

**CORRIGENDUM – II****NIT No.: TPCODL/CCG/23-24/006****“RATE CONTRACT FOR SUPPLY OF 33 KV & 11 KV METERING UNITS & METERING CUBICLES”****Subject: Regarding revision of Price Schedule (Annexure-I), revision of response to Pre-Bid Queries and change of Bid submission due date.**

- Prices must be submitted in revised format of ‘Price Schedule (Annexure-I)’, enclosed herewith.
- Enclosed ‘Response to Pre-Bid Queries (Revision – 1)’ shall supersede the earlier version circulated dated 13.07.2023.
- Revised due date for bid submission = 24.07.2023 [15:00 Hrs]

***All other terms and conditions of the original tender & Corrigendum-I as available in website [www.tpcentralodisha.com](http://www.tpcentralodisha.com), shall remain unaltered.*****Dated: 18.07.2023****Yours faithfully,  
-sd-  
Chief - CCG**

**ANNEXURE I**  
**Schedule for Items**

Sl. No.	Lot no.	Item Description	UoM	Qty.	Unit Price (Rs/unit)	GST (Rs/unit)	All-inclusive Unit Price (Rs/unit)	Total All-inclusive Amount (Rs.)
				A	B	C	D=B+C	E=DxA
1	LOT - I	33KV METERING UNIT 10/5A B/B ACCU 0.2S 15VA CT	EA	93				
2		33KV METERING UNIT 15/5A B/B ACCU 0.2S 15VA CT	EA	51				
3		33KV METERING UNIT 20/5A B/B ACCU 0.2S 15VA CT	EA	64				
4		33KV METERING UNIT 30/5A B/B ACCU 0.2S 15VA CT	EA	58				
5		33KV METERING UNIT 50/5A B/B ACCU 0.2S 15VA CT	EA	10				
6		CTPT UNIT O/D 33KV 3P4W 0.2 CLA 60/5A 15VA CT	EA	15				
7		METERING UNIT 33KV 3P4W 400-200/5 AMP 0.2S 15VA CT	EA	10				
8		33KV METERING UNIT 100/5A B/B ACCU 0.2S 15VA CT	EA	30				
9		33KV METERING UNIT 200/5A B/B ACCU 0.2S 15VA CT	EA	25				
10		33KV METERING UNIT 800/5A B/B ACCU 0.2S 15VA CT	EA	5				
11	LOT - II	11KV METERING UNIT 5/5A B/B ACCU 0.5S	EA	220				
12		11KV METERING UNIT 10/5A B/B ACCU 0.5S	EA	890				
13		11KV METERING UNIT 15/5A B/B ACCU 0.5S	EA	250				
14		METERING UNIT 11KV 3P4W 20/5 AMP 0.5S	EA	410				
15		CTPT UNIT O/D 11KV 3P4W 0.5 CLA 30/5A	EA	70				
16		METERING UNIT 11KV 3P4W 50/5 AMP 0.5S	EA	10				
17		CTPT UNIT O/D 11KV 3P4W 0.5 CLA 60/5A	EA	30				
18		METERING UNIT 11KV 3P4W 100/5 AMP 0.5S	EA	25				
19		METERING UNIT 11KV 3P4W 400-200 / 5 AMP 0.5S	EA	15				
20		CTPT UNIT O/D 11KV 3P4W 0.5 CLA 150/5A	EA	15				
21		METERING UNIT 11KV 3P4W 200/5 AMP 0.5S	EA	10				
22	LOT - III	METERING CUBICLE 33KV 5/5A 0.2S	EA	10				
23		METERING CUBICLE 33KV 10/5A 0.2S	EA	78				
24		METERING CUBICLE 33KV 15/5A 0.2S	EA	66				
25		METERING CUBICLE 33KV 20/5A 0.2S	EA	54				



