



Ref: TPCODL/P&S/ 1000000090/2021-22 /Corrigendum/001

Dated: 12th August 2021

Sub: Corrigendum-1 to Open tender number TPCODL/P&S/ 1000000090/2021-22 for Rate Contract for Supply of 33 kV and 11 kV Ring Main Units

With reference to above the bidder are intimated to note the following intimations:

I. TPCODL is sharing replies to Pre-Bid queries raised by all the bidders seeking clarification before the deadline date as mentioned in Event Calendar of Tender Document No. TPCODL/P&S/ 1000000090/ 2021-22 of the Tender. The replies to Pre-bid queries is attached as Annexure-1 to this Corrigendum

II. Extension of due date and time of bid submission/opening of Technical bids and EMD

Tender No.	Work Description	Existing Entry	May be read as
TPCODL/ P&S/ 1000000090/ 2021-22	Rate Contract for Supply of 33 kV and 11 kV Ring Main Units	a: Due date and time of bid submission /Date & Time of opening technical bids. 12.08.2021 15:00 Hours	a: Due date and time of bid submission /Date & Time of opening technical bids. 21.08.2021 15:00 Hours

Note:

- I. Bidder need to upload original signed Price bid along with copy of Price bid in Excel file in SAP Ariba
- II. All other terms and conditions of the above tender will remain same

By Order

Chief-Procurement & Store, TPCODL



ANNEXURE – I – Replies to Pre-Bid Queries

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
1	4.1 RMU CONFIGURATIONS	3 Way with 1 CB (For Indoor and Outdoor application): Both side extensible 2 Nos. 630A Incomer Load Break Switches + 1 No. 630A Local Feeder/transformer Control Vacuum Circuit Breaker with self-powered O/C + E/F relays+ shunt trip coil (24V DC) + 1 No. Electronic Fault Passage Indicator on left LBS in each RMU	Please confirm the following: Manual / Motorised Indoor / Outdoor Extensible / Non Extensible	RMU shall be Outdoor , Motorised & NON-Extensible type.
2	4.1 RMU CONFIGURATIONS	4 Way with 2CB (For Indoor and Outdoor application): Both side extensible 2 Nos. 630A Load Break Switches + 2 Nos. 630A Feeder Vacuum Circuit Breakers with self-powered O/C + E/F relays + shunt trip coil (24V DC) + 1 No. Electronic Fault Passage Indicator in left side LBS in each RMU	Please confirm the following: Manual / Motorised Indoor / Outdoor Extensible / Non Extensible	RMU shall be Outdoor , Motorised & NON-Extensible type.
3	5.2.13 Pg 7 of 31	For ODISHA the atmosphere is mainly humid, saline across year hence necessary anticorrosive fasteners & components to be provided on switchgear. Anticorrosive painting should be painted for RMU	Painting shall be as per Siemens standard offering suitable for saline atmosphere	Colour shade shall be RAL7032 as per relevant IS.
4	Current Transformer	For TPCODL, ODISHA The CT settings shall be adjustable between 60 - 400/1 Amp at terminal block. CT ratio is 60-400/1A, Burden is 2.5 VA, Class - 5P10.	CT ratio is 60-400/1A, Burden is 2.5 VA, Class -5P10.	For TPCODL, ODISHA the CT settings shall be adjustable between 60 - 400/1 Amp at terminal block. CT ratio is 60-400/1A, Burden is 2.5 VA, Class -5P10.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
5	Earth Busbar	5.7.3 The size of copper earth bus-bar should be Min.105 sq.mm inside the enclosure to withstand short time current carrying capacity as per IEC.	Earth busbar shall be 90sqmm Copper as per past supply to TATA Power Mumbai	It shall be as per Technical Specification
6	17.0 SPARES, ACCESSORIES & SPECIAL TOOLS / GAUGES	SPARES, ACCESSORIES & SPECIAL TOOLS / GAUGES	Please confirm if spares shall form part of RMU supply	Spares has not been considered for this tender.
7	46.A Cable Termination boot /Cable boot	Approved make - 3M/Raychem	Cable Boots shall be as per OEM approved make / KD Joshi as per previous supply	Approved make should be 3M/Raychem
8	46.0 Cable compartment suitability shall be	a. 11kV 3CX400 sq.mm having dia of 92mm in all compartment	Max Cable OD shall be 40mm per phase	It shall be as per Technical Specification
9	Fault Passage Indicator	50.0 Fault passage indicator FPI on each LBS as a part of each RMU with specified default setting.	Please confirm exact no of FPIs required.	3 Way(2 LBS+1VCB)-1 FPI 4 Way(2LBS+2VCB)-1 FPI FPI to be installed at one LBS each..
10	ROUTINE TESTS	ROUTINE TESTS	Routine Test shall be carried out on 10% Qty only Routine test shall be as per Siemens approved TATA Power QAP. Only routine tests which are mentioned in the QAP as per standards shall be conducted at Goa factory.	This should be done as per approved TPCODL QAP Plan.
11	Unloading at Site	Unloading at Site	Unloading at site shall be done by TATA Power	It is in the scope of vendor/supplier.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
12	Supervision at Site	Supervision at Site	Supervision shall not be part of Siemens scope, Additional charges for supervision shall be quoted as optional	Bidder shall provide supervision support during installations for minimum 10 days.
13	RMU Configuration	RMU Configuration- 3way	OPTION 1: RRL+ME (Line Metering). Connecting between the RMU and PT Panel shall be through Cable and not through Screened Busbar	It shall be as per Technical Specification
14	RMU Configuration	RMU Configuration- 4way	4way RMU shall be provided with a common Bus PT and not Line PT incase of 3way RMU	4 way with metering non extensible type-(2LBS + 2VCB)+ 2 metering unit, and metering unit to be placed on both sides.
15		Creepage distance (minimum) from any live part to the nearest earth point shall be 190 mm.	Since CT and PT shall be mounted inside panel, creepage is not applicable	It shall be as per Technical Specification
16	Current Transformer	4.3.1 Transformation ratio (CT ratio) 30/5, 50/5 ,100/5, 200/5 & 300/5 4.3.2 Rated Output (VA Burden) 15 VA 4.3.3 Class of accuracy 0.2s	CT shall be Line HT CT for 3way & Bus LT CT for 4way Burden- 2.5VA, Acc- 0.5, 5P10 in case of protection	It shall be as per Technical Specification
17	Potential Transformer	4.4.1 Transformation ratio (PT ratio) 11KV/110 Volts (single core) 4.4.2 Rated Output (VA Burden) 50 VA per phase 4.4.3 Rated Voltage factor and time 1.2 times continuous and 1.9 for 8 Hrs 4.4.4 Class of accuracy 0.2	4.4.1 Transformation ratio (PT ratio) 11KV/110 Volts (single core) 4.4.2 Rated Output (VA Burden) 50 VA per phase 4.4.3 Rated Voltage factor and time 1.2 times continuous and 1.9 for 8 Hrs 4.4.4 Class of accuracy 0.2	It shall be as per Technical Specification

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
18	4.6 Enclosure	4.6.1 Material and thickness of the enclosure Ms sheet, Minimum 2mm 4.6.2 Protection against penetration of dust and water -IP-55	IP shall be IP54 as per type tested design for outdoor enclosure	Accepted
19	Isolation	C) The PT should have isolation facility either through Load break switch or through Vacuum breaker.	Not possible in case of 4way.	It shall be as per Technical Specification
20	Dimensions	The dimensions of the metering cubicle shall be approx. 1000 mm (L) x 1500mm (H) x 1000 mm (D). Length (L) i.e. 1500 mm shall also include 100 mm standing channel.	Dimensions shall be confirmed during detail engineering	Accepted
21	Metering Compartment	The metering cubicle shall be panel type with 2 no's of compartments (one for CT - PT and other for metering).	The metering cubicle shall be panel type with common compartment with CT - PT and for metering).	It shall be as per Technical Specification
22	Earthing	Both earthing bolts at opposite ends to be interconnected by 50 x 6 GI.	Eathing shall be through 30x3 sqmm Cu B/B	Earthing shall be through 40x 3 Sqmm Cu Busbaar.
23	Explosion Vent	The metering cubicle shall have explosion vent provision at the bottom of back side.	Explosion Vent shall be as per type Tested design	Accepted
24	Creepage	Creepage distance (minimum) from any live part to the nearest earth point shall be 190 mm.	Creepage distance (minimum) from any live part to the nearest earth point shall be 150 mm as per type tested design.	It shall be as per Technical Specification
25		PT bushing shall be provided with a PVC cap to avoid creepage due to dust & moisture.	Not applicable	It shall be as per Technical Specification
26	Earth Busbar	The metering cubicle shall be provided with M16 earthing bolt at two opposite site with welding from inside the cubicle for fixing external earth during installation. Both	Common Earth busbar for RMU and Metering Panel of 30 x 3 sqmm copper	Earthing shall be through 40x 3 Sqmm CuBusbaar.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		earthing bolts at opposite ends to be interconnected by 50 x 6 GI.		
27	Danger Plate	A Danger Plate of Aluminum sheet embossed / engraved or Screen Printed on Enclosure with 11000 V and danger mark in English and Hindi also effectively secured.	Sticky type as per past supply	It shall be as per Technical Specification
28	Wiring	The secondary wiring shall be with flexible color-coded copper wires. 4 sq mm flexible wires to be used for CT & 2.5 sq mm flexible wires to be used for PT wiring.	CT circuit: 2.5 mm. ² / Red, Yellow, Blue, Black Control circuit DC If any:1.5 mm. ² / Grey Control circuit AC If any:1.5 mm. ² / Grey PT circuit:1.5 mm. ² / Red, Yellow, Blue, Black AC/DC Distribution circuit:1.5 mm. ² / Red,Black Auxiliary Buswire If any:2.5 mm. ² colour coding for AC/DC as per above	Accepted
29	Make List	Makes of CT & PT	Make of CT & PT shall be Reco, NPT / Siemens approved make	This is to be followed as per Tender specification. For any deviation prior permission to be taken before manufacturing.
30	Type Test	TYPE TESTS for RMU + CTPT	Type Test Report for RMU shall be submitted while Type Test Report of CT & PT shall be submitted separately	The complete type test is required RMU along with HT metering.
31	ROUTINE TESTS	ROUTINE TESTS RMU +CTPT	Routine Test Report for RMU shall be submitted while Routine Test Report of CT & PT shall be submitted separately	The complete type test is required RMU along with HT metering.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
32	Acceptancer Test	ACCEPTANCE TESTS RMU + CTPT	Acceptance Test Report for RMU shall be submitted while Routine Test Report of CT & PT shall be submitted seperately	The complete type test is required RMU along with HT metering. Acceptance test will be required for RMU along with HT metering.
33	1.1/6	Scope of work	Our Scope is limited to design, manufacture, testing at manufacturer's works, packing, forwarding, & supply of SF6 gas Insulated RMU as per given specification, clarification / deviation listed below. All works related to unloading of material at site / store, storage of material at site, moving at site, RMU "erection, testing and commissioning" is excluded from our scope. However, we can depute our engineer at site for supervision activities on per diem rate if required. External Cables, lugs and cable glands are not considered in our scope.	This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site/store and performance of 11kV Ring Main Units with all accessories and necessary training for trouble free & efficient performance. Bidder shall provide supervision support during installations for minimum 10 days.
34	1.1/6	RMU 33KV 3WAY 630A WITH METERING UNIT RMU 33KV 4WAY 630A WITH METERING UNIT	What will be the RMU configuration for these 3 Way & 4 Way RMU requirement	<u>RMU Configuration: Non Extensible Type</u> 3 way with metering-(2LBS + 1VCB)+ 1 metering unit,and metering unit to be placed on right sides. 4 way with metering-(2LBS +



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				2VCB)+ 2 metering unit, and metering unit to be placed on both sides.
35	1.1/6	*Bidder can select the Lot in which they want to participate and can deposit EMD amount accordingly	Can we quote selectively from Lot-2 i.e. Only those RMU's which are without metering unit	It is mandatory to quote for all the line items in the selected Lot.
36	3.9/14 & ENG-HV/8.0/Page 10 of 31	Type Tests (if applicable)	Kindly note, some of the test reports may be older than 5 years. However, there is no change as far as tested design is concerned. Also, as per latest guidelines from CEA, type test validity shall be for 10 years. Moreover, IEC does not specify about conducting repeat tests after specific durations unless there is change in design. In this view, we do not envisage any fresh type testing. However, we shall submit type test reports for type tests carried out on similar product.	Type tests shall have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid. However, the same can be extended upto 10 years if there is no change in design.
37	7.1/16	Delivery period shall be within 60 days from date of receipt of release order / CAT-A issuance, whichever is later	Delivery shall be commencing from 22-24 weeks from drawing approval and shall be discussed mutually depending on no. of qty deliverable in various lots. Drawings shall be submitted within 3 weeks from the date of PO. Drawings shall be approved within 1 week from the date of submission..	Delivery period shall be within 90 days for 33KV RMU and 60 days for 11KV RMU from date of receipt of release order / CAT-A issuance, whichever is later
38	ANNEXURE I	RMU 33KV 3 WAY 630A (2 ISLTR+2 BKR)	Please confirm the exact requirement is for 3 Way or 4 Way as configuration is mentioned for 4 Way RMU	RMU Configuration: Non Extensible Type



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				3 way-(2LBS + 1VCB) 4 way-(2LBS + 2VCB)
39	ENG-HV/3.0/Page 3 of 31	Max. ambient temperature : 50 deg. C	Please note that the design ambient temperature considered is 40 Deg C. All ratings are designed as per this ambient condition. Above ambient of 40 Deg C, suitable derations shall apply. Product is suitable to be used at max 50Deg C ambient.	Accepted
40	ENG-HV/4.0/Page 4 of 31	Min Gas Pressure 0.05 Bar G	Min recommended gas pressure for safe operations shall be 1.3 Bar at 20 deg C	Accepted
41	ENG-HV/4.0/Page 4 of 31	Rated cable Charging interrupting Current of Incomer Load Break Switch : 25kA	Rated cable charging interrupting current of Incomer Load Break Switch shall be 50 A	Accepted
42	ENG-HV/4.0/Page 4 of 31	Temperature Rise Maximum permissible temperature for bus bar shall not be 90 Deg C, as per IEC 6094 And IEC 62271.	Permissible temperature rise at 40 °C for Busbars shall be 65 K (105°C)	Accepted
43	ENG-HV/4.0/Page 4 & 5 of 31	Functional Requirements:	Kindly confirm qty of RMU's which are for Indoor and Outdoor application as well as please confirm qty of RMU's which will be extensible & Non extensible	RMU requirement is for Outdoor and Non extensible Only.
44	ENG-HV/4.0/Page 5 of 31	All RMUs envisaged are extensible type only and extensible on both the sides of the RMU.	Kindly confirm whether RMU requirement is for Indoor or Outdoor application. We can offer extensible type RMU for Indoor application and Non extensible type RMU for outdoor application	RMU requirement is for Outdoor and Non extensible Only.
45	ENG-HV/4.0/Page 5 of 31	Cable terminal should be easily accessible externally for IR test.	Please note that as per relevant standards and considering the safety of the operator, access to cable test bushing for testing	Accepted

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			purpose is possible only after the respective feeder is EARTHED. Remove the cable compartment cover and test the cables via probes. However, disconnection of cable terminations, cable joints and terminal protectors from cable bushings are not required. Access to live test terminals after opening the cover located at the front fascia (without earthing) may lead to accidents and is dangerous from operator safety point of view. Hence, we do not provide live test terminals in the front fascia.	
46	ENG-HV/5.1.1/Page 5 of 31	The RMU shall be designed so that the position of the different devices is visible to the operator on the front of the switchboard and operations are visible as well.	The position of the power contacts and earthing contacts shall be clearly visible on the front of the RMU with the help of mechanical MIMIC with position indicators which shows the ON-OFF-EARTH position of the 3 position switch & VCB ON & VCB OFF.	Accepted
47	ENG-HV/5.1.4/Page 6 of 31	Three toroid transformers incorporated in the transformer tee-off bushings	Protection CT's shall be provided. There is no toroidal window CT for Earth fault protection. The normal Earth fault protection is provided by the R, Y, B CTs input to the Relay. Also we understood that there is no requirement of metering CT and meters. Please confirm the same	Accepted for only RMU without having HT metering



