer Note 1.	2			
- Is a record maintained of all training and induction programs undertaken for employees in your company? - If yes provide examples of safety training records, if No please refer Note 2.	1			
- Are regular safety inspections / audits are undertaken at worksites? -If yes provide details (formats), if No please refer Note 3.	1			
- Is there a procedure by which employees can report hazards at workplaces? - If yes provide details if No please refer Note 1.	1			
<i>Safety Monitoring</i>				
- Is there an officer / supervisor responsible for monitoring workplace / worksite safety?	1			

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS		
Rev. No	0	Page 77 of 104	

Certification				
- If yes provide details				
<i>Safety Performance Monitoring</i>				
- Are employees regularly provided with information on company health and safety performance?	1			
- If yes provide details				
- Has the company ever been convicted of an occupational health and safety offence?	NO Marks (Negative mark ONE for each case)			
- If yes provide details				
- Has there been any major accident of employee at TPWODL site in past	NO Marks (Negative mark ONE for each case)			
- Has there been any fatal accident of employee at TPWODL site in past. - (Note: Bid evaluation committee has to take cognizance of the incident and shall evaluate the bid only after formal approval of competent authority i.e. CTO. - In case of yes please refer Note 4.	NO Mark (Negative mark FIVE for each case)			
Minimum of 75% marks is required for qualification.		Total Marks achieved		
<i>Company Reference</i>				
1. Name of company 2. Name of company				

Note

1: If company does not have formal procedure on Safety Management System than vendor may submit proposed Safety road map along with safety action plan and brief safety policy on his letter head signed by head of the organization.

2: The vendor may submit the same in the Safety Action Plan.

3: The vendor may utilize the same format of TPWODL or on request SAFETY group will assist the vendor in developing the audit system. For other points also vendor may take the assistance of SAFETY group for development of Safety management system.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 78 of 104

4: The vendor may submit the Safety Improvement Plan and Safety Action Plan for his employees based on following points.

- i. Action plan for enhancing safety awareness*
- ii. Action plan for safety training of employee*
- iii. Action plan for increasing safety audit in field*
- iv. Action plan for provision and utilization of safety PPE.*
- v. Action plan for fatality reduction.*
- vi. Action plan for enhanced supervision at site*
- vii. Action plan for making employee more responsible and accountable for safety.*
- viii. Action plan for availability and utilization of all required tool and equipment.*
- ix. Safety Improvement done in last two years, specially highlighting those which have been taken after the fatal accident along with results.*
- x. Safety initiatives planed or started recently.*
- xi. Any other point.*

Based on above points and documentary evidences vendor will be required to submit a detailed report in support of his bid. The bid evaluation committee and competent authority will scrutinize the facts and the evidence submitted. If found satisfactory competent authority i.e. CTO may accord his approval for bid opening otherwise his tender shall be disqualified.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 79 of 104

Annexure 2 (Refer Para 3.2 and 5.8)

Risk Assessment Form

Business Associate:
Scope of the work:
BA's Representative:
Telephone:
Signature:
Date:

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures
Working at Height	Fall from height	2	1. Mandatory usage of JSA checklist prior to start of work 2. Use appropriate ladder 3. Use full body safety harness having double lanyard. 4. Use Electrical Safety Shoes if working on electrical network otherwise use safety shoes. 5. Use Safety helmet. 6. Use PPE as per the annexure 7 of this CSM document 7. Refer Work instruction related to Working at Height for other details 8. Use of metal scaffold to be ensured in height work (cup lock type) 9. Deploy competent workforce who are medically fit

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 80 of 104

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures
Working on electrical equipment / network	Electric flash / electrocution	3	1. Mandatory usage of JSA checklist prior to start of work 2. Use Electrical Safety Shoes while working on electrical network. 3. Use Electrical Safety gloves of appropriate voltage rating. 4. Use face shield / visor attached with helmet. 5. Use Safety helmet. 6. Use PPE as per the annexure 7 of this CSM document 7. Mandatory usage of Insulated tools & tackles on electrical system 8. Mandatory compliance for Lock Out & Tag out system. Refer Work instruction related to Working on electrical equipment / network for other details
Excavation / Civil work	Collapse of soil, fall in excavated pit leading to Injury	2	1. Use safety shoes. 2. Use Safety helmet. 3. Use PPE as per the annexure 7 of this CSM document 4. Hard Barricading of the worksite. 5. Refer Work instruction related to excavation / civil work for other details
Material lifting & Mechanical Erection work	Fall of material/object, Topple of crane,	2	1. Mandatory compliance of crane checklist 2. Visual condition check of lifting tools and tackles such as wire rope sling, belt sling, chain, pulley block, D-shackles, etc. shall be ensured. 3. The operator's physical fitness and alertness should be judged by sup. / EIC. 4. Use PPE as per the annexure 7 of this CSM document 5. Refer Work instruction related to Material lifting & Mechanical Erection work
Road Safety	Road Accidents	3	1. Mandatory compliance of TPWODL Road Safety policy