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Sl. No.	Lot no.	Item Description	UoM	Qty.	Unit Price (Rs/unit)	GST (Rs/unit)	All-inclusive Unit Price (Rs/unit)	Total All-inclusive Amount (Rs.)
				A	B	C	D=B+C	E=DxA
26		METERING CUBICLE 33KV 25/5A 0.2S	EA	34				
27		METERING CUBICLE 33KV CTR 30/5A 0.2S	EA	38				
28	LOT - IV	METERING CUBICLE 11KV 5/5 A 0.2S 10VA CT	EA	70				
29		METERING CUBICLE 11KV 10/5 A 0.2S 10VA CT	EA	200				
30		METERING CUBICLE 11KV 15/5 A 0.2S 10VA CT	EA	100				
31		METERING CUBICLE 11KV 20/5A 0.2S 10VA CT	EA	80				
32		METERING CUBICLE 11KV CT RATIO 30/5 A 0.2S 10VA CT	EA	50				
33		METERING CUBICLE 11KV 50/5 A 0.2S 10VA CT	EA	10				
34		METERING CUBICLE 11KV 10/5 A 0.5s	EA	180				
35		METERING CUBICLE 11KV 15/5 A 0.5S	EA	120				
36		METERING CUBICLE 11KV 20/5A 0.5S	EA	66				
37		METERING CUBICLE 11KV CT RATIO 30/5 A 0.5S	EA	36				
38		METERING CUBICLE 11KV 50/5 A 0.5S	EA	12				
<b>ALL INCLUSIVE OVERALL BOQ AMOUNT (Rs.)</b>								

**NOTE:**

- Prices shall be firm till the validity of the contract.
- The bids will be evaluated commercially on the Lot-wise overall lowest cost basis.
- The unit price to be entered in in column "B" of above table is exclusive of GST.
- The prices mentioned above shall be on FOR basis for all the TPNODL, TPCODL & TPWODL locations.
- The total requirement mentioned above is for TPNODL, TPCODL & TPWODL.
- Issuance of Release Orders (RO) shall be done by respective discoms as per their requirement.
- The material shall be delivered as per the location captured in the release order.
- The bidders are advised to quote prices strictly in the above format. Failing to do so, bids are liable for rejection.
- The bidder must fill each and every column of the above format. **Mentioning "extra/inclusive" in any of the column may lead for rejection of the price bid.**
- No cutting/ overwriting in the prices is permissible.
- The quantity mentioned above are for evaluation purpose only and may vary as per actual site requirement.

**Signature & Seal of the Bidder**

**Response to Pre-Bid Queries**

(Revision – 1)

**NIT No.: TPCODL / CCG / 23-24 / 006**
**Tender Description: Rate Contract for Supply of 33KV & 11KV Metering Units  
& Metering Cubicles, At TPNODL, TPCODL & TPWODL.**
**18.07.2023**
**The pre-bid queries as received against the referred tender enquiry and CCG/CEQG (TP-Odisha) responses on the same are placed below:**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
1	Specification No. ENG-HV-2018	This specification is for loose CTs & PTs to be used for Metering Cubicle. Hence not applicable for Metering Cubicle given in schedule of items of tender. Please check & clarify.	OK
2	Specification No. ENG-HV-2031	This specification is for loose CTs & PTs to be used for Metering Cubicle. Hence not applicable for Metering Cubicle given in schedule of items of tender. Please check & clarify.	OK
3	Specification No. ENG-HV-2034	This specification is for loose CTs & PTs to be used for Metering Cubicle. Hence not applicable for Metering Cubicle given in schedule of items of tender. Please check & clarify.	OK
4	Specification No. ENG-HV-2019	There is different specifications for Metering Cubicle i.e. 0.5S class of accuracy & 0.2s class of accuracy, please clarify your exact requirement.	THIS IS ONLY FOR 0.5S
5	Specification No. ENG-HV-2032	There is different specifications for Metering Cubicle i.e. 0.5S class of accuracy & 0.2s class of accuracy, please clarify your exact requirement.	THIS IS ONLY FOR 0.2S
6	Specification No. ENG-HV-2035	There is different specifications for Metering Cubicle i.e. 0.5S class of accuracy & 0.2s class of accuracy, please clarify your exact requirement.	THIS IS ONLY FOR 0.2S
7	Specification No. ENG-HV-2033	There is different specifications for Metering Units i.e. 0.5S class of accuracy & 0.2s class of accuracy, please clarify your exact requirement.	THIS IS ONLY FOR 0.5S
8	Specification No. ENG-HV-2037	There is different specifications for Metering Units i.e. 0.5S class of accuracy & 0.2s class of accuracy, please clarify your exact requirement.	THIS IS ONLY FOR 0.2S
9	Specification No. ENG-EHV-1040	STC mentioned 6.4kA upto 20A, 13.1kA upto 100A and 18.4kA above 100A, Please review and clarify.	COMPLY AS PER SPECS.
10	Specification No. ENG-EHV-1040	STC mentioned 6.4kA for 3 sec., Please review and clarify.	STC SHALL BE 6.4KA FOR 1 SEC.
11	Specification No. ENG-EHV-1040	Rated votlage factor 1.2 times continuous & 1.5 time for 1 Min, which is not applicable for CT, Please review and clarify.	COMPLY AS PER SPECS.
12	Specification No. ENG-EHV-1040	Creepage mentoned as 900mm, whereas in the case of Metering Cubicle, it should be 320mm minimum Please review and clarify.	OK