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
48	ENG-HV/5.1.4/Page 6 of 31	A "fast-on" test receptacle for protection testing (with or without CB tripping)	Requirement is not clear please elaborate	The relay shall have its own arrangement to do functional checking through relay test kit, without primary injection.
49	ENG-HV/5.1.4/Page 6 of 31	The terminal protectors to be supplied with the RMU by the vendor along with the cable termination bolt for termination 400 Sq. mm 33kV 1C cable or 33kV 3C 400 Sq. mm cable in breaker & 400 Sq. mm 33kV 3 C for isolator compartment.	Currently we have considered 1RX3CX400sqmm Cable size for both LBS & VCB. Pls confirm the same. Also note trifurcation shall be outside RMU.	The cable box shall be suitable for 1Cx630sqmm cable /phase
50	ENG-HV/5.1.11/Page 8 of 31	The FPI should be communicable FPI so that the status will be available on SCADA.	FPI shall have potential free output contacts (1NO & 1NC) which shall be wired out upto terminals for SCADA or DAS. Further connection shall not be in our scope.	Accepted
51	ENG-HV/5.1.11/Page 8 of 31	Provision for relay testing and FPI testing without taking outage of FPI and relay to be made available.	Requirement is not clear please elaborate	The functional checking of FPI should be done without taking outage of the feeder.
52	ENG-HV/5.1.12/Page 8 of 31	Signal requirement for field RTU (which shall be mounted near RTU) is attached (refer Annexure-1). The bidder shall quote the cost of field RTU (FRTU) separately with all technical details for acquisition of the signal as described in Annexure-1.	Please confirm whether FRTU Panel, FRTU, Modem, & interfacing devices shall be in who's scope. RMU's shall be Motor operated or manual operated type please confirm the same	FRTU is not considered in this tender
53	ENG-HV/5.1.12/Page 8 of 31	The bidder shall quote the unit price for supply and fitting of the motor into the line switches and circuit breakers at a later date.	We understood that there is a requirement of manual operated load break switch and breaker. Please confirm the same	This arrangement has been considered with LBS & VCB both are motorised.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
54	ENG-HV/6.0/Page 9 of 31	RMU which need to be used for outdoor application should be having enclosure specified with IP55 degree of protection in accordance with recommendation of IEC 529. Type test certificates for test conducted earlier on similar equipments shall be furnished.	Kindly confirm whether RMU requirement is for Indoor or Outdoor application. We can offer extensible type RMU for Indoor application and Non extensible type RMU for outdoor application. For outdoor application degree of protection shall be IP 54 and IP3X for indoor application as per our type tested design	RMU requirement is for Outdoor and Non Extensible Only. For outdoor application degree of protection shall be IP 54 and IP3X for indoor application as per our type tested design
55	ENG-HV/5.1.13/Page 9 of 31	The RMU is going to be installed in sea facing .There should be minimum 5years of warranty for paint. In case of paint peeled off because of Saline weather within 5years OEM has to the repainting at his own Cost	We will check and confirm the same	To be done as per technical specification
56	ENG-HV/6.0/Page 9 of 31	NAME PLATE & MARKING Name plates shall be suitably embossed with "PO no. with date" "PROPERTY OF TPNODL" & "CODE NUMBER" along with the following information.	We understood that CODE NUMBER shall be provided by TPNODL. Please confirm	NAME PLATE & MARKING Name plates shall be suitably embossed with "PO no. with date" "PROPERTY OF TPCODL" & "CODE NUMBER" to be provided by TPCODL.
57	ENG-HV/7.0/Page 10 of 31	11. Salt spray Test for 1000Hrs.		To be done as per technical specification
58	ENG-HV/11.0/Page 10 of 31	Guarantee	Please confirm exact requirement of warranty period	The Guarantee Period is of 48 months from date of commissioning or 60 months from date of last supplies whichever is earlier
59	ENG-HV/17.0/Page 11 of 31	SPARES, ACCESSORIES & SPECIAL TOOLS/GAUGES	Please provide spare list	Spares has not been considered for this tender.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
60	ENG-HV/18.0/Page 12 of 31	7. Experience List	Please elaborate the exact requirement	How many units have been supplied and to which utilities along with their performance certificate.
61	ENG-HV/19.0/Page 12 of 31	RMU Category 3 Way - Extensible right side 3 Way - Non-Extensible 4 Way - Extensible right side 4 Way - Non-Extensible	Kindly confirm for this tender which functional requirement needs to be offer	RMU Configuration: Non Extensible Type 3 way-(2LBS + 1VCB) 4 way-(2LBS + 2VCB) Both are Non extensible type
62	ENG-HV/19.0/Page 13 of 31	Degree Of Protection The RMU metal parts shall be greater than 2.0 mm thickness high tensile steel which must be shot blasted, spray galvanised with minimum thickness of 30 micron and subsequently powder coated. The overall Paint thickness shall be not less than 70 microns.	Material and thickness of the enclosure (gas vessel) : Stainless-steel sheets - ≥ 2.0 mm thick; Material designation: Stainless steel Material and thickness of the enclosure (Outer) : CRCA - 2.0 mm thick; Material designation: CRCA Treatment Process shall be 7 tank Powder coating. Paint layer thickness shall be 100 microns +/- 25 Micron Standard	Accepted, however for the enclosure same needs to be stainless steel of thickness 2mm.
63	ENG-HV/19.0/Page 13 of 31	SF6 tank design : Sealed pressure system by Laser welding so that no refilling of gas is required for 30 years.	Sealed pressure system by robotic/TIG welding.	Accepted
64	ENG-HV/19.0/Page 13 of 31	Moving contacts of earthing switch shall be visible in closed position thru transparent covers	The position of the power contacts and earthing contacts shall be clearly visible on the front of the RMU with the help of mechanical MIMIC with position indicators which shows the ON-OFF-EARTH position	Accepted



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			of the 3 position switch & VCB ON & VCB OFF.	
65	ENG-HV/19.0/Page 13 of 31	Fitting of motor at site shall be possible & shall have mechanical interlock.	We understood that there is a requirement of manual operated load break switch and breaker. Please confirm the same. Also elaborate requirement of mechanical interlock	LBS & VCB both are motorized type.
66	ENG-HV/19.0/Page 14 of 31	Make of Relay SEG-WIP1 or Schneider-VIP 300 or REJ 603 or any other as per Purchasers Approval.	We request you to accept Siemens make 7SR45 self Powered Relay having protections (50,51,50N,51N) with RS 485 communication port. Please confirm the same.	The Relay Technical Specifications need to be shared with TPCODL for further approval. If Relay found suitable according to TPCODL requirement same will be approved for usage.
67	ENG-HV/19.0/Page 14 of 31	Testing of cable-without opening the doors.	Please note that as per relevant standards and considering the safety of the operator, access to cable test bushing for testing purpose is possible only after the respective feeder is EARTHED. Remove the cable compartment cover and test the cables via probes. However, disconnection of cable terminations, cable joints and terminal protectors from cable bushings are not required. Access to live test terminals after opening the cover located at the front fascia (without earthing) may lead to accidents and is dangerous from operator safety point of view. Hence, we	Accepted



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			do not provide live test terminals in the front fascia.	
68	ENG-HV/19.0/Page 14 of 31	Cable covers shall be pad lockable.	The cable cover compartment shall be interlocked with earth switch. The cable compartment cover can only be removed if the feeder is earthed.	Accepted
69	ENG-HV/19.0/Page 14 of 31	Hinged doors shall be provided. the hinges for the doors need to be riveted and shall not have any access from outside. Bolted hinges shall not be acceptable.	The cable cover compartment shall be interlocked with earth switch. The cable compartment cover can only be removed if the feeder is earthed.	Accepted
70	ENG-HV/19.0/Page 14 of 31	Earth fault passage indicator One Per RMU with as a part of RMU	We have considered only earth fault indicator. Please confirm	FPI will be installed on one LBS for the configuration 3 way(2LBS+1VCB)-Non extensible 4 way(2LBS+2VCB)-Non extensible and for other configuration like 3way(3LBS) there will be 2 nos of FPI for 2LBS & similarly for 4way(4LBS) there will be 3 nos of FPI for 3 nos of LBS.
71	ENG-HV/19.0/Page 15 of 31	Paint TPL Blue PANTON E 2727C	The paint shade for the RMU shall be light grey "RAL7035".	Accepted
72	ENG-HV/19.0/Page 15 of 31	54.2 Internal Arc Test Not older than 5 years from the date of opening of Bid 54.3 Temp Rise Test Not older than 5 years from the date of opening of Bid 54.4 STC Test Not older than 5 years from the	Kindly note, some of the test reports may be older than 5 years. However, there is no change as far as tested design is concerned. Also, as per latest guidelines from CEA, type test validity shall be for 10	Type tests shall have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		date of opening of Bid 54.5 Lightning Impulse withstand Not older than 5 years from the date of opening of Bid 54.6 Power frequency withstand Not older than 5 years from the date of opening of Bid 55 IP Protection Not older than 5 years from the date of opening of Bid	years. Moreover, IEC does not specify about conducting repeat tests after specific durations unless there is change in design. In this view, we do not envisage any fresh type testing. However, we shall submit type test reports for type tests carried out on similar product.	However the same can be extended upto 10years if there is no change in design.
73	ENG-HV/19.0/Page 17 of 31	Additional IOs :- RMU switch Control Command Earth Sw. 1 Status Input Earth Sw. 2 Status Input FPI Reset FRTU Local/Remote Position FRTU Door Open FRTU Battery Charger Faulty FRTU Switchgear Supply Off FRTU Aux Supply Off FRTU Fault Relay operation CB OFF status CB ON status CB ON/OFF Command	1) Please confirm whether FRTU Panel, FRTU, Modem, & interfacing devices shall be in whose scope. 2) We treat the same as Local /Remote Indication 3) Local/Remote switch shall be mounted on RMU panel (Not FRTU). We have considered L/R switch common for one RMU 4) Please elaborate the requirement & scope of battery charger. Who will be responsible for provide AC and DC auxiliary supply at site. 5) Please elaborate FRTU Switchgear Supply Off, FRTU Aux Supply Off & FRTU Fault 6) We treat the same as O/C+E/F relay operated. Please confirm	FRTU is not considered in this tender
74		ROUTINE TESTS	Routine Test shall be carried out on 10% Qty only	This should be done as per approved TPCODL QAP Plan.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			Routine test shall be as per Siemens approved TATA Power QAP. Only routine tests which are mentioned in the QAP as per standards shall be conducted at Goa factory.	
75		Civil work	Civil work is not in the scope of Siemens and quoted prices are exclusive of civil work. However, if required, RMU Civil foundation drawing shall be provided by us.	Civil Foundation Drawings has to be submitted by vendor along with all GA drawings.
76		List of Makes	We have considered list make as below, RMU - Siemens All other Product - from Siemens approved vendor.	Accepted
77		Battery freshning Charges	In case commissioning is scheduled beyond 3 months from receipt of materials at site, then freshening charge for batteries shall be given by customer to ensure that batteries do not go into permanent dry mode.	Accepted
78		Battery Warranty	Batteries being consumable & bough-out item, the warranty for batteries does not go beyond 12/ 18 month as per battery manufacturer.	Minimum 24 months of warranty is required
79	ENG-HV/2.1/Page 3 of 39	Line PT metering module connected by Busbar/Cable housing metering PT and CT.	Please confirm there is a requirement of Line PT or Bus PT	The HT PT & CT needs to be installed inside housing compartments, same needs to be connected to the VCB

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				outgoing either through cable or screened bus bar. Please refer the technical specifications for further clarifications.
80	ENG-HV/4.0/Page 4 of 39	The RMUs will be in future connected to the FRTU including the power supply required and shall have DI/DO's wired out to harting connectors.	Please confirm whether FRTU Panel, FRTU, Modem, & inetrfacing devices shall be in whose scope.	FRTU is not considered in this tender
81	ENG-HV/5.1/Page 5 of 39	The scope of supply is supply 11 kV 3/4 Way RMU suitable for outdoor application. Kiosk type design or cladded design wherein an indoor RMU is cladded with kiosk and converted to outdoor RMU is not acceptable.	Kindly confirm qty of RMU's which are for Indoor and Outdoor application as well as please confirm qty of RMU's which will be extensible & Non extensible	All the RMU's are of Outdoor and Non extensible type
82	ENG-HV/5.8.1/Page 5 of 39	Training	Please confirm mandays required for the same	10 days support is required for installation of RMU at site.
83	ENG-HV/5.9.1&8.2/Page 8 & 13 of 39	the enclosure shall be made of Galvatite sheet of 3.0 mm thickness, CRCA enclosures are not acceptable looking into the corrosiveness of the environment and coastal environment.	Material and thickness of the enclosure (gas vessel) : Stainless-steel sheets - ≥ 2.0 mm thick; Material designation: Stainless steel Material and thickness of the enclosure (Outer) : CRCA - 2.0 mm thick; Material designation: CRCA	Accepted, however for the enclosure same needs to be stainless steel of thickness 2mm.
84	ENG-HV/5.9.2/Page 8 of 39	should be painted with UV Resistant Pure Polyester Powder coating. The powder coated sheet steel fabrication shall fulfill 1000Hrs of Salt spray test.	Treatment Process shall be 7 tank Powder coating. Paint layer thickness shall be 100 microns +/- 25 Micron Standard	This should be followed as per technical specification

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
85	ENG-HV/8.2/Page 13 of 39	The RMU tank must be equipped with a suitable pressure relief device. The pressure relief must ensure that the escaping gases are dissipated to the bottom trench of the switchgear only tested for 25kA 1 s / IAC AFLR for tank and cable box	Pressure relief through duct from rear top	This should be followed as per technical specification
86	ENG-HV/8.2.2/Page 15 of 39	The switch and earthing switch mechanisms shall have a mechanical endurance of at least 5,000 operations due to repeated switching on-off of the isolators.	1000 Operations for load break switch, Mechanical endurance shall be M1	Mechanical endurance for LBS is 1000 & for VCB is 2000 operations
87	ENG-HV/8.2.2 & 8.2.5/Page 15 & 16 of 39	The load break switches shall be provided with cable test bushings interlocked with the earth switch, since touch proof termination is involved opening of cable box and testing of the cable is not feasible.	Please note that as per relevant standards and considering the safety of the operator, access to cable test bushing for testing purpose is possible only after the respective feeder is EARTHED. Remove the cable compartment cover and test the cables via probes. However, disconnection of cable terminations, cable joints and terminal protectors from cable bushings are not required. Access to live test terminals after opening the cover located at the front fascia (without earthing) may lead to accidents and is dangerous from operator safety point of view. Hence, we do not provide live test terminals in the front fascia.	Accepted
88	ENG-HV/8.2.5/Page16 of 39	Fully integrated and interlocked earth and test facilities in accordance with ENATS 41-36	Same shall be as per IEC 62271-100 & 200	Accepted