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 81 of 104

Specific Task/Activity	Potential Hazards/Consequences	Class of Risk	Control Measures

Note: This information for the general indication purpose. The detailed risk assessment shall be conducted before start of the work by the authorized representative of the BA. The report of same shall be submitted to engineer in-charge along with annexure 4 of the CSM document.

Guidelines for filling the Risk Assessment Form

- *Specific Task/Activity* - The documentation of each major task associated with the contract.
- *Potential Hazards* - The identification of hazards associated with each activity or task to be carried out.
- *Class of Risk* - Each hazard should be evaluated as a level of risk, described as Risk Class 1, 2 or 3 defined above.
- *Control Measure* - The identification and documentation of actions required to eliminate or reduce the hazards that could lead to accident or injury.

Hazard / Risks shall be classified according to the following schedule:

- Class 1: Potential to cause injury treatable with first aid
- Class 2: Potential to cause death or permanent injury
- Class 3: Potential to cause more than one or more lost time injuries.

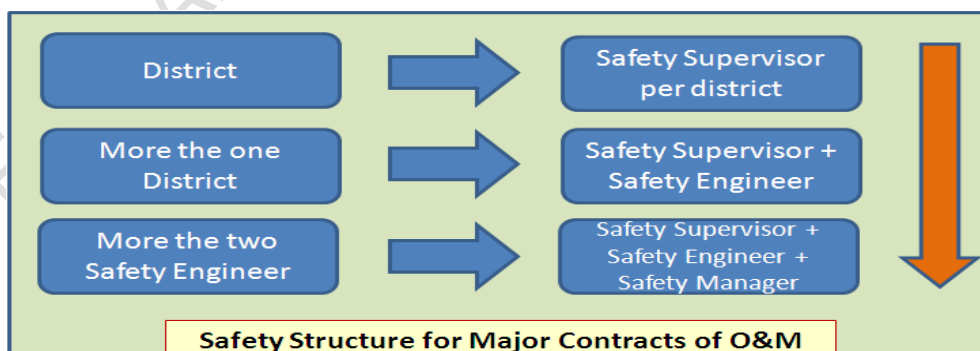
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 82 of 104

Annexure 3.1 (Refer Para 4.0)

General Safety Conditions for the Maintenance of Distribution Network Contracts:

A BA awarded a contract (O&M) work of maintenance of distribution network will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPWODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPWODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPWODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPWODL approved list in *annexure 7*.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPWODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPWODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPWODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in a district. In case the BA has been awarded work in more than one district, then the following safety structure will be adopted.



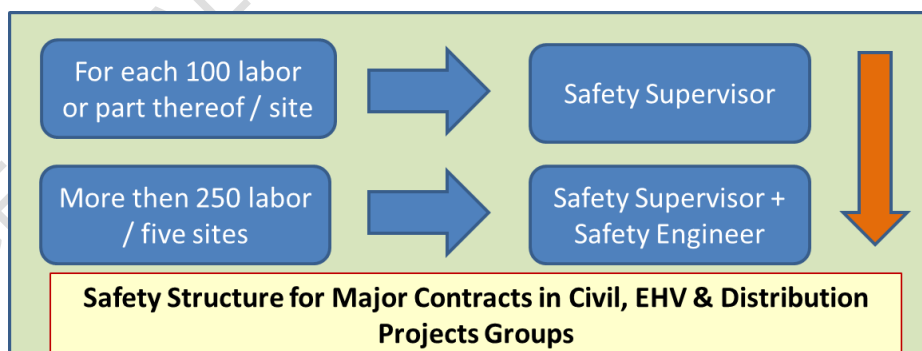
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 83 of 104

Annexure 3.2 (Refer Para 4.0)

General Safety Conditions for the Distribution Projects Major Contracts:

A BA awarded a major contract work of TS&P in area of a circle will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1.
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPWODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPWODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPWODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPWODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPWODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPWODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPWODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in the area. In case the BA has been awarded work in more than one circle, then the following safety structure will be adopted.