**Response to Pre-Bid Queries**

(Revision – 1)

**NIT No.: TPCODL / CCG / 23-24 / 006**
**Tender Description: Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles, At TPNODL, TPCODL & TPWODL.**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
13	Specification No. ENG-EHV-1040	Creepage mentoned as 900mm, whereas in the case of Metering Cubicle, it should be 320mm minimum Please review and clarify.	OK
14	Type Tests as per TS	<p>We are manufacturing Oil Cooled CT PTs, Indoor Resin cast CT PTs, and Outdoor Cycloaliphetic CT PTs. We have supplied Lot of Oil cooled and Resin cast CT PTs to WESCO. We have manufactured and supplied very short quantity of Metering units and metering cubicles, but they are not type tested.</p> <p>Kindly confirm whether we can submit the Type Test reports post award of contract. Kindly confirm whether type tests will be required for individual items for all CT ratios given in tender.</p>	COMPLY AS PER SPECS.
15	Page no. 7 Clause 1.7 as	<p>How can a prospective bidder with Annual Average Turnover of only Rs. 2.00 Crore will complete the contractual obligation. We feel that the purpose of prequalification is to assess the technical and managerial competency and financial soundness of the interested prospective bidders. Capability of manufacturing should be the important criteria and also the quality of the products may get compromised if you allow every body to participate in such crucial tenders. You may get response for tenders from vendors who are not serous participants. Our basic intention is to encourage transparency and provide equal and fair participation to eligible bidders and also to increase the competitiveness of the bids.</p> <p>In view of the above we are, humbly, requesting to review the criteria of eligibility of minimum turnover for participating in tenders.</p>	Tender terms shall prevail.
16	Page no-75, Clause No 5	Please confirm whether it is galvanised panel OR Powder Coated Panel, because in 11KV Cubicle, panel is Powder Coated.	COMPLY AS PER SPECS.
17	Technical Specification of 11KV Metering Cubicles ENG-HV-2018 ; ENG-HV-2019 ; ENG-HV-2031 ; ENG-HV-2032 ;	Short time current defined 6.4KA for 3 sec for Current Transformer used for metering purpose is very high and is not feasible. The lower ratio of CTs cannot be manufactured with such high value of Short time current rating. We suggest you to lower the value to the min. or	6.4KA upto 20/5A for 1sec , 13.1KA upto 100/5A for 1Sec , 18.4KA above 100/5A for 1sec