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		requirements shall be provided for VCB and Ring switches. Access to the test terminals shall be achieved by opening the cover located at the front fascia.		
89	ENG-HV/10.1/Page18 of 39	Local fault indications - LCD display on FPI front panel along with LED indication on front panel of RMU enclosure.	FPI shall have LED display	Accepted
90	ENG-HV/13.0/Page 21 of 39	The switchgear shall have a mechanical impact protection of IK10 and type test shall be submitted accordingly.	The switchgear shall have a mechanical impact protection of IK07	Accepted
91	ENG-HV/15.0/Page 22 of 39	1No- ON, OFF, TRIP indication on the front mimic of the panel.	1No- ON, OFF, EARTH indication on the front mimic of the panel.	Accepted
92	ENG-HV/15.0/Page 22 of 39	1 Set- Integral Test Bushings on Mimic	Please elaborate the exact requirement	Integral test bushing is normally additional bushing given to do the cable testing without opening the cable compartment door, however same is optional.
93	ENG-HV/Page 35 of 39	Rated cable charging breaking current A 35 Rated line charging breaking current A 35 Rated cable and line charging current A 60 Rated earth fault breaking current A 105 Load break switch Class M2 (5,000 operations) Load break switch Class E3 (100 operations) Earth switch Class E2 (5 operations)	Rated cable-charging or line-charging breaking current shall be 50 A Rated earth-fault breaking current shall be 150 A Load break switch Class M1 (1,000 operations) Load break switch Class E3 (100 operations) Earth switch Class E2 (5 operations)	Load break switch Class M2 (5,000 operations) Earth switch Class E2 (5 operations) Load break switch Class E3 (100 operations) Rated cable/line charging breaking current A 35 Rated cable and line charging current A 60

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				Rated earth fault breaking current-To be provided by bidder as per their type tested design.
94	ENG-HV/Page 35 of 39	Rated cable charging breaking current A 100 Rated line charging breaking current A 10 Circuit breaker Class M1 (2,000 operations) Earth switch Class M0 (1,000 operations) Circuit breaker Class E2 (2 operations) Earth switch Class E2 (5 operations)	Rated cable-charging breaking current : 50 A Rated line-charging breaking current : 50 A Circuit breaker Class M2 (2,000 operations) Earth switch Class E2 (2,000 operations)	Circuit breaker Class M1 (2,000 operations) Circuit breaker Class E2 (2 operations) Earth switch Class E2 (5 operations) Rated cable/Line charging breaking current A 100
95	3.0 Climate conditions of the Installation	Operating Temperature	RMU shall be capable of operating normally -25 Deg. C to +40 Deg. C Temperature range.	Accepted
96	3.0 Climate conditions of the Installation	Air Temperature	Offered RMU tested at ambient temperature of 40 °C as per IEC. However, Offered RMU is suitable for 50 Deg. C but with suitable derating i.e. 570A.	RMU tested at ambient temperature of 40 °C
97	4.0 General Technical Requirement	Internal Arc	Pl. confirm Internal Arc requirement i.e. 20KA/1 Sec. or 25KA/1 Sec.	20KA/1 Sec for 11kV RMU 25KA/1 sec for 33kV RMU
98	4.0 General Technical Requirement	Extensible	At present we have considered Non - Extensible RMUs. Please clarify if requirement is Extensible RMU.	RMU's are Non Extensible.
99	4.0 General Technical Requirement	Space Heaters	Not Required	Irrelevant Query
100	4.0 General Technical Requirement	IR Test	IR Test shall be possible during Off condition only.	Accepted



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
101	5.1.2 Earthing Of the Maint Circuit	Provision for connecting the earth strip	We shall provide Copper strip and the size shall be 25X4 sufficient for STC requirement as per tender requirement.	Minimum requirement is 40X3 copper strip.
102	5.1.3 Paint	RAL 7032	We will provide RAL 9003 paint shade for RMUs & Outdoor Enclosure with RAL 7032 paint shade in case of OD RMU requirement.	Paint should be Light Gray shade RAL 7035
103	5.1.4. "Feeder and Local Transformer Control circuit-breaker" feeders	CT AC. CL. & Relay Settings	Protection CT AC. CL. Shall be depends upon TF rating. Please confirm exact TF ratings to select CT ratio. Offered Self Powered Relay Settings for O/C & E/F Protections shall be as per Manufacturer's standard practice. Further Relay is having Trip LED Indication hence we are not providing separate flag for the same.	The CT shall be dual ratio 100-200/1 Self powered relay with LED indication for tripping is accepted.
104	5.1.4. "Feeder and Local Transformer Control circuit-breaker" feeders	Cable Size	RMU cable chamber is suitable to termination 1 No. X 3C X 400 Sq. mm cable for Isolator & Breaker Feeder.	RMU cable compartment shall be suitable for 1C X 630sq mm/phase
105	5.1.7 Voltage indicator and phase comparators	Phase Comparators	Please confirm the requirement of phase comparators with each RMU.	Voltage indicator and phase comparators are required
106	5.5 Remote Control of the RMUs	Spare NO & NC Contacts	Not applicable because at present we have offered RMUs are Manual type & as per this clause supply and fitting of the motor into the line switches and circuit breakers at a later date. Please clarify if RMU to be required with Motorised mechanism.	All RMU's are motorised and Non extensible type.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
107	5.1.12 Remote Control of the RMUs	Harting Plug	We have considered one common Harting Plug for all four Functions for SCADA singals and same shall be installed or mounted in LV chamber on left hand side of one CB Function due to space constrain in LV chamber instead of providing separate Harting Plug for each function.	Provision for Remote control of RMU shall be as per provided technical specifications
108	5.1.12 Remote Control of the RMUs	Aux. Contact for Low Gas Pressure	We will provide one change over contact for Manometer instead of Auxiliary Contact.	This shall be as per provided technical specifications
109	7.0 Tests	4. Temperature rise test 5. Internal Arc withstand test	Both tests are part of Type Tests & same can't be performed during Routine Test.	Accepted
110	8.0 Type Tests		Please note that we have all Type Test Reports of 33 kV RMUs (Type FLUSARC) & same are type tested as per IEC standards but not within 5 years period. Further we have not changed anything in design parameters of 33KV RMUs, hence we have not conducted any new / repetitive type test against this tender. Request you to accept the same.	Type tests shall have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid However the same can be extended upto 10yeras if there is no change in design.
111	17.0 Spares, Accessories & Special Tools / gauges	GAS leak indicator	We have not considered gas leak indicator in our offer since as per GTP 1 No. per 25 RMUs however tender Qty. Request you to confirm the requirement for the same.	This shall be as per provided technical specifications
112	GTP - Min Gas Pressure	0.05 BarG	0.2 bar	Accepted

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
113	Annexure-I Price Schedule	RMU Installation	At present we have considered RMU suitable for Indoor application. Please clarify in case of Outdoor installation.	All RMU's are of Outdoor Type.
114	Annexure-I Price Schedule	RMU Configurations	We have considered RMU configurations as below : SUPPLY OF 33kV 4 WAY RMU - 2 Nos. of LBS + 2 Nos. of VCB SUPPLY OF 33kV 3 WAY RMU - 2 Nos. of LBS + 1 No. of VCB Please clarify in case of any other RMU configuration.	RMU Configuration: 3 way-(2LBS + 1VCB) 4 way-(2LBS + 2VCB) Both are Non extensible type
115	Pg. No 8 of 233 1.7 Qualification Criteria	1.7.1 The average annual turnover of the bidder shall be a minimum of Rs.50 crores for last three financial years. Copy of audited Balance Sheet and P&L Account to be submitted in this regard. If audited balance sheet for 2020-21 is not available owing to Covid19 then the bidder need to audited balance sheet for 2017-18	Kindly allow to submit Group Balance sheet Instead of subsidiaries companies for Financial year is mentioned.	Turnover criteria needs to be fulfilled
116	Pg. No 9 of 233 1.7 Qualification Criteria	1.7.7 Type test should have been conducted in certified test laboratories during the period not exceeding 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 or any/all type tests (including additional type tests, if any) not carried out, same shall be carried out without any cost implication to TPCODL.	As per CEA guideline the validity of type test for medium voltage switchgear is for 10 years. Further we confirm that there is no change in offered design.	Type tests shall have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid However the same can be extended upto 10yeras if there is no change in design.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
117	Pg. No 9 of 233 2.0 Evaluation Criteria	The bids will be evaluated commercially on the overall all-inclusive lowest cost for the individual LOT as defined in the tender BOQ as calculated in Schedule of Items [Annexure I]. TPCODL reserves the right to split the order line item wise and / or quantity wise, among more than one Bidder. Hence all bidders are advised to quote their most competitive rates.	What will be the ratio quantity award of L1 bidder against other bidder.	The splitting ratio is based on urgency of requirement and to mitigate delivery risk on discretion of TPCODL management.
118	Pg. No 11 of 233 3.0 Submission of Bid Documents	THIRD PART: "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, Taxes & duties, Freight etc.	Kindly refer Annexure - I, there is no separate freight coloum. So, freight will be considered in Unit price. Please also clarify Insuarance is in buyer or in bidder scope. Also, share the store for site loacation where item to be delivery. It will helps us to evaluate the freight & inurance amount. This is important considering validity of contract & constant increase in fuel prices	The unit price is inclusive of Frieght. Insurance shall be as per GCC of the Tender document. Delivery location will be all across TPCODL area. It can be stores in Bhubaneswar or Cuttack or as specified in the Release Order.
119	Pg. No 12 of 233 3.0 Submission of Bid Documents	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.	Considering current situation, we are adapting minimum paper transction. In view of which, please allow us to sign the documents through digital signature format other then hard copy signature.	Accepted
120	Pg. No 12 of 233 3.9 Type Test	The type tests specified in TPCODL specifications should have been carried out	As per CEA guideline the validity of type test for medium voltage switchgear is for	Type tests shall have been conducted in certified Test



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		<p>within five years 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 TPCODL.</p>	<p>10 years. Further we confirm that there is no change in offered design.</p>	<p>laboratories during the period not exceeding 5 years from the date of opening the bid However the same can be extended upto 10yeras if there is no change in design.</p>
121	<p>Pg. No 12 of 233 4.2 Technical Bid Opening</p>	<p>The technical bid of the bidders who have furnished the requisite EMD will be opened, one by one. The salient particulars of the techno commercial bid will be read out at the sole discretion of TPCODL.</p>	<p>Will the result of Technical bid opening share on TPCODL website</p>	<p>No. The bidding process shall be as per Tender document.</p>
122	<p>Pg. No 16 of 233 7.1 Special Conditions of Contract</p>	<p>2.BA shall submit GTP / Drawing within 2 weeks from issuance of rate contract. In case BA does not get necessary approvals for issuance of manufacturing clearances / CAT-A within mentioned / mutually agreed timelines, then TPCODL reserve the right to cancel issued rate contract / release order and also reserve the right to forfeit EMD / PBG.</p>	<p>We will submit the detailed engineering drawing within 15 working days after issue of Rate Contract for approval. However, manufacturing clarence & drawing approval is depend on TPCODL & its approval should not effect forfeit EMD / PBG.</p>	<p>Remains as per Tender Document. For any delay in approval / clearance from TPCODL will be acknowledged and decision will be taken accordingly.</p>
123	<p>Pg. No 16 of 233 7.1 Special Conditions of Contract</p>	<p>3.Delivery period shall be within 60 days from date of receipt of release order / CAT-A issuance, whichever is later</p>	<p>Delivery period shall be 8-10 Weeks for 11kV RMU & 12-14 weeks for 33kV RMU from the approval of GTPs, CAT-A Approved drawings & manufacturing clarence whichever is later.</p>	<p>Delivery period shall be within 90 days for 33KV RMU and 60 days for 11KV RMU from date of receipt of release order / CAT-A issuance, whichever is later</p>



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
124	Pg. No 16 of 233 7.1 Special Conditions of Contract	6.Any change in statutory taxes, duties and levies during the contract period shall be borne by TPCODL. However, in case of delay in work execution owing to reasons not attributable to TPCODL, 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 TPCODL	Please clarify further	The clause is self-explanatory
125	Pg. No 16 of 233 7.1 Special Conditions of Contract	7.Statutory Variations: Any changes in existing taxes/ Duties and levies, Introduction of new taxes and duties etc. during the period of the contract shall be paid at actuals to BA subject to BA shall submit the tax break up in details, however, where BA has quoted the all-inclusive prices and not shown the tax break-up, this clause will not be applicable. The date of issue of MDCC shall be used for this purpose	Kindly note that we are submitting the price as per Annexure - I	Noted. We do have tax break-up in existing BoQ (Annexure-1) of the Tender.
126	Pg. No 17 of 233 7.2 Drawing Submission & Approval	In case, re-submission of drawings is required on request of TPCODL, same needs to be submitted back to TPCODL within 5 days of such request.	Kindly allow to submit revised drawing within 7 working days from next date of communications.	Re-submission of drawings shall be within 7 days from next date of communications.
127	Pg. No 17 of 233 7.5 Payment Terms	On delivery of the materials in good condition and certification of acceptance by certified official	What are the condition for issuing certification of acceptance by certified official	On Delivery, the Material should be as per approved GTP & Drawing and confirming to PDI Report & Packing list.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				Materials should be in good condition while received at store subject to no quality & quantative issues.
128	Pg. No 20 of 233 Annexure - I	Note: The quantity mentioned above is for evaluation purpose only and may vary during the execution. Release Orders against this Rate Contract shall be issued by TPNODL as per actual requirement	What will be the qty variation +/- 5% or different	NO positive tolerance allowed for the total quantity. However, negative tolerance is permission upto 2.5% and payment will be made as per actual quantity received
129	Pg. No 24 of 233 Annexure - V	17. Credit rating/ Solvency certificate	We are sharing audit balance sheet and Turnover Certificate in that case is it mandatory to submit Solvency certiifcate or exemption is allow	Kindly submit the document as required in the Tender document. Any consideration will be on discretion of TPCODL team evaluating the bid.
130	Pg. No 69 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 1.0 Scope	necessary training for trouble free & efficient performance.	Online training for one manday will be arrange	10 days support is required for installation of RMU at site.
131	Pg. No 70 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 3.0 Climatic Conditions of Installation of RMU	a.Maximum ambient air temperature 50°C	The Offered RMU is designed for 630A at max ambient temp of +40 Deg C with temperature rise as per relevant IEC. The suitable current derating is applicable at higher temperature.	Accepted
132	Pg. No 73 of 233 Doc. No ENG-EHV-009 -	All LBS and CB should be given 24V DC motorized RMU while designing RMU having inbuilt Battery & Battery charger	We understand that for the offered RMU LBS & CB both should be motorized. Please confirm.	YES both LBS and CB are motorized

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
	TS 11KV RMU 4.1 RMU Configurations			
133	Pg. No 75 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.4 Incomer Load Break Switches (LBS)	5.4.1 The position of power contacts and earthing contacts clearly visible on the front of RMU	All contacts are in sealed SS tank. Cladding is provided over the tanks housing the interlocks with front panel. Mechanical Position indicators are provided on the front mimic without transparent covers.	Accepted
134	Pg. No 75 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.4 Incomer Load Break Switches (LBS)	5.4.4 The disconnecter should have the maximum 200micro ohm contact resistance.	Kinldy allow as per manufacturer type tested designed	Accepted
135	Pg. No 75 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.4 Incomer Load Break Switches (LBS)	5.4.6 The switches shall be fully mounted and inspected in the factory. Provision for future motorisation of LBS and CB should be kept in configuration while designing RMU.	We understand that for the offered RMU LBS & CB both should be motorized. Please confirm.	YES both LBS and CB are motorized
136	Pg. No 76 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.5 Circuit Breaker for transformer/local feeder control	5.5.2 The position of power contacts and earthing contacts clearly visible on the front of RMU	All contacts are in sealed SS tank. Cladding is provided over the tanks housing the interlocks with front panel. Mechanical Position indicators are provided on the front mimic without transparent covers.	Accepted
137	Pg. No 76 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.5 Circuit Breaker for	The Breaker contact resistance should be <=50mico ohms .	The contact resistance of the circuit breaker will be as per manufacturer's type tested design	This should be as per tender specification.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
	transformer/local feeder control			
138	Pg. No 76 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.5 Circuit Breaker for transformer/local feeder control	5.5.9 The required motor for this operation shall be delivered separately to stores (at a later date) and shall be compatible with older versions of RMUs already working within the TPCODL network	We understand that for the offered CB is motorized. So, no separate motor will be provided.	This arrangement has been considered with LBS & VCB both are motorised.
139	Pg. No 76 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.5 Circuit Breaker for transformer/local feeder control	5.5.10 three toroid transformers incorporated in the transformer tee-off bushings	CT shall be mounted on cable in the cable compartment	Accepted
140	Pg. No 77 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.5 Circuit Breaker for transformer/local feeder control	5.5.25 The preferable make of relay are ABB, Ashida, Schneider, Siemens make relay.	Kindly also add C&S make relay in prefeable list	This should be as per tender specification. However if any other approval to be taken from TPCODL.
141	Pg. No 77 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.5 Circuit Breaker for transformer/local feeder control	5.27 The CTs of 5P20 Class shall be employed. CT ratio shall be 200/1 (Further CT ratio may finalized during detailed engineering)	Please note that considering compactness of unit CT with 5P10 class & ratio 200/1A may be provided during detailed engineering.	The CT ratio will be required 60-400/1 ratio with 5P10 class burden 2.5VA