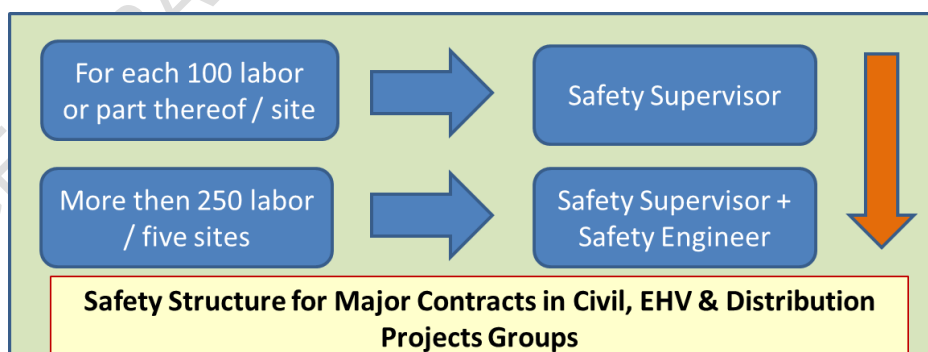
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 84 of 104

Annexure 3.3 (Refer Para 4.0)

General Safety Conditions for the major EHV Projects Contracts:

A BA awarded a major contract work of EHV projects will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPWODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPWODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPWODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPWODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPWODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPWODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPWODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in the area. In case the BA has been awarded work in more than one circle, then the following safety structure will be adopted.
- BA shall refer Construction Safety Manual in TPWODL Safety Manual for details.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 85 of 104

Annexure 3.4 (Refer Para 4.0)

General Safety Conditions for the Maintenance of Sub – Transmission Network Contracts:

A BA awarded a major contract work of maintenance of sub – transmission network in area of a power system will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPWODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPWODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPWODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPWODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPWODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPWODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPWODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Coordinator for managing a complete safety management system in the area. In case the BA has been awarded work in more than one area power system, then the following safety structure will be adopted.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 86 of 104

Annexure 3.5 (Refer Para 4.0)

General Safety Conditions for the major contract work in Civil / Generation Projects:

A BA awarded a major contract work of / in civil or Generation project will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPWODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPWODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPWODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPWODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPWODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPWODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPWODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor (for workforce up to 100 at site) / a safety engineer (for workforce up to 250 at site) / safety manager (for more than two safety engineers) for managing a complete safety management system at the project site. In case the BA has been awarded more than one major contracts, then the following safety structure will be adopted.
- BA shall refer Construction Safety Manual in TPWODL Safety Manual for details.



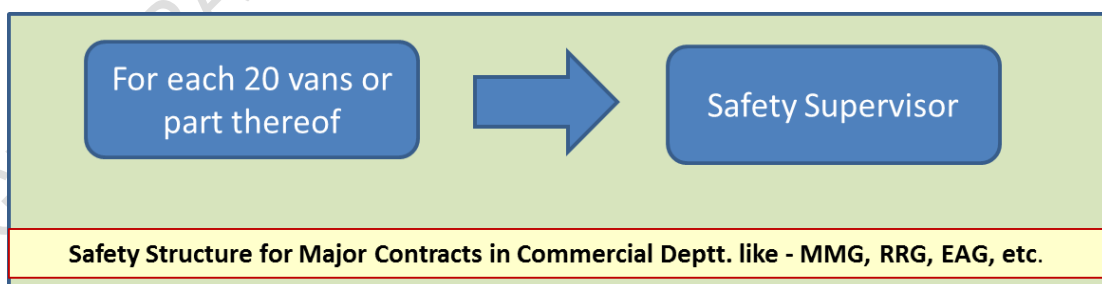
Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 87 of 104

Annexure 3.6 (Refer Para 4.0)