**Response to Pre-Bid Queries  
(Revision – 1)**

**NIT No.: TPCODL / CCG / 23-24 / 006**

**Tender Description:**

**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
	ENG-HV-2034; ENG-HV-2035 Clause no. 4.1 serial no.10 Page no.	Otherwise 6KA /1 Sec for CT Ratio:- up to:-50/5A ; 13.1 KA /1 Sec for CT Ratio from 50/5A-100/5A; 18KA / 1 Sec for CT Ratio above 100/5A	
18	Technical Specification of 11KV Metering Units ENG-HV-2033 ENG-HV-2037 Clause no.4.1 (vi)	Short time current defined 18.4KA for 1 sec for Current Transformer used for metering purpose is very high and is not feasible. The lower ratio of CTs cannot be manufactured with such high value of Short time current rating. We suggest you to lower the value to the min. or Otherwise 6KA /1 Sec for CT Ratio:- upto:-30/5A ; 13.1 KA /1 Sec for CT Ratio 50/5A to 100/5A; 18KA / 1 Sec for CT Ratio above 100/5A	6.4KA up to 20/5A for 1sec 13.1KA up to 100/5A for 1Sec 18.4KA above 100/5A for 1sec
19	ENG-HV-2018 ; ENG-HV-2019 ; ENG-HV-2031 ; ENG-HV-2032 ; ENG-HV-2034; ENG-HV-2035 Clause no. 4.1 serial no.4 Clause no.4.2 serial no.5  ENG-HV-2033 ENG-HV-2037 Clause no.4.1 at serial no. viii	The CT / PT Burden should be kept as low as possible in the wake of recent developments of high precision digital meters / relays at the user end . Such Digital equipment impose a very low burden less than 2VA , and including to and fro lead drops the imposed burden will not exceed 5VA . Higher value of burden was used in earlier days when the meters were analog and bulky. Thus for higher precision accuracy suggested CT Burden:- 5VA and PT Burden:- 10VA . With rated burden: 50VA at the actual imposed burden, the errors within high accuracy class are not guaranteed and hence the purpose of using such high precision accuracy will be failed. In view of the above, recently our customer(s) BSES Yamuna Power Ltd have reduced the CT Burden to 2.5VA.	COMPLY AS PER SPECS.
20	ENG-HV-2033 ENG-HV-2037 Clause no.5.6 at serial no. (e)	6mm dia bolts should be used, with sealing arrangement. 10mm bolts will be very big in size for secondary terminal box and not feasible.	COMPLY AS PER SPECS.
21	ENG-HV-2033 ENG-HV-2037 Clause no.5.4 at serial no. (b)	Internally, inside the oil- filled tank , necessary insulation is provided between phases as per manufacturer's design. Externally, the porcelain bushings act as phase barriers . Kindly clarify.	PHASE BARRIER TO BE PROVIDED INTERNALLY.
22	ENG-EHV-1040 ; ENG-EHV-1041 Clause no. 4 serial no. 12	Short time current defined 6.4KA for 3 sec for Current Transformer used for metering purpose is very high and is not feasible. The lower ratio of CTs cannot be manufactured with such high value of Short time current rating. We suggest you to lower the value to the min. or	6.4KA upto 20/5A for 1sec , 13.1KA upto 100/5A for 1Sec , 18.4KA above 100/5A for 1sec