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
142	Pg. No 77 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.5 Circuit Breaker for transformer/local feeder control	The transformer ratings which are to be controlled by the breaker are as follows: 500kVA to 2000kVA.	Kindly confirm type of CTs required Tape Wound or Resin Cast, Single core or double core. Is metering CTs is required? & if yes, then in which verticle LBS or CB or both. Also, share any approved make or allow as per manufacturer standard.	CT should be of cast resin. Metering CT is not considered for those RMU which are not having metering unit.
143	Pg. No 79 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.6 Bushings and Cable terminations	Note: Supply of Cable terminations is not to be part of RMU supply.	Supply of cable termination boot is included is scope of supply or not. Also,we understand that cable termination is in buyer scope. Kindly clarify.	Cbale Termination Kit to be provided by bidder. Size of cable is 3CX400Sqmm.
144	Pg. No 81 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.10 Fault Passage Indicator	5.10.5 The Approved Make of FPI are EKL8000, EKL8000NG, Easergy Flair 22D ,SICAM and any other makes can be approved subject to TPCODL Approval	Kindly also add C&S make FPI in approved make	The Approved Make of FPI are EKL8000, EKL8000NG, Easergy Flair 22D ,SICAM and any other makes can be approved subject to TPCODL Approval. C&S make FPI not accepted.
145	Pg. No 82 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.11 Remote Control of the RMU	Also the PCB of motor should be covered by anti-tracking agent. There should be relay with timer instead of only relay, which is used in the latching circuit	As per early supplied to TPCODL.	For motorised ckt there should be a timer with relay.
146	Pg. No 82 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.11 Remote Control of the RMU	The bidder shall quote the cost of field RTU (FRTU) separately with all technical details for acquisition of the signal as described in Annexure-1.	Kindly clarify requirement of FRTU is part of tender or will be procure separately. If the requirment is for future the prices will be quoted as and when needed depending upon make & requirment.	FRTU is not considered in this tender

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			Please provide detail specification of FRTU along with any approved/preferred list. Also, share price schedule for FRTU.	
147	Pg. No 83 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 5.12 Paint	The paint should sustain for harsh environment & saline weather , Corrosion Protection for RMU entire life cycle (minimum 25 Years) .	As per manufacturer standard practice	Colour shade shall be RAL7032 as per relevant IS .
148	Pg. No 84 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 7.0 Test for RMU	7.1 Type Tests 7) Operational & Interlock performance Test 12 Dimensional and Visual Checks.	Please note this are routine tests not type tests.	Accepted
149	Pg. No 84 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 7.0 Test for RMU	7.2 Routine Tests 5) SF6 Pressure withstand test	5) SF6 leakage test is part of the Routine test at the tank stage and cannot be carried out as acceptance test during final inspection. We shall provide SF6 gas leakage test as an part of routine test report	Accepted
150	Pg. No 84 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 7.0 Test for RMU	7.2 Routine Tests Cable boot for cable termination	As per manufacturer standard	Approved make for cable termination is 3M & raychem.
151	Pg. No 84 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 8.0 Type Test	Type tests shall have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid	As per CEA guideline the validity of type test for medium voltage switchgear is for 10 years, attached copy for your reference. Further we confirm that there is no change in offered design.	Type tests shall have been conducted in certified Test laboratories during the period not exceeding 5 years from the date of opening the bid. However the same can be extended upto 10 years if there is no change in design.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
152	Pg. No 85 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 9.0 Pre Dispatch Inspection		Final inspection of the RMU shall be conducted at our Factory. All cost towards the To & Fro, lodging, boarding, local conveyance will have to be borne by TPCODL.	Accepted
153	Pg. No 85 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 11.0 Guarantee	<p>In the event any defect is found by the Purchaser up to a period of at least 48 months from the date of commissioning or 60 months from the date of last supplies made under the contract whichever is earlier, Bidder shall be liable to undertake to replace/rectify such defects at its own costs, within mutually agreed time frame, and to the entire satisfaction of the Purchaser, failing which the Purchaser will be at liberty to get it replaced/rectified at Bidder's risks and costs and recover all such expenses plus the Purchaser's own charges (@ 20% of expenses incurred), from the Bidder or from the "Security cum Performance Deposit" as the case may be.</p> <p>Bidder 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</p>	<p>Guarantee / Warrantee shall be 48 months from the date of commissioning or 60 months from the date of supply, whichever is earlier. We shall undertake to repair / replace free of cost the products supplied, should it become defective under proper use due to faulty materials or workmanship.</p> <p>However any rectification of a defect caused due to mishandling of the equipments shall be charged extra at actuals to your account. Our responsibility is limited to rectify/repair/replace the equipment with mutual agreement without effecting any PBG & payment amount.</p> <p>Please clarify observation period to claim latent defects</p>	Accepted



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
154	Pg. No 85 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU 17. Spares, Accessories & Special Tools/Gauges	Bidder has to provide below spare with one lot of RMU	Is this list is mandatory to quote with the bid. If yes, then will it be consider while evaulating the offer. Kindly, also provide price scheule for the same.	Spare is not considered in this tender
155	Pg. No 91of 233 Doc. No ENG-EHV-009 - TS 11KV RMU GTP	39.0 Make of Relay	Kindly also add C&S make relay in prefeable list	This should be as per tender specification. However if any other approval to be taken from TPCODL.
156	Pg. No 92 of 233 Doc. No ENG-EHV-009 - TS 11KV RMU GTP	46.A Cable Termination boot /Cable boot	Kindly allow to supply as per manufacturer standard make.	Approved make for cable termination is 3M & Raychem.
157	Pg. No 17 of 233 Clause 7.5	Payment will be released within 45 days from date of submission of certified bills/invoices	Clause no. 6.0 of the GCC (page no. 193 of 233) mentions that payment will be made within 30 days from submission of bill/invoice. Request you to clear this discrepancy.	Refer clause 6.0 Order of Preference/Contradiction of Tender document. SCC prevail over GCC as per the clause.
158	Pg. No 16 of 233 Clause 7.1.5	PBG submission to be done within 30 days from RC/RO and this PBG must be valid till Guarantee Period + 3 months.	Clause no. 8.0 (page no. 194 of 233) of the GCC requires the PBG submission to be done within 15 days from effective date of issue of PO/RC and this PBG must be valid till Guarantee Period + 1 month. Request you to clear this discrepancy.	Refer clause 6.0 Order of Preference/Contradiction of Tender document. SCC prevail over GCC as per the clause.
159	Pg. No 16 of 233 Clause 7.1.5	PBG to be submitted for 5% of RC or 10% of RO value.	Clause no. 8.0 (c) (page no. 194 of 233) of the GCC requires the Associate to submit	Refer clause 6.0 Order of Preference/Contradiction of



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			<p>PBG of 5% of RC in case of Rate Contract.</p> <p>Request you to clear this discrepancy.</p>	<p>Tender document. SCC prevail over GCC as per the clause. PBG can either be submitted as 5% of Rate Contract or 10 % of Release Order. However, in case the Bidder opt for issuing PBG on RO, then the EMD will be held with TPCODL until the PBG is received from BA against an order, further if required TPCODL may ask BA to extend the validity of EMD in line with RC validity period.</p>
160	<p>Pg. No. 85 of 233 & Pg. No. 121 of 123 Clause 11.0 (Technical Specs for 11 KV RMUs)</p>	<p>The Guarantee Period for 11KV units is the earlier of 48 months from date of commissioning or 60 months from date of last supplies made under the Contract.</p>	<p>However, Clause 11.0 (page no. 140 of 233) of Technical Specs for 33 KV RMUs specifies Guarantee Period as the latter of 48 months from date of commissioning or 60 months from date of supply made under the Contract</p> <p>Request you to confirm the intention of different Guarantee Periods for 11KV and 33KV units.</p>	<p>The Guarantee Period for 11KV & 33KV RMU units is of 48 months from date of commissioning or 60 months from date of last supplies whichever is earlier</p>
161	<p>Page No-6 & 19 of 233:</p>	<p>Configuration: 11KV 4 Way with Metering</p>	<p>11KV 3 Way with metering is with 2 LBS + 1 VCB Kindly confirm the configuration of 4 way with metering. Is it 3 LBS + 1 VCB or 2 LBS + 2 VCB as the same is not mentioned</p>	<p>3 way with metering-(2LBS + 1VCB)+ 1 metering unit,and metering unit to be placed on right sides & Non Extensible. 4 way with metering-(2LBS +</p>

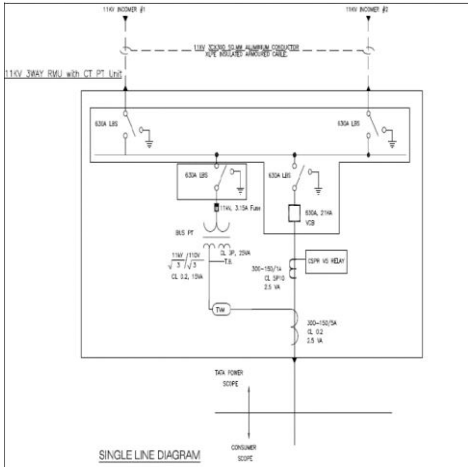
Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				2VCB)+ 2 metering unit, and metering unit to be placed on both sides & Non Extensible.
162	Page No-73 Clause No-4.1	Cable Voltage presence Indicators to be provided in each compartment of all type of RMUs in above mentioned combination. All LBS, EW and CB shall be with auxiliary contacts for SCADA status indication. All LBS and CB should be given 24V DC motorized RMU while designing RMU having inbuilt Battery & Battery charger. Note- All shunt trip coils shall be 24V DC for TPCODL	Kindly confirm whether 1) LBS is Motorized & VCB is manual or 2) Both LBS & VCB is Motorized or 3) Both LBS & VCB is Manual	Both LBS & VCB are motorised.
163	Page No-73 Clause No-5.1.2	The tank shall have SS sheet of 2.5 mm thickness minimum	Tank shall be 2 mm as per Eaton Type tested Design	Accepted
164	Page No-74 Clause No-5.2.2 Base frame	The provision for cabling shall be through base plate from bottom of RMU through trench below.	Our Cable termination height is 936 mm. Additional Base frame is not required. You can directly place the RMU on plinth.	Accepted
165	Page No-74 Clause No-5.2.8	Mechanical interlocking systems shall prevent access to the operating shaft to avoid all operator errors such as closing the earth switch when the Load break switch is closed or when cable is charged.	Do you need Eletromechanical Interlock in LBS only or in Both LBS & VCB?	Eletromechanical Interlock is required in LBS only
166	Page No-75 Clause No-5.4.2 Electromagnetic Interlock	Electrical /Mechanical Interlock should be provided to the Earth switch it should not be Close when cable is back charged .	As per this clause Electrical /Mechanical Interlock should be there in LBS. Kindly confirm the requirement	Eletromechanical Interlock is required in LBS only

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
167	Page No-77 Clause No-5.5.21 Do you need electromagnetic Interlock in VCB feeder also?	Electrical /Mechanical Interlock should be provided to the Earth switch it should not be Close when cable is back charged.	As per this clause Electrical /Mechanical Interlock should be there in VCB. Kindly confirm the requirement	Eletromechanical Interlock is required in LBS only
168	Page No-80 Clause No 5.8.2	All the VIPS installed on compartments shall have auxiliary contacts wired up to the terminal block of respective compartment which shall be further used for remote status indication at SCADA. The auxiliary contacts in VPIS shall be there should be electrical interlock of cable presence indicator and operation of earth switch in RMU incomer cable compartment of LBS.	As per this clause Electromagnetic Interlock is asked for LBS only. Kindly confirm	Eletromechanical Interlock is required in LBS only
169	Page No-74 Clause No-5.2.11 5.2.10 & 5.5.25	Cable size	Kindly confirm the cable size as 3C X 400 sqmm. 1C X 630 sqmm is not considered as of now.	cable size should be 3C X 400 sqmm.
170	Page No-75 Clause No-5.4.6	The switches shall be fully mounted and inspected in the factory. Provision for future motorisation of LBS and CB should be kept in configuration while designing RMU.	As per this clause LBS & VCB to manual type. Only in future it should be converted to motorized. Kindly confirm the requirement.	LBS & VCB both are required motorised.
171	Page No-77 Clause No-5.5.15	Breaker operation counter should be provided and should be visible on front in horizontal alignment.	Operation counter for VCB will be vertical alignment. Kindly accept	Accepted
172	Page No-77 Clause No-5.5.25	Three toroid transformers incorporated in the transformer tee-off bushings,	We are providing LV Ring Type CT instead of Bushing mounted CT	Accepted