General Safety Conditions for the major contract work in Commercial Department like - MMG, RRG, EAG, etc.:

A BA awarded a major contract work in meter management group & energy auditing group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPWODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPWODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPWODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPWODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPWODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPWODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPWODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system for the work as per the following safety structure.
- The BA for the RRG work shall depute one Safety supervisor.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 88 of 104

Annexure 3.7 (Refer Para 4.0)

General Safety Conditions for the major contract work in O&M of street light group:

A BA awarded a major contract work in operation and maintenance of street light group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPWODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPWODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPWODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment PPE as per the TPWODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPWODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPWODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPWODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- Each BA shall ensure to depute a Safety Supervisor for managing a complete safety management system for the work awarded as per the below structure.



Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 89 of 104

Annexure 4 (Refer Para 3.3)

Safety Undertaking by way of Affidavit

I _____ s/o _____ R/o _____ (AUTHORIZED REPRESENTATIVE/PARTNER/DIRECTOR/PROPRIETOR) of M/S _____ (name of company/firm)___ having its office at (Complete address of Company), authorized vide power of attorney dated -----/Board resolution dated----/letter of authority dated----, hereinafter referred to as **Contractor [or Business Associate (BA)]** which expression shall, unless it be repugnant to or inconsistent with the meaning or context thereof, be deemed to include its heirs, executors, administrators, and assigns do hereby affirm and undertake as under :

1. The present undertaking shall remain in force from the date of execution of contract awarded by TPWODL and shall be valid till the date of termination of the said contract by either parties. The undertaking is binding on me (contractor) as well as my sub-contractor and its employees, representatives etc.
2. That I(the contractor) will be responsible and liable to comply and abide by all the safety rules, instructions and regulations as may be specified and laid down by The TP Western Odisha Distribution Limited (TPWODL) so as enable TPWODL to achieve its goal of Zero On site incidences.
3. That the Contractor shall be fully responsible for ensuring occupational health and safety of its employees, representatives, agents as well as of its subcontractor's employees, at all times during the discharge of their respective obligations under the contract including any methods adopted for performance of their tasks / work.
4. That Contractor shall ensure ,at its own expense to arrange for and procure, implement all requisite accident prevention tools, first aid boxes, personal protective equipment, fire extinguisher, safety training, Material Safety Data Sheet, pre-employment medical test, etc. for operations & activities including as & when so specified by TPWODL specifically. , failing which TPWODL shall be entitled, but not obliged, to provide the same and recover the actual cost thereof from the Contractor's payments.
5. That the Contractor shall engage adequate and competent Safety – Supervisor / Engineer / Manager / Skilled persons at site as per the Para 5 (Qualification and experience of safety personnel) and Annexure 3 of Contract Safety Management.
6. That the Contractor shall engage the competent Site – Supervisor with each group of workers for safe and correct workmanship, proper co-ordination of material and site work as per contract.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 90 of 104

7. That the Contractor shall immediately replace supervisor in case it is found to be not up to the level of skill and experience required as in skill and experience required in *annexure 5* of this document, but any such replacement shall be only with the prior concurrence of TPWODL .
8. That the Contractor and its subcontractors shall abide by all the safety guidelines as per Safety Manual, Contract Safety Management and other guidelines issued from time to time by TPWODL during the contract period.
9. That in case the Contractor and/or any of its Subcontractor fail to ensure the compliance as required in terms of this undertaking the Contractor shall keep and hold TPWODL / its directors / officers / employees indemnified against any / all losses / damage / expense / liability / fines / compensation / claims / action / prosecutions or the like which might be suffered by TPWODL or to which TPWODL might get exposed to as a result of any breach /wilful negligence /deliberate default on the part of the Contractor /Subcontractor in complying with the same. Contractor shall also furnish any press release, clarification etc. if sought by TPWODL for any near miss or safety violations, accidents, which are attributable to fault of Contractor.

DEPONENT VERIFICATION

Verified at Sambalpur on this _Day of _____20__ that the contents of the above affidavit are true and correct and nothing material has been concealed therefrom

DEPONENT

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 91 of 104

Annexure 5 (Refer Para 5.4)

SKILL / QUALIFICATION REQUIRED FOR ELECTRICIAN AND ELECTRICAL SUPERVISOR

Skill / Qualifications Required for Electrician (*Certificate of Competency Class-II*):

1. Formal education in ITI – Wireman/ Electrician trade.

OR

2. Working experience of minimum three years of practical wiring.

OR

3. Have completed three years apprenticeship course through Apprenticeship Advisor, Govt. of Odisha / other state Govt. in the trade of Lineman / Wireman / Electrician.
4. A candidate must have attained the age of Eighteen years.