**Response to Pre-Bid Queries  
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**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
		otherwise 6KA / 1 Sec for CT Ratio:- upto:-30/5A ; 13.1 KA / 1 Sec for CT Ratio 50/5A to 100/5A; 18KA / 1 Sec for CT Ratio above 100/5A	
23	ENG-EHV-1038 ENG-EHV-1039 ENG-EHV-1042 ENG-EHV-1043 Clause no. 4.1 at serial no. vi)	Short time current defined 25KA for 1 sec for 33KV Current Transformer used for metering purpose is very high and is not feasible. The lower ratio of CTs cannot be manufactured with such high value of Short time current rating. We suggest you to lower the value to the min. or otherwise 6KA / 1 Sec for CT Ratio:- upto:-50/5A ; 13.1 KA / 1 Sec for CT Ratio From 50/5A-100/5A; 18KA / 1 Sec for CT Ratio above 100/5A	6.4KA upto 20/5A for 1sec , 13.1KA upto 100/5A for 1Sec , 18.4KA above 100/5A for 1sec
24	Technical specification of 33KV CT-PT Metering Units ENG-EHV-1038 ENG-EHV-1039 ENG-EHV-1042 ENG-EHV-1043 Clause no. 4.1 at serial no. vii)	The CT / PT Burden should be kept as low as possible in the wake of recent developments of high precision digital meters / relays at the user end . Such Digital equipment impose a very low burden less than 2VA , and including to and fro lead drops the imposed burden will not exceed 5VA . Higher value of burden was used in earlier days when the meters were analog and bulky. Thus for higher precision accuracy suggested CT Burden:- 5VA and PT Burden:- 10VA . With rated burden:50VA at the actual imposed burden, the errors within high accuracy class are not guaranteed and hence the purpose of using such high precision accuracy will be fructuous and not useful. In view of the above recently, our customer(s) BSES Yamuna Power Ltd have reduced the CT Burden to 2.5VA.	COMPLY AS PER SPECS.
25	ENG-EHV-1038 Clause no. 5.6 at serial no. e)	6mm dia bolts should be used, with sealing arrangement. 10mm bolts will be very big in size for secondary terminal box and not feasible.	COMPLY AS PER SPECS.
26	ENG-EHV-1038 Clause no. 5.6 at serial no. e)	Internally , inside the oil- filled tank , necessary insulation is provided between phases as per manufacturer’s design. Externally , the porcelain bushings act as phase barriers . Kindly clarify.	PHASE BARRIER TO BE PROVIDED INTERNALLY.
27	ENG-EHV-1040 Clause no. 5. General Construction	Please clarify the requirements mentioned. Galvanised MS Sheet cannot be put to seven tank dipping procedure , and thereafter galvanized again. Either we can use seven tank phosphating procedure or we can use galvanised sheet.	USE SEVEN TANK PHOSPHATING PROCEDURE
28	Technical Specifications	There are several specifications attached in tender document. Request you to please review and confirm the specific TS nos. which are applicable to this tender “Schedule of Items”.	FOR DIFFERENT CTR , BURDERN & ACCURACY ,TS SHALL BE DIFFERENT.



**Response to Pre-Bid Queries  
(Revision – 1)**

**NIT No.: TPCODL / CCG / 23-24 / 006**

**Tender Description:**

**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
29	Tender clause 1.4.4 type test	We have recently developed design for combined CTPT unit and metering cubicles and hence our product is yet to be type tested. We assure you that if we are awarded any %quantity from tender we will do a fresh type test for combined CTPT unit and metering cubicle and same shall be submitted to TPCODL before inspection. Please confirm if that is allowed.	TYPE TEST REPORT SHALL BE SUBMITTED BEFORE GTP & DRAWING APPROVAL..UNDERTAKING SHALL BE SUBMITTED IN THIS REGARD.
30	7.1 Special Conditions of Contract	Delivery will be 120 days from date of receipt of release order/CAT-A issuance, whichever is later	Tender terms shall prevail.
31	Inspection & Testing of MUs:-	20 nos. sample selection becomes too high at the time of inspection because testing is too much in this, secondly we submit our internal Routine test reports at the time of inspection. We request kindly allow us to 10% of the offered quantity.	AS PER TS.
32	Acceptance and Routine Tests:-	We will conduct Temperature rise test in one piece of higher ratio against entire RC. Kindly confirm	OK.
33	Acceptance and Routine Tests:-	This test not possible at the time of final inspection because the CT-PT unit hermetically sealed. We will conduct at the time of Stage inspection. Kindly confirm.	OK.
34	GENERAL PARTICULAR REQUIREMENT: (point no. vi)	As per our previous supply the STC rating of 33kV MU i.e. 10/5A- 6.4kA for 1 sec. 15/5A- 6.4kA for 1 sec. 20/5A- 6.4kA for 1 sec. 30/5A- 13.1kA for 1 sec. 60/5A- 13.1kA for 1 sec. 100/5A- 13.1kA for 1 sec. 200/5A- 18.4kA for 1 sec. 800/5A- 25kA for 1 sec. Kindly confirm.	COMPLY AS PER SPECS.
35	GENERAL PARTICULAR REQUIREMENT: (point no. vi)	As per our previous supply the STC rating of 11kV MU i.e. 5/5A- 6.4kA for 1 sec. 10/5A- 6.4kA for 1 sec. 15/5A- 6.4kA for 1 sec. Kindly confirm.	OK
36	7.1 ROUTINE, ACCEPTANCE AND TYPE TESTS:	We use oil and paper for insulation, not resin. Kindly confirm.	COMPLY AS PER SPECS.
37	7.1 Special Conditions of Contract	Please accept BG on Pro-rata basis as per each RO/PO. Many times RC value does not get consumed, wasting our BG limit. Already being an MSME we have very limited BG limits. Alternatively the Discoms may link our already submitted BGs against various RCs to this Tender.	Tender terms shall prevail.
38	Short Time Current Test	Some places STC rating mentioned 25KA for 1 second and some places 6.4KA up to 20/5A for 1sec, 13.1KA up to 100/5A for sec & 18.4KA above 100/5A for 1 sec.	6.4KA up to 20/5A for 1sec 13.1KA up to 100/5A for 1Sec