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
173	Page No-77 Clause No-5.5.22 & 5.5.25	CT ratio	Kindly confirm the CT Ratio. Whether it is CT ratio is shown 60-400/1A as per clause 5.5.24 or as per 5.5.25 it is 200/1A CT.	The CT ratio will be required 60-400/1 ratio with 5P10 class burden 2.5VA
174	Page No-77 Clause No-5.5.24 & 5.5.25	CT accuracy class	Kindly confirm the accuracy class: Whether it is Accuracy class 5p20 as per clause no 5.5.25 or it is 5P10 as per clause no 5.5.24	The class of CT is 5P10
175	Page No-77 Clause No 5.5.25	Relay Make	IN the same clause in one place C&S make is mentioned and in other C&S make is not mentioned. Can we consider C&S make relay or not?	This should be as per tender specification. However if any other approval to be taken from TPCODL.
176	Page No-78 Clause No 5.6.1	Bushing should be of Epoxy resin. Each cable compartment shall be provided with three bushings of adequate sizes to terminate the incoming and outgoing cables. The termination bolt shall be M16 only for TPCODL ODISHA supplies for all bushings & M12 for TPCODL ODISHA supplies	By default we will M16 termination bolt In case of M16 bolt. If you need M12 also then kindly confirm. In that case we need consider reducer also in scope.	M16, This should be as per technical specification.
177	Page No-81 Clause No 5.10.5 Whether C&S make FPI is acceptable?	The Approved Make of FPI are EKL8000, EKL8000NG, Easergy Flair 22D ,SICAM and any other makes can be approved subject to TPCODL Approval	Kindly confirm whether C&S make is acceptable?	The Approved Make of FPI are EKL8000, EKL8000NG, Easergy Flair 22D ,SICAM and any other makes can be approved subject to TPCODL Approval C&S make FPI not accepted.
178	Page No-82 Clause No 5.11.2	For motorized RMU- The motors to be fitted in LBS sections only.	LBS is only motorized. VCB is Manual kindly confirm	Both LBS & VCB are required motorized.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
179	Page No-82 Clause No 5.11.2	Preferred communication protocol for FRTU shall IEC-60870-5-104.	Kindly confirm that whether FRTU to be included in our scope?	FRTU is not considered in this tender
180	Page No-82 Clause No 5.11.2	Flag Indications on RMU when tripped should be on shunt trip.	Flag indication will be given for Fault condition only	Accepted
181	Page No-82 Clause No 5.11.2	There should be harting plug arrangement for individual Isolator as well as breaker motor connections, which will be fitted on the RMU body itself. Also the PCB of motor should be covered by anti-tracking agent. There should be relay with timer instead of only relay, which is used in the latching circuit.	Hurting Plug arrangement to be provided for LBS & VCB. Kindly confirm. As per above clauses only LBS will be motorized. VCB is manual.	Harting plug is required the RMU is motorized both for LBS and VCB.
182	Page No-82 Clause No 5.11.2	There should be relay with timer instead of only relay, which is used in the latching circuit.	Timer is not required. We are achiving all operation through relay only	Requiring relay with timer in motorized circuit.
183	Page No-105 Clause No 4.1	4 Way configuration	11KV 3 Way with metering is with 2 LBS + 1 VCB Kindly confirm the configuration of 4 way with metering. Is it 3 LBS + 1 VCB or 2 LBS + 2 VCB as the same is not mentioned	3 way with metering-(2LBS + 1VCB)+ 1 metering unit,and metering unit to be placed on right sides & Non Extensible. 4 way with metering-(2LBS + 2VCB)+ 2 metering unit,and metering unit to be placed on both sides & Non Extensible.
184	Page No-108 Clause No 5.2.11	The default design of cable compartment for TATA Power CENTRAL ODISHA DISTRIBUTION LTD shall be suitable for 3Cx400 sq.mm cables in feeder compartments & in the breaker compartment 11kV, 1CX185 sq. mm / 3C X 300 Sq. mm. cables .	confirm Cable size as for 1C cable we have to consider AI Gland plate	Size of cable is 3CX400Sqmm.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
185	Page No-109 Clause No 5.5.11	CT shall be mounted on cables the mounting arrangement shall be flexible to move to & fro, up and down based on site condition of cable terminations etc. The mounting arrangement shall ensure that the CT should not reach less than 300mm from live part of bushing. The CT mounting shall be fixed at position while dispatch such that the cable entry, the bushing terminal bolt and CT core hole are co-axial. (There should be separate CTs for protection & metering. Separate colors for metering & protection CTs. There should be separate compartment for metering CTs & PTs)	As we are considering Dual Core CT. We are not giving 2 colors. It will single color	Accepted
186	Page No-114 Clause No 5.11.2	Preferred communication protocol for FRTU shall IEC-60870-5-104.	FRTU is not in our scope. Kindly confirm	FRTU is not considered in this tender

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
187	Clause No-4.1		<p>Last year we had supplied the CT-PT unit RMU with this option to tata power Mumbai</p> <p>In this option, the bus PT is isolated by a load break switch and in VCB feeder, we had provided dual core LV CT with protection core with 5P10, 2.5VA and metering core with CL:0.2, 2.5VA. And in Bus metering panel, space provision for TVM is considered.</p> <p>Moreover, we had provided castell key interlock between metering panel and LBS of PT. Unless and until the LBS is not switched off, the PT door cannot be open and unless and until the PT door is not closed, you cannot switch on the LBS of PT</p> <p>Similar type of arrangement, can we consider for this tender also ?</p>	Accepted
188	Page: 133 of 233 Clause No-1	The insulating medium is SF6 and the interrupting media may be SF6 or Vacuum.	<p>Insulating Medium of Bus Bar: Air Interrupting Medium of LBS : SF6 Interrupting Medium of Circuit Breaker: SF6 This is in our HMM36 series We are offering Circuit Breaker of SF6 CB in</p>	As your not providing RMU , the queries are irrelevant.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			series with Isolator We are offering SF6 LBS	
189	Page: 168 of 233 Clause No-15.0	Configuration: 1Set- of 36kV touch-proof Cable Boots.	Touch Proof cable boots are not required in HHM36	As your not providing RMU , the queries are irrelevant.
190	Page: 155 of 233 Clause No-5.9.2	Corrosion Protection Outdoor Enclosure	We will provide Outdoor canopy meeting the specification for outdoor application	As your not providing RMU , the queries are irrelevant.
191	ANNEXURE I Schedule for Items	1) RMU 11KV 3WAY 630A BKR O/D(2ISO+1BKR) = 14 EA 2) RMU 11KV 4WAY 2* 630A BKR O/D (2ISO+2BKR)= 5 EA 3) RMU 11KV 3 WAY 630A WITH METERING UNIT = 10 EA 4) RMU 11KV 4 WAY 630A WITH METERING UNIT= 30 EA	Please clarify below. * RMU shall be Motorised or manual ? * For S.No.-3&4. Please confirm that RMU shall be Indoor or Outdoor. Also clarify the configuration of RMU for 3way & 4way.	All the RMU's are of Motorised and Outdoor type & Non Extensible Type RMU Configuration: 3 way with metering-(2LBS + 1VCB)+ 1 metering unit,and metering unit to be placed on right sides & Non Extensible. 4 way with metering-(2LBS + 2VCB)+ 2 metering unit,and metering unit to be placed on both sides Non Extensible.
192	Clause-4.1, RMU configurations Page- 5 of 30	LBS and CB should be given 24V DC motorized RMU while designing RMU having inbuilt Battery & Battery charger.	Please specify the AH capacity of battery.	AH Calculation in scope of bidder based to Motor rating and Control relay/Coil .
193	Clause-5.2.8, General Details Page- 6 of 30	Mechanical interlocking systems shall prevent access to the operating shaft to avoid all operator errors such as closing the earth switch when the Load break switch is closed or when cable is charged.	Load break switches are fitted with VPIS which is manually operated device that gives visible indication for presence of voltage in the cable. A field operator should always activate the VPIS to confirm whether Voltage is presence or not before	Same to be provided as per Technical Specification

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			operating the LBS to Earth. Our earth switch can be closed when LBS is open and interlocked but earth switch is not interlocked with the VPIS when the cable is charged and this methodology is the industry accepted standard procedure. Request you to accept the same.	
194	Clause-5.4.2, Incomer Load Break Switches Page- 7 of 30	Electrical /Mechanical Interlock should be provided to the Earth switch it should not be Close when cable is back charged	Load break switches are fitted with VPIS which is manually operated device that gives visible indication for presence of voltage in the cable. A field operator should always activate the VPIS to confirm whether Voltage is presence or not before operating the LBS to Earth. Our earth switch can be closed when LBS is open and interlocked but earth switch is not interlocked with the VPIS when the cable is charged and this methodology is the industry accepted standard procedure. Request you to accept the same.	Same to be provided as per Technical Specification
195	Clause-5.4.2, Incomer Load Break Switches Page- 8 of 30	The LBS shall be fitted with an electrical operating mechanism and can remotly open-disconnected, closed and earthed from reserved location.	LBS shall be fitted with an electrical mechanism and it is possible to remotely open-disconnected, closed. Earth switch is manually operated & it can operate locally, and we understand reserved location means it should not operate from remote location.	LBS & VCB are motorised and shall be operated remotely where as earth to be manually operated



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
196	Clause-5.5.4, Circuit Breaker for Transformer/Local feeder Page- 8 of 30	In view of safety each VCB shall be assisted with feeder side disconnecter having 3 positions, open-disconnected, closed, and earth (having fault making capacity) and shall be constructed in such a way that natural interlocking prevents unauthorized operations.	Our RMU shall have feeder side vacuum circuit breaker as per our type tested design and last supplies to TPCODL. Request you to please accept the same.	Accepted
197	Clause-5.5.9, Circuit Breaker for Transformer/Local feeder Page- 8 of 30	The operating mechanism shall be compatible for remote/ SCADA operation. The required motor for this operation shall be delivered separately to stores (at a later date) and shall be compatible with older versions of RMUs already working within the TPCODL network.	The operating mechanism shall be compatible for remote/ SCADA operation. The required motor and battery charger for this operation shall be provided with the RMU. However, if required, we shall deliver separate motor for RMU of the same make (C-sec or C&S) on chargeable basis.	This arrangement has been considered with LBS & VCB both are motorised. Separate motor for RMU is not required.
198	Clause-5.5.11, Circuit Breaker for Transformer/Local feeder Page- 8 of 30	CT shall be mounted on cables the mounting arrangement shall be flexible to move to & fro, up and down based on site condition of cable terminations etc.	CT mounting arrangement can move only up & down in cable compartment. Request you to accept the same.	Accepted
199	Clause-5.5.21, Circuit Breaker for Transformer/Local feeder Page- 9 of 30	Electrical /Mechanical Interlock should be provided to the Earth switch it should not be Close when cable is back charged.	Circuit breaker are fitted with VPIS which is manually operated device that gives visible indication for presence of voltage in the cable. A field operator should always activate the VPIS to confirm whether Voltage is presence or not before operating the CB to Earth. Our earth switch can be closed when CB is open and interlocked but earth switch is not interlocked with the VPIS when the cable is charged and this	Same to be provided as per Technical Specification



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			methodology is the industry accepted standard procedure. Request you to accept the same.	
200	Clause-5.5.25, Circuit Breaker for Transformer/Local feeder Page- 9 of 30	The relays shall be self-powered suitable numerical relay with necessary elements. Please refer Specification no. ENG-HV-95 for Self power relay for RMU feeder protection. The preferable make of relay are ABB, Ashida, Schneider, Siemens make relay.	Please accept C&S Make Relay. Also, request you to provide the specification No. ENG-HV-95 for self powered relay.	Make of relay should be as per tender specification. However if any other approval to be taken from TPCODL.
201	Clause-5.5.25, Circuit Breaker for Transformer/Local feeder Page- 10 of 30	There should be provision of flag Relay on each outgoing vacuum breaker module for indication of Trip on Fault	We can provide Flag for trip on fault condition, for this separate flag relay is not required. However LED indication also available for Breaker trip on fault condition. Request you to accept the same.	Accepted
202	Clause-5.6.9 Bushing & Cable terminations Page- 10 of 30	The cable cover door shall be pad lockable and shall be Tamper and Arc proof.	The Cable door shall be mechanically interlocked with respective LBS/VCB and can be opened in earth position only. Cable cover door are not padlockable. However it shall be tamper and arc proof. Request you to accept the same.	Accepted
203	Clause-5.6.11, Bushing & cable terminations Page- 11 of 30	Locking provision of cable compartment door to be provided in case of any switch/CB is at earth position to avoid pilferage.	Not available, the cable door are withdrawable type and are interlocked with the earth switch of respective LBS and CB feeder. Request you to accept the same.	Accepted
204	Clause-5.8.2, Voltage Indicator lamps Page- 11 of 30	The auxiliary contacts in VPIS shall be there should be electrical interlock of cable presence indicator and operation of earth	VPIS are not interlocked with the earth switch. However, we shall provide VPIS with auxilliary contacts for SCADA.	We will be requiring interlock for earth switch operations of LBS whenever there is cable



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		switch in RMU incomer cable compartment of LBS		is charge the earth switch should not be closed electrically or manually.
205	Clause-5.10.5 Fault Passage Indicators Page- 13 of 30	The Approved Make of FPI are EKL8000, EKL8000NG, Easergy Flair 22D ,SICAM and any other makes can be approved subject to TPCODL Approval	Please accept C&S Make FPI also, as we have supplied RMUs with C&S make FPI to TPCODL and major DISCOM in India.	The Approved Make of FPI are EKL8000, EKL8000NG, Easergy Flair 22D ,SICAM and any other makes can be approved subject to TPCODL Approval. C&S make FPI not accepted.
206	Clause-5.11.1 Remote control of the RMU Page- 14 of 30	For non-motorized RMU: Future provision for motorization to be kept along with the hurting plug arrangement on each feeder of each RMU	Please confirm RMUs are motorized or manual.	All the RMU's are motorized.
207	Clause-5.11.2 Remote control of the RMU Page- 14 of 30	Signal requirement for field RTU (which shall be mounted near RMU) is attached (refer Annexure-1). Bidder shall quote the cost of field RTU (FRTU) separately with all technical details for acquisition of the signal as described in Annexure-1.	Do we quote RMUs with FRTU or without FRTU. There is no space in the price bid to quote FRTU separately. Please clarify.	FRTU is not considered in this tender
208	Clause-5.11.2 Remote control of the RMU Page- 14 of 30	A flag is required for series and shunt coil actuation).	We shall provide flag indication for series tripping. Please clarify the requirement of flag in Shunt coil.	No flag is required for shunt coil.
209	Clause-7.1 Type Test Page- 16 of 30	Salt Spray Test for 1000 Hours	Curently type test report for Salt spray test is available on 500 Hours. Request you to accept the same.	Shall be required as per technical specification

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
210	S.No.35, General Technical Particulars, Page-23 of 30	Moving contacts of earthing switch shall be visible in closed position thru transparent covers AND closing shall be possible only when Isolator is open	As the contact are inside SS tank, the contacts are not visible but the mimic shows the true position of contacts as it is mounted on the contact operating shaft. Request you to accept the same.	Accepted
211	S.No.5(e), General Technical Particulars, Page-27 of 30	There shall be provision of 230 V AC (maximum 5 Amp current) & 24 V DC	Please confirm that, should we consider Auxilliary PT of 11KV/230V AC, 500VA for 230V AC and Battery charger for 24V DC? Please specify the AH capacity of battery (if required)	Auxiliary PT is not required only provision of 230 V AC is to be given.
212	Clause-4.3, Current Transformer	4.3.1. Transformation ratio (CT ratio) -30/5, 50/5 ,100/5, 200/5 & 300/5 4.3.2. Rated Output VA Burden-15 VA 4.3.3 Class of accuracy- 0.2s	Due to manufacturer's design limitations, LT CT in RMU will have below specifications 4.3.1. Transformation ratio (CT ratio): 50/1 ,100/1, 200/1 & 300/1 4.3.2. Rated Output VA Burden-2.5 VA for metering & 2.5VA for protection. 4.3.3 Class of accuracy- 0.2s for metering & 5P10 for protection. Also, request you to confirm the primary ratio of LT CT for metering and protection separately.	CT ratio shall be as per Tender specification
213	Clause-4.3, Current Transformer	4.3.4. Rated continuous thermal current -1.2 times Primary Current 4.3.5 Short time thermal current rating -200/5 : 18.4 KA Amps for 1 sec .For	RMU shall have LT CT for metering & protection and the specification is for HT CT. Therefore the given clause is not applicable.	This is required for HT metering purpose for those RMU's which has been considered with HT metering

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		other ratio as per IS 4.3.6 Rated Dynamic Current 2.5 times short time thermal current rating. 4.3.11 Maximum temperature rise over ambient temperature.- 55 Deg C as per IS 2705-1	Request you to accept the same.	unit in Tender. Same has to be followed as per technical specification.
214	Clause-4.6.2, Enclosure	Protection against penetration of dust and water IP-55	The RMU shall have Ingress protection (IP54) for protection against penetration of dust and water as per our type tested design. Request you to please accept the same.	Accepted
215	Clause-4.0,Clearance	Cable Box Clearance Phase to Phase =130mm Phase to ground = 90mm	Cable Box Clearance shall be as below. Phase to Phase =111mm Phase to ground =71mm	It shall be as per Technical Specification
216	Clause-4.1, RMU configuration	B) There will be 3 no's of 11KV Current Transformer & 3 no's of 11KV Potential Transformer in the metering unit compartment. C) The PT should have isolation facility either through Load break switch or through Vacuum breaker.	B). The metering unit of RMU will consist of 3Nos single phase 11kV PT only. The LT CT of RMU shall be placed in cable compartment of RMU of respective LBS and CB feeder as per requirement. C) PT shall be fixed type bus connected as per SLD enclosed by us. There shall not be any isolation facility in the Bus PT. As per General arrangement(SLD) for 3 W RMU given in the clause , C-sec remarks are as below.	It shall be as per Technical Specification