Skill / Qualifications Required for Electrical Supervisor (*Certificate of Competency Class-I*):

1. Have at least five years' experience of practical wiring after passing the certificate of competency class-II i.e. electrician.

OR

2. Recognized Degree or Diploma or equivalent qualification in Electrical Engineering from any Technical institute / College or University recognized by the Board.

AND

Must have completed the training/job in rectifying the common defects in electrical line and power installation for a period of one and three years after passing Degree or Diploma respectively

OR

3. Possessing the valid certificate of certificate of competency class – 1 (Electrical Supervisor)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 92 of 104

Annexure 6 (Refer Para 5.6)

Training Module for BAs Worker & Supervisor

Training for BA Supervisor

Duration – 02 Hrs / Month

Methodology: Lecture and Practical Demonstration of Safety Zone Creation

Session: 1

Topic: Electrical Safety Aspects

Sub Topics:

1. Learning specifics of HT & LT Network of zone
2. Major type of HT / LT / service lines / street light maintenance works
3. Understanding the need of Safety
4. Understanding the safe process of maintenance:
 - Planning of the maintenance job
 - Availability of men, material & machine, PPEs, Safety gear and approved PTW
 - Briefing of the job by the supervisor of the TPWODL
 - Identification of Risks associated with the maintenance work and planning for controlling measures by TPWODL supervisor
 - Creation of safety zone by TPWODL supervisor and satisfying that the network is dead – Use of Neon Tester, Shorting Chain and Safety Tagging
 - Start of the work – Right person for the right job
 - Alert supervision
 - Completion of the job – Check points
 - Energization of network
 - Actions to be taken in case of some accident

Session: 2

Topic: Use of Electrical Testing Equipment

Methodology: Lecture and Practical Demonstration

Sub Topics:

1. Meggar, Hi Pot, Clamp On Meter, Neon Tester, Discharge Rod, Line tester etc.

Session: 3

Topic: Awareness of Electrical Safety Aspects

- A. Understanding the need of this Training and Safety
- B. Learning specifics of HT & LT Network
- C. Major type of work to be carried out in zones
- D. Switching Operations (Do's & Don'ts) including Street Light Switching
- E. Working on Height (*practical demo also*)
- F. Understanding the Safe Process of Maintenance / Working:
 - Planning of the job
 - Availability of men, material & machine, PPEs, Safety gear and approved PTW
 - Briefing of the job by the supervisor
 - Permit to Work
 - Safety Tagging and Lock Out Tag out

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 93 of 104

- Identification of Risks associated with the work to be carried out and planning for controlling measures by proper supervision
- Concept of “**Safety Zone**”
- Identification and use of Neon Tester, Shorting Chain, Clamp on Meter, Hi Pot, Meggar etc.
- Completion of the job – Check points
- Accident Theory & Incident Reporting
- Actions to be taken in case of some accident

Session: 4

Topic: Identification, Demonstration and Usages of Tools, PPEs and other Safety Gears and demonstration of working on HT pole

Session: 5

Topic: Practical demonstration of Safety Zone creation

FREQUENCY

Regular Safety Training Program

- It will be conducted for all field & supervisor staff of BA in such a manner that all BA Personnel attend at least two hours safety training during every month.

One Day Induction Safety Training Programs:

- This training will be for the new BA's personnel, who have been cleared by the Cross Functional Panel to undergo Safety training and who are likely to be deployed at various work sites of TPWODL by the BA, as a part of AMC / Work Contract.