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			<p>1. The Outgoing of Circuit breaker will directly fed to the transformer with separate Metering cubicle for Bus PT and this being accepted by major DISCOMs & Utilities of India.</p> <p>2.The LT CT of RMU shall be placed in cable compartment of RMU of respective LBS and CB feeder as per requirement.</p> <p>3. We are enclosing our refrence SLD of RMU for 11kV 3W configuration with metering.</p> <p>Request you to accpet the same.</p>	
217	Clause-4.1, General Arrangement for 3W RMU with Metering Unit	All shunt Trip coils shall be 230V AC for TPCODL supply	If RMU is motorised, Shunt trip coil shall be 24V DC and if it is manual we can offer shunt trip with provision for 230V AC in our RMU.	For Motorised operations the voltage required for Motor :24VDC & Coil:230VAC
218	Clause-4.1, General Arrangement for 3W RMU with Metering Unit	There should be mechanical interlock between 630A LBS of PT & outgoing. Outgoing LBS should not close unless LBS of PT is ON. There should be single core PT.)	The PT shall be fixed type bus connected PT, it shall not have any interlock with the LBS. Request you to accept the same.	Same should be as per Technical Specification
219	Clause-5.2.8, General Details	Mechanical interlocking systems shall prevent access to the operating shaft to avoid all operator errors such as closing the earth switch when the Load break switch is closed or when cable is charged.	Load break switches are fitted with VPIS which is manually operated device that gives visible indication for presence of voltage in the cable. A field operator should always activate the VPIS to confirm whether Voltage is presence or not before operating the LBS to Earth. Our earth	Same to be provided as per Technical Specification

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			switch can be closed when LBS is open and interlocked but earth switch is not interlocked with the VPIS when the cable is charged and this methodology is the industry accepted standard procedure. Request you to accept the same.	
220	Clause-5.4.9, Incomer Load Break Switches	The LBS shall be fitted with an electrical operating mechanism and can remotely open-disconnected, closed and earthed from reserved location.	LBS shall be fitted with an electrical mechanism and it is possible to remotely open-disconnected, closed. Earth switch is manually operated & it can operate locally, and we understand reserved location means it should not operate from remote location.	LBS & VCB are motorised and shall be operated remotely whereas earth to be manually operated
221	Clause-5.5.4, Circuit Breaker for Transformer/Local feeder	In view of safety each VCB shall be assisted with feeder side disconnecter having 3 positions, open-disconnected, closed, and earth (having fault making capacity) and shall be constructed in such a way that natural interlocking prevents unauthorized operations.	Our RMU shall have feeder side vacuum circuit breaker as per our type tested design and last supplies to TPCODL. Request you to please accept the same.	Accepted
222	Clause-5.6.9 Bushing & Cable terminations	The cable cover door shall be pad lockable and shall be Tamper and Arc proof.	The Cable door shall be mechanically interlocked with respective LBS/VCB and can be opened in earth position only. Cable cover door are not padlockable. However it shall be tamper and arc proof. Request you to accept the same.	Accepted

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
223	Clause-5.11 Remote control of the RMU	Signal requirement for field RTU (which shall be mounted near RMU) is attached (refer Annexure-1). Bidder shall quote the cost of field RTU (FRTU) separately with all technical details for acquisition of the signal as described in Annexure-1.	Do we quote RMUs with FRTU or without FRTU. There is no space in the price bid to quote FRTU separately. Please clarify.	FRTU is not considered in this tender
224	Clause-5.11 General Construction of CTPT Metering Unit.	The connection between the CT and PT inside the enclosure shall have adequately reinforced insulation to avoid infringement of clearance in air or to the enclosure from inside the unit.	The metering unit of RMU will consist of 3Nos single phase 11kV Bus connected PT only. The LT CT of RMU shall be placed in cable compartment of RMU of respective LBS and CB feeder as per requirement. Request you to accept the same.	This shall be done as per technical specification
225	Clause-5.11 General Construction of CTPT Metering Unit.	The dimensions of the metering cubicle shall be approx. 1000 mm (L) x 1500mm (H) x 1000 mm (D). Length (L) i.e. 1500 mm shall also include 100 mm standing channel.	The dimensions of the metering cubicle shall be approx. 700mm (L) x 1942mm (H) x 740 mm (D) Length (L) shall include 60 mm standing channel. Request you to accept the same.	Accepted
226	Clause-5.11 General Construction of CTPT Metering Unit.	The metering cubicle shall be panel type with 2 no's of compartments (one for CT - PT and other for metering).	The metering unit of RMU will consist of 3Nos single phase 11kV Bus connected PT only. The LT CT of RMU shall be placed in cable compartment of RMU of respective LBS and CB feeder as per requirement. Request you to accept the same.	This should be done as per technical specification
227	Metering Unit Name Plate & Marking	It shall be possible to seal the metering compartment with plastic seals for preventing tampering.	Sealing of metering cubicle is not possible.	This should be done as per technical specification
228	Approved sub vendor List	Epoxy Resin Cast C.T & PT.- Pragati Make, Huphen Fabricator, Huphen Electromech	Request to accept Nortex/Adcon/NPT make for CT & PT.	This is to be followed as per Tender specification. For any

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				deviation prior permission to be taken before manufacturing.
229	Clause-7.1, Type Test for RMU+CT/PT	CTPT Metering cubicle Type Test: - (Test shall be included RMU +CT PT with busbar & enclosure) 1. Temperature rise test 2. IP 55 Test 3. Short time current tests (Short circuit withstand test for Metering cubicle along with RMU + CT, PT, busbar and insulator)	We shall have type test of RMU separately. CT/PT are bought out items and we shall provide its type test report separately.	The complete type test is required RMU along with HT metering.
230	Clause-7.2, Routine Test RMU+CT/PT	Power Frequency Withstand Test. SF6 chamber pressure withstands/leakage test	This is a part of type test of RMU. We shall provide type test report for the same.	Accepted
231	Clause-7.2, Routine Test RMU+CT/PT	Routine Test for CT & PT Unit - Power frequency dry withstand tests on primary windings - Power frequency dry withstand tests on secondary windings - Partial discharge test in accordance with IS 11322-1985	It is applicable for PT only. CT shall be LT type	This is to be followed as per Tender specification and drawings
232	S.No.32, General Technical Particulars.	Moving contacts of earthing switch shall be visible in closed position thru transparent covers AND closing shall be possible only when Isolator is open	As the contact are inside SS tank, the contacts are not visible but the mimic shows the true position of contacts as it is mounted on the contact operating shaft. Request you to accept the same.	Accepted
233	S.No.41, General Technical Particulars.	Electrical and mechanical interlocks shall be ensured between RMU and Metering unit	There is no interlocking provision between RMU and metering unit. The metering unit will consist of Bus PT.	This is to be followed as per Tender specification and drawings



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
234	Particulars - Page 8 of 233 - Clause 1.7 Qualification Criteria	1.7.3 The bidder should have experience of having successfully completed supply orders for at least 100 nos. RMUs of same or higher voltage rating during last 3 years. Copy of work order / completion certificate to be submitted in this regard	Our understanding is that 100 No's of 11KV & 100 No's of 33KV PO copies shall be submitted for qualification criteria	PO copies of 100 Nos. of 33 kV or higher rating RMU will suffice for both the Lots. Or 100 No's of 11KV & 100 No's of 33KV PO copies shall suffice for respective Lots.
235	- Page 8 of 233 - Clause 1.7 Qualification Criteria	1.7.4 The bidder should have performance certificates from at least 2 reputed companies for similar or higher rating of work. The work against these issued certificates should be completed in last seven years from the date of bid submission.	Our understanding on "Reputed companies" is state Utilities/ Govt. Utilities/PSU's The performance certificates shall also follow from the same & should be separate for 11KV & 33K individually	As mentioned Performance certificate should be of similar or higher rating RMU's.
236	- Page 8 of 233 - Clause 1.7 Qualification Criteria	1.7.5 The bidder should have dedicated service team in TPCODL to attend issues within 24 hours or bidder shall develop dedicated service team in this area in the event of award of contract, before commencement of supplies. Bidder should submit the undertaking in this regard	Hereby confirm that we have local service team to attend issues. shall depute engineer to attend the site in minimum possible time	As per Tender document
237	- Page 10 of 233 - Clause 2.1 Price Variation Clause	The prices shall remain firm during the entire contract period	We request you to introduce IEEMA price variation clause in the tender	Not accepted. Existing clause prevails-"The prices shall remain firm during the entire contract period"
238	- Page 13 of 233 - Clause 3.5 Period of Validity of Bids	Bids shall remain valid for 180 days from the due date of submission of the bid.	We request you to introduce IEEMA price variation clause in the tender	Existing Clause prevails- Rate contract shall be valid for 1 year. The prices shall remain firm during the entire contract



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				period. Bidders need to quote accordingly.
239	- Page 16 of 233 - Clause 7.1 Special Conditions of Contract	3. Delivery period shall be within 60 days from date of receipt of release order / CAT-A issuance, whichever is later	Delivery shall be against drawing approval or manufacturing clearance whichever is later 11KV RMU shall be 9 weeks 33KV RMU shall be 14 weeks (35 Qty's per month in single lot- respectively for 11&33KV)	Delivery period shall be within 90 days for 33KV RMU and 60 days for 11KV RMU from date of receipt of release order / CAT-A issuance, whichever is later
240	SPECIFICATION FOR 11kV RING MAIN UNIT- 3W, 4W and 5 WAY - Page 2 of 30 - Clause 1.0 Scope	This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site/store and performance of 11kV Ring Main Units with all accessories and necessary training for trouble free & efficient performance.	Scope for this package is only design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site	Scope is as per Technical Specification.
241	- Page 3 of 30 - Clause 3.0 CLIMATIC CONDITIONS OF THE INSTALLATION OF RMU	The design of equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.3 g	The foundation/plinth of the RMU has to be designed suitably by the end user, in that cases the RMU would be able to withstand the shocks that will be experienced in the seismic zone	Accepted
242	- Page 3 of 30 - Clause 4.0 GENERAL TECHNICAL REQUIREMENTS OF RMU:	14 Opening time of breaker (max.) without relay time 2.5 cycle	Approx. 40-80 ms	Accepted
243	- Page 3 of 30 - Clause 4.0 GENERAL TECHNICAL REQUIREMENTS OF RMU:	15 Closing time of breaker (max.) without relay time 3 cycle	Approx. 40-70 ms	Accepted

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
244	- Page 4 of 30 - Clause 4.1 RMU CONFIGURATIONS	Indoor and Outdoor application	Pls confirm the application is Indoor or outdoor	The application is for outdoor only
245	- Page 6 of 30 - Clause 5.2 GENERAL DETAILS	Cable compartment shall be IP54	Cable compartment degree of protection IP3X with enclosure door open IP54 with enclosure door closed	Accepted
246	- Page 6 of 30 - Clause 5.2 GENERAL DETAILS	5.2.9 All panel covers shall be provided with anti-vandal screw bolts so that opening of panel covers is only possible with special tools, which shall be provided by the Bidder as mandatory spare/tool.	No special tools required to access the panel cover	Accepted
247	- Page 6 of 30 - Clause 5.2 GENERAL DETAILS	5.2.11 Three way with two CB configuration	This clause is not applicable for this package Since the Annexure-I Schedule of Item is calling for 3way with 2 Isolator + 1 Breaker	Accepted, this tender is for 3way (2LBS+1VCB)
248	- Page 7 of 30 - Clause 5.4 Incomer Load Break Switches (LBS)	5.4.2 Electrical /Mechanical Interlock should be provided to the Earth switch it should not be Close when cable is back charged	Manual pad locking arrangement should be done at site on each LBS. Provision of padlocking is available in RMU	Electrical & Mechanical interlocking is required. Earth switch should not be closed when cable is back charged.
249	- Page 8 of 30 - Clause 5.5 Circuit Breaker For Transformer / Local Feeder Control	5.5.9 The operating mechanism shall be compatible for remote/ SCADA operation. The required motor for this operation shall be delivered separately to stores	Motor will be fixed with VCB mechanism. Separate motor mechanism delivery to stores is not considered	This arrangement has been considered with LBS & VCB both are motorised.
250	- Page 9 of 30 - Clause 5.5 Circuit Breaker For	The CTs of 5P20 Class shall be employed	5P20 protection class in CT shall be able to provide for equal or more than 100/1A ratio	The CT ratio will be required 60-400/1 ratio with 5P10 class burden 2.5VA



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
	Transformer / Local Feeder Control			
251	- Page 10 of 30 - Clause 5.5 Circuit Breaker For Transformer / Local Feeder Control	The transformer ratings which are to be controlled by the breaker are as follows: 500kVA to 2000kVA.	Pls confirm Transformer auxiliary protection relays to be considered or not	NO Only self-powered relays to be provided for protection of DT
252	- Page 14 of 30 - Clause 5.11 Remote Control of the RMU:	The bidder shall quote the cost of field RTU (FRTU) separately with all technical details for acquisition of the signal as described in Annexure-1.	Pls confirm FRTU to be considered or not, since there is no separate line item is provided in Schedule of Items (Annexure-I)	FRTU is not considered in this tender
253	- Page 14 of 30 - Clause 5.11 Remote Control of the RMU:	A flag is required for series and shunt coil actuation	Electrical trip flag indication shall be provided in self powered Numercial relay	Accepted
254	- Page 14 of 30 - Clause 5.11 Remote Control of the RMU:	Also the PCB of motor should be covered by anti-tracking agent. There should be relay with timer instead of only relay, which is used in the latching circuit	As per our standard design we do not use PCB or timer relay for spring charging motor circuit	For motorised ckt there should be a timer with relay.
255	Specification for 11 KV Outdoor Motorized Combined RMU with CTPT Unit - Page 101 of 233 - Clause 1.0 Scope	This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site/store and performance of 11kV Ring Main Units with all accessories and necessary training for trouble free & efficient performance.	Scope for this package is only design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site	This specification covers the technical requirements of design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site/store and performance of 11kV Ring Main Units with all accessories and necessary training for

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				trouble free & efficient performance. 10 days support is required for installation of RMU at site.
256	- Page 102 of 233 - Clause 3.0 CLIMATIC CONDITIONS OF THE INSTALLATION OF RMU	The design of equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.3 g	The foundation/plinth of the RMU has to be designed suitably by the end user, in that cases the RMU would be able to withstand the shocks that will be experienced in the seismic zone	Accepted
257	- Page 103 of 233 - Clause 4.0 GENERAL TECHNICAL REQUIREMENTS OF RMU:	14 Opening time of breaker (max.) without relay time 2.5 cycle	Approx. 40-80 ms	Accepted
258	- Page 103 of 233 - Clause 4.0 GENERAL TECHNICAL REQUIREMENTS OF RMU:	15 Closing time of breaker (max.) without relay time 3 cycle	Approx. 40-70 ms	Accepted
259	- Page 105 of 233 - Clause 4.1 RMU CONFIGURATIONS	Indoor and Outdoor application	Pls confirm the application is Indoor or outdoor	The application is for outdoor only
260	- Page 107 of 233 - Clause 5.2 GENERAL DETAILS	Cable compartment shall be IP54	Cable compartment degree of protection IP3X with enclosure door open IP54 with enclosure door closed	Accepted
261	- Page 108 of 233 - Clause 5.2 GENERAL DETAILS	5.2.9 All panel covers shall be provided with anti-vandal screw bolts so that opening of panel covers is only possible with special tools, which shall be provided by the Bidder as mandatory spare/tool.	No special tools required to access the panel cover	Accepted

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
262	- Page 109 of 233 - Clause 5.5 Circuit Breaker For Transformer / Local Feeder Control	5.5.9 The operating mechanism shall be compatible for remote/ SCADA operation. The required motor for this operation shall be delivered separately to stores	Motor will be fixed with VCB mechanism. Separate motor mechanism delivery to stores is not considered	This arrangement has been considered with LBS & VCB both are motorised.
263	- Page 110 of 233 - Clause 5.5 Circuit Breaker For Transformer / Local Feeder Control	The transformer ratings which are to be controlled by the breaker are as follows: 500kVA to 2000kVA.	Pls confirm Transformer auxiliary protection relays to be considered or not	NO Only self powered relays to be provided for protection of DT
264	- Page 114 of 233 - Clause 5.11 Remote Control of the RMU:	The bidder shall quote the cost of field RTU (FRTU) separately with all technical details for acquisition of the signal as described in Annexure-1.	Pls confirm FRTU to be considered or not, since there is no separate line item is provided in Schedule of Items (Annexure-I)	FRTU is not considered in this tender
265	- Page 114 of 233 - Clause 5.11 Remote Control of the RMU:	A flag is required for series and shunt coil actuation	Electrical trip flag indication shall be provided in self powered Numercial relay	Accepted
266	- Page 114 of 233 - Clause 5.11 Remote Control of the RMU:	Also the PCB of motor should be covered by anti-tracking agent. There should be relay with timer instead of only relay, which is used in the latching circuit	As per our standard design we do not use PCB or timer relay for spring charging motor circuit	For motorised ckt there should be a timer with relay.
267	- Page 104 of 233 - Clause 4.3 Current Transformer	4.3.1 Transformation ratio (CT ratio) 30/5, 50/5 ,100/5, 200/5 & 300/5	Ration shall be 40/1, 50/1 ,100/1, 200/1 or 300/1	Ratio shall be as per Tender specification
268	- Page 104 of 233 - Clause 4.3 Current Transformer	4.3.2 Rated Output (VA Burden) 15 VA	VA burden shall be 2.5VA	Burden shall be as per Tender specification

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
269	- Page 104 of 233 - Clause 4.3 Current Transformer		All other technical parameters shall be as per IS2705	Accepted
270	- Page 104 of 233 - Clause 4.4 Potential Transformer		Technical parameters shall be as per IS3156	Accepted
271	- Page 105 of 233 - Clause Clearance: -		As per IEC standards	Accepted
272	- Page 114 of 233 - Clause General construction of CTPT Metering unit	Creepage distance (minimum) from any live part to the nearest earth point shall be 190 mm.	As per IEC standards	As per Tender Specification
273	- Page 115 of 233 - Clause General construction of CTPT Metering unit	The dimensions of the metering cubicle shall be approx. 1000 mm (L) x 1500mm (H) x 1000 mm (D). Length (L) i.e. 1500 mm shall also include 100 mm standing channel.	Tentative dimension of metering cubicle shall be: H- 2250mm x W- 830mm x D- 900mm	Accepted
274	- Page 115 of 233 - Clause General construction of CTPT Metering unit	The bolts shall be connected internally to 50 x 6 mm GI earth bus which shall provide earthing to PT neutral & cable earth provision	The earthing bus material is Copper & dimension shall be 30x4mm	Accepted
275	- Page 115 of 233 - Clause General construction of CTPT Metering unit	4 sq mm flexible wires to be used for CT & 2.5 sq mm flexible wires to be used for PT wiring.	We shall use 2.5 Sq.mm flexible wires for CT & PT control circuit	Accepted
276	- Page 119 of 233 - Clause APPROVED SUB VENDOR LIST	Epoxy Resin Cast C.T.- Pragati Make, Huphen Fabricator, Huphen Electromech Epoxy Resin Cast P.T.- Pragati Make, Huphen Fabricator, Huphen Electromech	Please accept as per manufacturer standards	This is to be followed as per Tender specification. For any deviation prior permission to

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		TTB - DAV make & Model name is SSFS TB (Link) - Connect well		be taken before manufacturing.
277	- Page 119 of 233 - Clause Annexure-I Schedule for Items	RMU 11KV 4 WAY 630A WITH METERING UNIT- 30 QTY	Pls confirm the RMU configuration for the same	4 way (2LBS + 2VCB)+ 2 metering unit,and metering unit to be placed on both sides & Non Extensible Type.
278	- Page 122 of 233 - Clause 17.0 SPARES, ACCESSORIES & SPECIAL TOOLS / GAUGES		Request clarification: List of spares to be considered along with RMU or speretae offer to be submitted	Spares has not been considered for this tender.
279	TECHNICAL SPECIFICATIONS FOR EXTENSIBLE 33 KV RMU. - Page 3 of 31 - Clause 1.0 Scope	This specification covers technical requirement of design, engineering, manufacture, testing at manufacturing work, painting, packing, forwarding, supply and performance of 33 kV Ring Main Units complete with all accessories for efficient and trouble-free operation of the distribution network for Tata Power Company Central Odisha. at Odisha.	Scope for this package is only design, manufacture, testing at manufacturer's works, packing, forwarding, supply and unloading at site	Scope shall be as per Tender Specification
280	- Page 4 of 31 - Clause 3.0 Climatic Conditions of The Installation	The design of the equipment and accessories shall be withstand seismic forces corresponding to an acceleration of 0.1 g.	The foundation/plinth of the RMU has to be designed suitably by the end user, in that cases the RMU would be able to withstand the shocks that will be experienced in the seismic zone	Accepted
281	- Page 4 of 31 - Clause 4.0 GENERAL TECHNICAL REQUIRMENTS:	Min Gas Pressure 0.05 Bar G	As per design & type tested standards	Accepted



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
282	- Page 4 of 31 - Clause 4.0 GENERAL TECHNICAL REQUIREMENTS:	Rated cable Charging interrupting Current of Incomer Load Break Switch 25kA	Rated cable-charging breaking current 20 A	Rated cable/line charging breaking current A 35 Rated cable and line charging current A 60
283	- Page 4 of 31 - Clause Functional Requirements:	4 Function Non Extensible/ Extensible	Pls confirm requirement is non extensible or extensible	33kV RMUs are non extensible type.
284	- Page 5 of 31 - Clause Functional Requirements:	Space heaters to be provided in each cable compartment	Space heaters shall not be provided in cable compartment.	Accepted
285	- Page 6 of 31 - Clause 5.1.3 Incomer Load Break Switches	Mechanical Interlock should be provided for Earth switch, If cable is back charged Earth switch should not be closed.	Manual pad locking arrangement should be done at site on each LBS. Provision of padlocking is available in RMU	Mechanical Interlocking with earth switch should be as per technical specifications
286	- Page 6 of 31 - Clause 5.1.4 "Feeder and Local Transformer Control circuit-breaker" feeders	The CTs of 5P20 Class shall be employed	5P20 protection class in CT shall be able to provide for equal or more than 100/1A ratio	protection class CT,5P20 with suitable ratio to be provided.
287	- Page 6 of 31 - Clause 5.1.4 "Feeder and Local Transformer Control circuit-breaker" feeders	The terminal protectors to be supplied with the RMU by the vendor	For 33KV Touch proof termination kit is applicable	Accepted
288	- Page 7 of 31 - Clause 5.1.5 RMU bushings and Cable terminations	The cables going to use for terminations in the isolators compartment is 33kV, 3C X 400 sq. mm and in the breaker compartment 33kV, 1CX400 sq. mm/ 33KV,1CX630Sqmm / 33kV 3C X 400 Sq. mm. The termination should be suitable for above said cables Note: Supply of Cable terminations is to be considered to be part of RMU.	Since the supply of touch proof cable termination kits to be considered along with RMU's, request to confirm the make of kit approved in TPCODL & firm cable sizes of Isolator & VCB Also request to keep the termination of cables in OEM scope only	Termination kit make shall be 3M/ Raychem Cable sizes of LBS & VCB shall be suitable for 1C X 630sq mm/phase.Termination Kit is in vendor scope.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
289	- Page 7 of 31 - Clause 5.1.9 Operating lever	The effort exerted on the lever by the operator should not be more than 250 Nos for the switch and 250 Nos for the circuit breaker.	Our understanding is 250 N mtr	Noted
290	- Page 7 of 31 - Clause 5.1.10 Front plate	The front plate shall have an IP2XC degree of protection.	Front plate shall have IP2X degree of protection	Accepted
291	- Page 8 of 31 - Clause 5.1.12 Remote control of the RMUs	A flag is required for series and shunt coil actuation	Electrical trip flag indication shall be provided in self powered Numercial relay	Accepted
292	- Page 8 of 31 - Clause 5.1.12 Remote control of the RMUs	Also the PCB of motor should be covered by anti-tracking agent. There should be relay with timer instead of only relay, which is used in the latching circuit	As per our standard design we do not use PCB or timer relay for spring charging motor circuit	For motorised ckt there should be a timer with relay.
293	- Page 8 of 31 - Clause 5.1.12 Remote control of the RMUs	The bidder shall quote the cost of field RTU (FRTU) separately with all technical details for acquisition of the signal as described in Annexure-1.	Pls confirm FRTU to be considered or not, since there is no separate line item is provided in Schedule of Items (Annexure-I)	FRTU is not considered in this tender
294	- Page 10 of 31 - Clause 8.0 TYPE TEST CERTIFICATE	The test shall have been conducted in certified test laboratories during the period not exceeding 5 years from the date of opening the bid.	Offered RMU's are designed & type tested as per applicable IEC standrads We do not envisage to do re type tests on the product Shall certify on letter head as per "tender Clause 8.0 Type test certificate" page No: 121of 233	Accepted
295	- Page 11 of 31 - Clause 17.0 SPARES, ACCESSORIES & SPECIAL TOOLS/GAUGES	A list of complete set special tools and gauges required for erection & maintenance and installation procedure shall be submitted	No special tools required for erection, maintenance & installation	Pls provide the installation procedure

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
296	TECHNICAL SPECIFICATIONS FOR 33KV RMU with HT Metering Unit - Page 15 of 39 - Clause 8.2.2 Incomer Load Break Switches	Mechanical Interlock should be provided for Earth switch, If cable is back charged Earth switch should not be closed.	Manual pad locking arrangement should be done at site on each LBS. Provision of padlocking is available in RMU	Mechanical Interlocking with earth switch should be as per technical specifications
297	- Page 15 of 39 - Clause 8.2.4 Cable Termination		Since the supply of touch proof cable termination kits to be considered along with RMU's, request to confirm the make of kit approved in TPCODL & firm cable sizes of Isolator & VCB Also request to keep the termination of cables in OEM scope only	Termination kit make shall be 3M/ Raychem Cable sizes of LBS & VCB shall be suitable for 1C X 630sq mm/phase. Termination Kit is in vendor scope.
298	- Page 19 of 39 - Clause 11.0 Protection Relay	A flag indicator shall be installed for signaling the occurrence of trip conditions.	Electrical trip flag indication shall be provided in self powered Numerical relay	Accepted
299	- Page 27 of 39 - Clause 16.8 Type tests:	The test shall have been conducted in certified test laboratories during the period not exceeding 5 years from the date of opening the bid	Offered RMU's are designed & type tested as per applicable IEC standards We do not envisage to do re type tests on the product Shall certify on letter head as per "tender Clause 8.0 Type test certificate" page No: 121 of 233	Accepted
300	- Page 29 of 39 - Clause 16.13 SPARES, ACCESSORIES & SPECIAL TOOLS/GAUGES	A list of complete set special tools and gauges required for erection & maintenance and installation procedure shall be submitted	No special tools required for erection, maintenance & installation	Pls provide the installation procedure

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
301	- Page 4 of 39 - Clause 4.0 Scope of Work	The Package scope of work shall include design, manufacture, testing, delivery supervision of installation commissioning of new "SCADA-Ready" Ring Main Units capable of being monitored and controlled by the SCADA/DMS.	Pls confirm the number of supervision man days to be considered for this package/33KV RMU with metering	10 days supervision support is required for installation of RMU at site.
302	- Page 5 of 39 - Clause 4.1 Environmental Conditions	The supplied 33kV Ring Main Unit must have no derating at 50 °C and must be capable to carry 630A continuously without any derating	33KV RMU is designed & typetested for 630A continous current carrying capacity @ 40 deg celcius ambient temp Derating shall be applicable as per IEC standards above 40 deg	Accepted
303	- Page 5 of 39 - Clause 5.0 33 KV 3/4 Way RMU TECHNICAL PARAMETERS	Kiosk type design or cladded design wherein an indoor RMU is cladded with kiosk and converted to outdoor RMU is not acceptable	The outdoor RMU shall be as per OEM design & type tested for relevant ingress protection	Kiosk type design or cladded design wherein an indoor RMU is cladded with kiosk and converted to outdoor RMU is not acceptable
304	- Page 7 of 39 - Clause 5.8.1 Maintainability	training necessary to operate and repair the RMU	Pls confirm the number of days to be considered for training & whether its site training or training at Manufacturer works. In case the training to be conducted at manufacturer facility, boarding, travelling cost is not in ABB scope	10 days support is required for installation of RMU at site.
305	- Page 7 of 39 - Clause 5.8.2 Expandability	The whole switchgear (RMU) should be suitable for extension on both sides through bolted type bushings; plug in arrangement for extension of 33kV RMU is not acceptable since in case of unequal foundations the chances of failure are more on the plug in bushings. RMU	Design should be as per OEM standards & type tested as per relevant IEC standards	All the RMU's Non extensible type

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		designs offering plug in extension through link busbars are not acceptable.		
306	- Page 8 of 39 - Clause 5.9 Outdoor Features	The enclosure shall be made of Galvatite sheet of 3.0 mm thickness, CRCA enclosures are not acceptable looking into the corrosiveness of the environment and coastal environment.	Shall offer 2 mm CRCA material for enclosure. To protect the corrosiveness of the environment, painting specifications as per tender shall met	For the enclosure same needs to be stainless steel of thickness 2mm.
307	- Page 8 of 39 - Clause 5.9.2 Corrosion Protection	The main SF6 tank, housing the on-load break switches and the vacuum circuit breakers, should be of no other material except 3 mm robotically stainless steel tank	SF6 gas tank is made up of 2mm thick SS304 Non ferrite & non magnetic material as per our standard type tested design	It shall be as per Technical Specification.
308	- Page 15 of 39 - Clause 8.2.2 Incomer Load Break Switches	The switch and earthing switch mechanisms shall have a mechanical endurance of at least 5,000 operations due to repeated switching on-off of the isolators.	Mechanical endurance for LBS & ES as per M0/M1 class i.e. 1000 CO operations	Mechanical endurance for LBS and Earth Switch is 1000 operation.
309	- Page 16 of 39 - Clause 8.2.5 Fully integral test facilities for isolator and VCB.	This is a mandatory feature requirement to be provided with the ring main unit, Testing by removing the cable cover and accessing of the termination through cable test probes is not acceptable since touch proof cable termination kits are involved and disturbing the termination for testing can lead to failure and flashover of the termination.	Touch proof cable termination design is with bolted type & comes with top cap, which shall be removable from hand for cable testing & plug the testing rod to termination bolt without disturbing the touch proof termination.	This is not a mandatory feature requirement but it is preferred to have an arrangement to test the cable without opening the cable compartment.
310	- Page 17 of 39 - Clause 9.1 Current Transformers	Burden : 5VA Accuracy Class : 0.2	We shall offer 2.5VA burden CT with CL: 0.5 Accuracy	Accuracy Class 0.2 is required however burden can be 2.5 VA. Sizing calculation to be provided.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
311	- Page 20 of 39 - Clause 12.0 Power Supply and auxiliary power transformer	The 24 V DC batteries shall have sufficient capacity to supply power to the following devices with a nominal backup of 4 hours: - RMU's motors for a minimum of five (5) operations	Battery back up capacity shall be either 4 hours or 5 CO operations immediate	Accepted
312	- Page 21 of 39 - Clause 13.0 Construction	The switchgear shall have a mechanical impact protection of IK10 and type test shall be submitted accordingly	Our offering product is Indoor type cladded with Out door KIOSK Hence this test is not applicable	RMU are of Outdoor and Non extensible Type.
313	- Page 21 of 39 - Clause 14.0 Gas filling provision.	Gas filling / Top up provision shall be provided on the mimic of the ring main unit without removal of mimic, design which are sealed for life and which offer gas filling required after removing manometer value is not acceptable since the chances of gas leakage are more during refitting of the manometer.	Gas refilling valve & manometer valve is same which is fitted with Non return valve, ensures no leakage of gas after refilling & refixing of manometer We recommend not to have two valves for gas refilling & monitoring seperatley which leads to failure of leakage tendency	Accepted
314	- Page 21 of 39 - Clause 15.0 Configuration requirements	A) Two isolator + 1 VCB + Line metering B) Two isolator + 2 VCB + Line metering	Kindly clarify the exact site requirement of configurations with metering module Since the layout & configuration described are not matching with each other	3 way with metering non extensible type-(2LBS + 1VCB)+ 1 metering unit,and metering unit to be placed on right sides . 4 way with metering non extensible type-(2LBS + 2VCB)+ 2 metering unit, and metering unit to be placed on both sides.
315	- Page 35 of 39 - Clause Load Break Switch	Rated cable charging breaking current 35A	Rated cable charging breaking current 20A	Rated cable charging breaking current 35A