Duration / Periodicity:

- Duration and periodicity has been defined above. However, this is subject to change at the discretion of TPWODL.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 94 of 104

Annexure 7 (Refer Para 5.7)

LIST OF PERSONAL PROTECTIVE EQUIPMENT AND TESTING FREQUENCY

Sl. No.	Name of PPE	IS / EN Standard	Testing Frequency	Remarks	Ref Brand & Model
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298 (Part-2)	Monthly and visual check every day for any crack or damage in the leather or sole.		BATA (Model No.- Endura L/C) Liberty (Model No. – 7198-01 HT Barton Black – Warrior)
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	Monthly and visual check every day for any crack in shell.		Karam (PN Safetech) Joseph Leslie Accent Industries Honeywell
03	Full body harness (Safety belt)	EN 361	Monthly and visual check every day of the bends and the harness.		Karam (PN Safetech) Joseph Leslie Accent Industries
04	Electrical Safety Gloves	EN: 60903 CE marked	Weekly and visual check for any crack and blow test before every work.	Manufactured not beyond 12 months.	Make Sparian / Sumitech / CATU supplied with inner cotton glove with over glove of split leather.
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	Monthly and visual check every day for any crack in shell.	Clear acrylic visor attached with safety helmet.	Karam (PN Safetech) Joseph Leslie Accent Industries Honeywell
06	Fireproof jacket for chest protection		Monthly and visual check every day.		
07	Safety Chain for shorting cum earthing.	As per TPWODL standard	Weekly and visual check before every work.	Made of brass, Total length – 5.5 meters and made of 12 SWG.	

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 95 of 104

Note:

1. Any other Personal Protection Equipment required beyond above list will be according to BIS or EN Standards.
2. All Personal Protection Equipment will be checked by the engineer in-charge or SAFETY group of TPWODL.
3. Safety Representative of the BA has to maintain the record of the availability, condition and checking of the PPEs.
4. All tools required as per the contract must be according to respective IS / EN standards.
5. TPWODL may revise or add the above list of PPE and their specifications as and when feel necessary. The information about new specifications /models will be circulated by the Engineer In-charge (EIC), which shall adhere by the business associated in the shortest possible time. The EIC shall issue a memo / instruction to BA with timeline for implementation. Any delay will be treated as non- compliance / safety violations. Refer picture of each PPE given in next page.

Pictures of PPE for reference purpose.

Sl. No.	Name of PPE	IS / EN Standard	Picture
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298(Part-2) and with test report of electrical resistance.	
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	
03	Full body harness (Safety belt) The straps at shoulder and thigh shall have full pad for comfort. The back shall be so designed that harness straps do not tangle with each other.	EN 361:2002 EN 358: 2000 IS: 3521:1991/2002	

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 96 of 104

04	Electrical Safety Gloves – Composite type Soft electrical gloves as per size of individual.	EN: 60903 CE marked	
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	
06	Fireproof jacket for chest protection		
07	Safety Chain for shorting cum earthing.	As per TPWODL standard	
08	Reflective jacket to each workman	As per TPWODL standard	

Note: Picture shown are for indicative purpose only. Actual product may differ.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 97 of 104

Annexure 8 (Refer Para 5.8) LIST OF AUDITS TO BE CONDUCTED

Audits	Responsibility	Freq.	Ref. Doc.
Permit to Work & Field Audit	BA Safety Representative	Weekly	F04 (COR P - 12)
Tool Bag & PPE's Audit		Weekly	F06 (COR P - 12)
First Aid Box Maintenance Record		Fortnightly	F08 (COR P - 12)
Fire Extinguisher Record <i>(Applicable for the BA involved in major construction works and have storage of flammable material at worksite)</i>		Monthly	F09 (COR P - 12)
Safety Talk Register		Weekly	F18 (COR P - 12)
Site Safety Audit		Daily	F29A (COR P - 12)

Note:

1. (BA Safety Representative has to use the formats as per Safety process COR – P – 12 of TPWODL)

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 98 of 104

Annexure 9 (Refer Para 5.9)

PERFORMANCE REPORT – SAFETY

FOR THE MONTH OF.....

Name of BA:

Name of the Project and Purchase order No:

Date of commencement of work:

Man Hour Worked in this month (No. of employees X 8 Hrs + Overtime):

Cumulative Man Hour worked:

Total Number of Minor Injury (this month): Minor Injury (Total)

Major Injury (this month): Major Injury (Total):

Detail of the Incident / Sub Standard Acts and Condition

Activity	This Month	Cumulative (Total)	Day Lost (this month)	Days Lost (Cumulative)
No. of the Incident				
No. of lost time injuries				
No. of dangerous occurrences				
No. of near miss reported				
Substandard Act/Conditions observed			Attach details of observation of this month	
Safety Violation Notice received (from TPWODL) (both in numbers and in Rs.)	No.	No.	No. of violation letter received and compliance report for the TPWODL.	
	Rs.	Rs.		

Note: Cumulative means total from date of commencement of work according to the contract.

Detail of the Accident / Near Miss Incidents:

Date and Time	Type of the incident	Name of Employee	Brief Description	Corrective and Preventive actions recommended

Details of the Safety Violations:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 99 of 104

Date and Location	Brief Description	Name of employee involved	Action Taken

Detail of the Safety Talk / Toolbox Talk / Safety Training

Date and Location	Topic (s)	Total Number of employees (Worker / Supervisor)	Number of participants (Worker / Supervisor)

Detail of the Safety Meeting

Date and Location	Number of participants	Topics discussed	Major Observations / Innovation

Detail of the Safety Inspection /Audit: (as per TPWODL site audit checklist F29A(COR-P-12))

Date	Area / Location	Major Observations	Recommendations	Action Taken

Any other Safety, Occupational Health, Environment & Disaster Management Promotional Activity (During this month):

Date	Location	Activity	Level of Participation	Number of participations

Signature of the BA Safety Representative
HoG

Signature of ZM /

Name, E. No. and Date

Name, E. No. Date.

Note: The original form to be deposited with Engineer in-charge and a copy to SAFETY group on or before 5th of every month along with bill. List of training of the current month and status of PPE to be also mentioned individual wise.

BA may include additional lines if required. The TPWODL may revise the format as and when deemed required.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 100 of 104

ANNEXURE-M
VENDOR APPRAISAL FORM

TO BE SUBMITTED BY VENDOR (To be filled as applicable)			
VENDOR:			
1.0	DETAILS OF THE FIRM		
	1.1	NAME (IN CAPITAL LETTERS)	:
	1.2	TYPE OF CONCERN (PROPRIETORY) Partnership, Pvt. Ltd., Public Ltd. etc.	:
	1.3	YEAR OF ESTABLISHMENT	:
	1.4	LOCATION OF OFFICE POSTAL ADDRESS TELEGRAPHIC ADDRESSES, TELEX NO. FAX NO.	:
	1.5	LOCATION OF MANUFACTURING UNITS	:
		i) UNITS 1	:
		ii) OTHER UNITS	:
2.0	PRODUCTS MANUFACTURED		:
3.0	TURNOVER DURING THE LAST 3 YEARS (TO BE VERIFIED WITH THE LATEST PROFIT & LOSS STATEMENT).		:
4.0	VALUE OF FIXED ASSETS		:
5.0	NAME & ADDRESS OF THE BANKERS		:
6.0	BANK GUARANTEE LIMIT		:
7.0	CREDIT LIMIT		:
8.0	TECHNICAL		
	8.1	NO. OF DESIGN ENGINEERS (INDICATE NO. OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	8.2	NO. OF DRAUGHTSMEN	:
	8.3	COLLABORATION DETAILS (IF ANY)	:
		8.3.1 DATE OF COLLABORATION	:
		8.3.2 NAME OF COLLABORATOR	:
		8.3.3 RBI APPROVAL DETAILS	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 101 of 104

		8.3.4 EXPERIENCE LIST OF COLLABORATORS	:
		8.3.5 DURATION OF AGREEMENT	:
	8.4	AVAILABILITY OF STANDARDS / DESIGN PROCEDURES / COLLABORATOR'S / DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT)	:
	8.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	:
	8.6	QUALITY OF DRAWINGS	:
9.0	MANUFACTURE		
	9.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	:
	9.2	POWER (KVA)	:
		MAINS INSTALLED	:
		UTILISED	:
		STANDBY POWER SOURCE	:
	9.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENT AS APPLICABLE)	:
		9.3.1 MATERIAL HANDLING	:
		9.3.2 MACHINING	:
		9.3.3 FABRICATION	:
		9.3.4 HEAT TREATMENT	:
		9.3.5 BALANCING FACILITY	:
		9.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:
	9.4	SUPERVISORY STAFF	:
	9.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	:
	9.6	NO. OF SHIFTS	:
	9.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	:
	9.8	WORKMANSHIP	:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 102 of 104