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
316	- Page 35 of 39 - Clause Load Break Switch	Rated line charging breaking current 35A	Rated line charging breaking current 2A	Rated line charging breaking current 35A
317	- Page 35 of 39 - Clause Load Break Switch	Rated cable and line charging current 60A	Rated cable and line charging current 35A	Rated cable and line charging current 60A
318	- Page 35 of 39 - Clause Load Break Switch	Rated earth fault breaking current 105A	Rated earth fault breaking current 60A	Rated earth fault breaking current 105A
319	- Page 35 of 39 - Clause Vacuum Circuit breaker	Rated cable charging breaking current 100A	Rated cable charging breaking current 50A	Rated cable charging breaking current 100A
320	GENERAL CONDITIONS OF CONTRACT –SUPPLY ORDERS - Page 6 of 43 - Clause 4.0 Scope of Work	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.	Scope for this package is only design, manufacture, testing at manufacturer’s works, packing, forwarding, supply and unloading at site Clasue 4.0 is not applicble for this package since the scope is only supply of RMU's	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
321	- Page 11 of 43 - Clause 11.2 Facilitating Inspection	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 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	Clause 11.2 is not applicable All expenses shall be borne by TPNODL	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)
322	- Page 13 of 43 - Clause 12.2 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	Any such rejections shall be brought to our notice immediately in writing, we shall examine the same & take action as per mutual agreement	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)
323	- Page 14 of 43 - Clause 13.3 Failure in Guarantee Period (GP)	If Associate fails to repair/rectify/replace the equipment or material supplied 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.	Clause 13.3 is not acceptable In case such situation arises, expenditure for rectification shall be discussed & agreed mutually	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
324	- Page 15 of 43 - Clause 13.6 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	Latent defects shall only include inherent design defects and no other defect. Hidden manufacturing defect will not be included in latent defect.	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)
325	- Page 15 of 43 - Clause 14.0 LIQUIDATED DAMAGES	For delay of each week and part thereof from the delivery schedule specified in the contract, 1% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, TPCODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value.	Any delay attributed to the supplier beyond agreed date of delivery will attract Liquidated Damage (LD) if agreed to at the time of order, as a genuine pre estimated losses and not as penalty, @0.5% per week or part thereof subject to maximum 5% of the undelivered portion of the order value. However, in case of any delay for the reason not attributable to the supplier or even, force majeure conditions, the provision of liquidated damages shall not apply. Liquidate Damages shall be the exclusive and the sole remedy available to the purchaser under this contract, tort or any other law applicable for the time being	Existing LD clause prevails.
326	- Page 17 of 43 - Clause 17.0 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,	Any intellectual property developed or acquired by Associate during course of contract shall be owned by Associate. TPNODL will have such rights as granted by Associate in the intellectual property so developed as may be necessary for the use of Associate's products by TPCODL	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		<p>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.</p>		
327	- Page 18 of 43 - Clause 18.0 INDEMNITY	<p>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.</p>	<p>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.</p>	<p>Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)</p>



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
328	- Page 18 of 43 - Clause 19.1 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.	Except for any specific monetary value 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 gross negligence, willful misconduct	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)
329	- Page 18 of 43 - Clause 19.2 Limitation of Liability	The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.	Notwithstanding any other provision to the contrary, the total liability of Associate under this contract shall be limited to the total all-inclusive contract value	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)
330	- Page 22 of 43 - Clause 22.3 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. 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.	In case of termination for convenience of TPCODL or cancellation of project, Associate shall also be paid for the cost of actual executed work for WIP project along with supplies/services rendered until date of termination	Existing clause prevails as per Tender Document



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
331	- Page 23 of 43 - Clause 24.0 ATTRIBUTES OF GCC 24.1 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.	In case of termination for convenience of TPCODL or cancellation of project, Associate shall also be paid for the cost of actual executed work for WIP project along with supplies/services rendered until date of termination	Existing clause prevails as per Tender Document
332	- Page 23 of 43 - Clause 26.0 TRANSFER OF TITLES	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.	Loss, theft, damages occurred during the storage, handling of the product (Transportation to site, erection, installation) shall not be covered under the responsibility of associate	Existing clause prevails (As per company policy GCC Can't be amended, however any dispute arising owing to this clause can be mutually discussed and agreed upon)
333	19.0- General Technical Particulars:	Minimum gas pressure at 0.05 barG	SF6 is filled at 0.35 Bar G. Alarm will be generated at 0.25Bar G and Circuit Breaker shall trip at 0.2 Bar G.	Accepted.
334	4.0- General Technical Requirement:	Breaker Duty Cycle- O-3min-CO-3min-CO	Breaker duty cycle shall be O-0.3sec-CO-3min-CO	It should be as per Technical Specification
335	5.1.2- General Construction of RMU	The RMU shall be complete with all connection and tinned copper bus bar	The RMU shall be complete with all connection and bare copper bus bar	It should be as per Technical Specification
336	5.1.3- General Construction of RMU	LBS /CB shall not be closed in case Earth Switch is closed.	Earth Switch can be operated only when LBS and CB are in open position. However CB can be closed when DS is in earth position for earthing of cables	We require Electrical mechanical Interlocks to block the earth switch operation when the LBS is in open state.
337	5.1.4- General Construction of RMU	Internal fault IAC- A & B as per IEC 62271-200.	Internal arc fault as per IAC-A shall be provided as per standard practice.	Accepted.

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
338	5.5.25 Circuit Breaker For Transformer / Local Feeder Control	The breaker shall have the provision of flag Relay for indication to Trip on Fault.	Mechanical flag shall be provided and indication from relay shall be provided through LED.	Accepted.
339	19.0- Clause 38 Circuit Breaker For Transformer / Local Feeder Control	Testing of cable-without opening the doors.	Testing of cables can be done as per the mentioned clause, however separate test bushing shall not be provided. Testing can be done through test rods.	Accepted.
340	19.0- Clause 57	Guarantee from date pf taking over by TPL. 48 Months from the date of commissioning or 60 months from the date of last supplies made under the contract which ever is later	Guarantee shall be replaced by warranty. Materials are free from manufacturing defects 36 months from the date of supply of 30 months from the date of commissioning whichever is earlier.	The Guarantee Period is of 48 months from date of commissioning or 60 months from date of last supplies whichever is earlier
341	7.0- Type Test:	Breaking and Making Capacity Test for Breaker & Isolating Switches.	Breaking capacity shall be provided for circuit breaker only.	It should be as per Technical Specification
342	19.0- General Techncial Particular of RMU- 34.0	Circuit breaker preferebly shall be Sf6 type.	We shall offer breaker vacuum type only.	Breaker shall be VCB however surrounded by SF6.
343	19.0- General Techncial Particular of RMU- 45.3	Minimum 1200mm Above GL	Height shall be minimum 1000mm Above GL	Accepted.
344	5.2.2-General Details	The RMU shall be suitable for mounting on plinth with trench below and shall have base frame on sides with mounting bolt accessibility from outside of RMU the mounting bolts provision shall be min. M12 bolts on all four sides.	Bolts shall not be in our scope	Accepted.
345	5.2.9- General Details	All panel covers shall be provided with anti-vandal screw bolts so that opening of panel covers is only possible with special tools,	We keep minimum hardwares on outer portion, as per standard design we will offer standard hardwares.	This is to be followed as per Technical Specification

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		which shall be provided by the Bidder as mandatory spare/tool.		
346	5.4.10- Incomer Load Break Switches	The LBS shall be fitted with an electrical operating mechanism and can remotely open-disconnected, closed and earthed from a reserved location.	Earthing operation shall be offered locally. Remote earthing is not recommended.	LBS & VCB are motorised and shall be operated remotely whereas earth to be manually operated
347	Clause 37- General technical Particulars	In view of safety each VCB shall be assisted with feeder side disconnecter having 3 positions, open-disconnected, closed, and earth (having fault making capacity) and shall be constructed in such a way that natural interlocking prevents unauthorized operations.	VCB feeder shall be with Disconnecter switch on Busbar side.	Accepted.
348	5.5.22-Circuit Breaker For Transformer / Local Feeder Control	The CT settings shall be adjustable between 60 – 400/1 Amp for feeder and transformer in relay.	CT setting cannot variable, it can be defined based on TAPs provided while engineering stage	The CT Ratio should be 60-400/1 and it will be used both for feeder & transformer protection
349	5.5.12-Circuit Breaker For Transformer / Local Feeder Control	Fixing bracket to be provided for fixing CT on particular position without touching termination cores. Bolting arrangement to be provided for fixing CT on the mounting bracket.	We shall offer as per our standard practice and safety point of view.	It should be as per Technical Specification
350	5.5.25-Circuit Breaker For Transformer / Local Feeder Control	The preferable make of relay are ABB, Ashida, Schneider, Siemens make relay.	We request you to consider C&S make relays, as it is popular for RMU application.	This should be as per tender specification. However if any other, approval to be taken from TPCODL.
351	Clause 36- General technical Particulars	The electrical interlock of cable charge with earth switch is preferred.	Cable live indication shall be through LIU, there is no separate interlock.	Will be requiring both electrical & mechanical

Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
				interlock which will prevent the closing of Earth switch when cable is back charged.
352	Clause 37b- General technical Particulars	open-disconnected, closed, and earth (having fault making capacity) and shall be constructed in such a way that natural interlocking prevents unauthorized operations	Fault making is not required since DS is towards Bus side. In our RMU design VCB does making and breaking.	Accepted.
353	Clause 37- General technical Particulars	Cable Cleats- HDPE/Nylon (Full Circle)	We shall offer boots, as per our regular offering to all the utilities.	Not in Tender scope
354	5.6.3- Bushing and Cable Termination	Bidder should provide bimetallic washer for connection between Copper bushing stud and Aluminum Lug.	Since we offer silver plating at bushing, hence this clause is not applicable.	Accepted.
355	5.6.3- Bushing and Cable Termination	The bidder can alternately offer tinned copper surface of bushing then bimetallic washer not required.	Since we offer silver plating at bushing, hence this clause is not applicable.	Accepted.
356	5.6.15- Bushing and Cable Termination	Control cabinet shall have control cable entry arrangement on both sides of the RMU top control cabinet with proper grommet such that the opening are sealed in normal installations when not used for our door extension box arrangement to be provided any other arrangement to be explained in drawing during tender.	As per standard design practice one side provision shall be given.	Accepted.
357	5.7.1- Earthing	The RMU outdoor metal clad switchgear enclosure, load Break Switch, VCB, SF6 tank etc. shall be equipped with an tinned copper earth bus throughout all compartments	We shall offer tinned GI as per our type tested design.	It should be as per Technical Specification



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
		and securely fixed along the base of the RMU with cover.		
358	5.9.9- Front Cover	The Direction of operation shall be clock wise for any close operation and anticlock wise for any open operation of disconnecter /LBS and earth switch	Same shall be as per our standard design practice	Accepted.
359	4.0- General Technical Requirement	Space heaters to be provided in each cable compartment	Space heater can not be mounted because of compact size of RMU.	Accepted.
360	7.1-Special Condition of Contract	BA shall submit GTP / Drawing within 2 weeks from issuance of rate contract. In case BA does not get necessary approvals for issuance of CAT-A within mentioned / mutually agreed timelines, , then TPC reserve the right to cancel issued rate contract / release order and also reserve the right to forfeit EMD / PBG.	Drawings shall be submitted within 3 weeks from the date of LOA. Cancellation of rate contract/ work order can not be sole discretion of TPCODL in case delay is not attributable of BA. Same shall be mutually discussed and settled.	Clause remains as per Tender Document
361	7.1-Special Condition of Contract	Delivery period shall be 60 days from date of receipt of release order / CAT-A issuance, whichever is later.	Material shall be ready for inspection within 120 days from date of receipt of release order / CAT-A issuance, whichever is later.	Delivery period shall be within 90 days for 33KV RMU and 60 days for 11KV RMU from date of receipt of release order / CAT-A issuance, whichever is later
362	8.0-General Condition of Contract- SPBG	Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPC.	We shall only submit PBG after completion of supply and shall be valid till warranty period.	Existing clause prevails as per Tender document



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
363	20.0-General Condition of Contract- Force Majeure	Causes like power breakdown/ shortages/fire/strikes, accidents etc do not fall under Force Majeure	Pandemic/ Epidemic, Fire, Strikes, War, Riot, terrorism shall be part of force majeure clause.	There is no change in existing GCC clause. Any other event where the Government declares Force Majeure shall be considered
364	21.1- Suspension of 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 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.	Please include the following against this clause, The Bidder can terminate/ cancel the Contract with prior written notice of 30 days to BUYER for any of the following reasons:- a) Bidder's payment are withheld /suspended beyond reasonable time limit; b) BUYER fails to fulfill its contractual obligations c) BUYER assigns or transfers the Contract or any right or interest herein other than in accordance with the Contract. d) Persistently fails to timely comply its obligations including approval/ certifications of drawings, documents, measurements or other inputs. e) The occurrence of Force Majeure event continues for 2 months or above. f) BUYER fails to take delivery of material due to whatever reasons for more than 2 months. g) Repetitive suspension of work due to	Not accepted. Existing clause prevails. Payment shall be released against accepted supplied items and already completed work. No termination fee shall be paid.



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
			<p>reasons attributable to BUYER.</p> <p>h) A change in Law of any Government Authority, where performance of contractual obligations are not feasible or possible.</p> <p>i) In any case of termination and/or project being scraped/ purged for whatever reasons, the Vendor shall receive from BUYER the full payment towards all the work performed, including but not limited to, certified or not; all payments due towards confirmed commitments with respect to costs of materials, goods and services ordered by the Bidder with its Sub-contractor or Sub-suppliers for performance of this Contract, including the once delivered at site and/or are under transit</p> <p>j) The Bidder shall also be entitled for payment with reasonable profit by BUYER on the part of the terminated works; payment of a sum representing 10% of the contract price as a termination fee.</p> <p>k) In addition, the Bidder shall have all other rights and remedies to which it is entitled under this Contract and/or at law.</p>	



Sr. No.	Detailed Reference to Tender Document	Description as per Bid Document	Remarks - Query / Clarification	TPCODL RESPONSE
365	14.0- Liquidated damage	For delay of each week and part thereof from the delivery schedule specified in the contract, 1% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, TPCODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value.	LD shall be applicable at the rate of 0.5% per week subject to maximum of 5% of the basic order value.	Not accepted. Existing Clause Prevails.