	9.9	MATERIAL IN STOCK AND VALUE	:	
	9.10	TRANSPORT FACILITIES	:	
	9.11	CARE IN HANDLING	:	
10.0	INSPECTION / QC / QA / TESTING			
	10.1	NUMBER OF PERSONNEL (INDICATE NO. OF YEARS OF EXPERIENCE)	:	
	10.2	INDEPENDENCE FROM PRODUCTION	:	
	10.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:	
	10.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:	
	10.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:	
	10.6	STAGE INSPECTION AND DOCUMENTATION	:	
	10.7	SUB-ASSEMBLY & DOCUMENTATION	:	
	10.8	FINAL INSPECTION AND DOCUMENTATION	:	
	10.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	:	
	10.10	TYPE TEST FACILITIES	:	
	10.11	ACCEPTANCE TEST FACILITIES	:	
	10.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	:	
	10.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC. (AS APPLICABLE)	:	
	10.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:	
	10.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNISED LABORATORIES	:	
		i) FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	:	
		ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:	
11.0	EXPERIENCE (INCLUDING CONSTRUCTION / ERECTION / COMMISSIONING) TO BE FURNISHED IN THE FORMAT INDICATED IN APPENDIX)			:
12.0	SALES, SERVICE AND SITE ORANISATIONAL DETAILS			:
13.0	CERTIFICATE FROM CUSTOMERS (ATTACH COPIES OF DOCUMENTS)			:

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 103 of 104

14.0	POWER SITUATION	:
15.0	LABOUR SITUATION	:
16.0 *	APPLICABILITY OF SC/ST RELAXATION (Y/N) IF YES, SUPPORTING DOCUMENTS TO BE ATTACHED	
17.0	ORGANIZATIONAL DETAILS 1. PF NO 2. ESI NO 3. INSURANCE FOR WORK MAN COMPENSATION ACT NO 4. ELECTRICAL CONTRACT LIC NO 5. ITCC / PAN NO 6. SALES TAX NO 7. WC TAX REG. NO	:
18.0	DOCUMENTS TO BE ENCLOSED: 1. FACTORY LICENSE 2. ANNUAL REPORT FOR LAST THREE YEARS 3. TYPE TEST REPORT FOR THE ITEM 4. PAST EXPERIENCE REPORTS 5. ISO CERTIFICATE –QMS, EMS, OHAS, SA 6. REGISTRATION OF SALES TAX 7. COPY OF TIN NO. 8. COPY OF SERVICE TAX NO. 9. REGISTRATION OF CENTRAL EXCISE 10. COPY OF INCOME TAX CLEARANCE. 11. COPY OF PF REGISTRATION 12. COPY OF ESI REGISTRATION 13. COPY OF INSURANCE FOR WORK MAN COMPENSATION ACT NO 14. COPY OF ELECTRICAL CONTRACT LIC NO 15. COPY OF PAN NO 16. COPY OF WC TAX REGISTRATION 17. DOCUMENTS IN SUPPORT OF SC/ST RELAXATION AT S.NO.16.0 18. GST Registration No	

* Classification of BA s under SC/ST shall be governed under following guidelines:

- **Proprietorship/ Single Ownership Firm:** Proprietor of the firm should be from SC/ST community. Governing document shall be Proprietorship Deed.
- **Partnership Firm:** Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed.
- **Private Limited Company:** Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

NOTE: Certification from SC/ST Commission shall be required for deciding upon SC/ST status of a person.

Doc. Title	GENERAL CONDITIONS OF CONTRACT - COMPOSITE WORKS	
Rev. No	0	Page 104 of 104

ANNEXURE-N

MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:

Tender Enquiry No.:

To,

Chief (Procurement & Stores)

TP Western Odisha Distribution Limited,
Burla, Sambalpur

Sir,

WHEREAS M/s. [name of OEM], who are official manufacturers of having factories at [address of OEM] do hereby authorize M/s [name of bidder] to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us

.....

and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the Special Conditions of Contract or as mentioned elsewhere in the Tender Document, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

We hereby confirm that in case, the channel partner fails to provide the necessary services as per the Tender Document referred above, M/s [name of OEM] shall provide standard warranty on the materials supplied against the contract. The warranty period and inclusion / exclusion of parts in the warranty shall remain same as defined in the contract issued to their channel partner against this tender enquiry.

Yours Sincerely,

For

Authorized Signatory