**Response to Pre-Bid Queries  
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**Tender Description:**

**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
		As per our experience and requirement of various SEB/PSU it should be : 10/5 A & 15/5 A: 3 kA/ 0.5 sec. 20/5 A to 40/5 A: 7.88 kA/ 0.5 sec. 50/5 A to 100/5A: 13.1 kA/ 1 sec. Above 100/5A: 18.4 kA/ 1 sec. We are executing TPNODL order for CT-PT Unit with above data. Kindly check and confirm.	18.4KA above 100/5A for 1sec
39	Weight of oil	In 33kV CT-PT Unit minimum volume of oil is mentioned 120 Ltr. It should be left on manufacturers design. We are executing TPNODL order for CT-PT Unit with minimum 70 Ltr. in 33kV & 45 in 11kV.	COMPLY AS PER SPECS
40	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause 4.1 GTP - point xvii	Oil volume as mentioned in our GA drawing must be acceptable. Note that CTPT metering units are type tested in CPRI and the offered items are as per type tested designs. Amount of oil filled inside the tank in turn is governed by the size / dimension of the tank. <u>Through the various type tests conducted in CPRI, the oil quantity mentioned in GA drawing is proven to be sufficient, meeting the purpose of coolant as well as an insulating medium.</u> Increasing oil quantity to minimum 120 litres as per your requirement is possible only by increasing the tank dimensions over and above our type tested tank dimensions. Further, approx. oil quantity in our tanks is 90litres. <u>By some nominal increase in the tank size, we can make it 100litres.</u> However, <u>increasing oil quantity to 120litre calls for excessively increasing the tank size, making it very bulky.</u> The weight of 33kV CTPT units vary from 260 to 290kg, but in order to create space for 120litres oil, the increase in size will increase weight to around 350kg, and transportation and handling will be further difficult Hence, we request to kindly review this point and please consider minimum oil quantity as 100litres instead of 120litres.  We request your precise reply, whether - a. to keep oil quantity as per our standard type tested tank size or	COMPLY AS PER SPECS

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**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**


S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
		b. do we need to excessively increase the tank size over and above the type tested tank size, so as to meet the minimum 120 litres oil quantity as called in your TS. or c. Minimum oil volume 100litres is acceptable to you, for which nominal increase in tank dimensions will work out.	
41	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause 4.2	Kindly confirm acceptance of CTPT MU suitable to 3 phase, 4 wire system, with 3 no. CTs for R,Y,B phase, and one 3 phase PT, with primary star point (HT star point) fully insulated and left floated inside the tank and secondary star point accessible to the user, brought out to the secondary terminal box.	OK
42	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause 5.1.6	Such nuts & bolts shall be hot-dip galvanized MS hardware, suitable to outdoor exposure. Since the tank finish called in the T.S. is hot dip galvanized, hence hot dip galvanized hardware for tank bolting must be acceptable.	COMPLY AS PER SPECS.
43	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause 5.1.3	<p>Note that the tank cover shape is sloped at the two extreme sides and flat in the centre. In this type of tank cover, a separate flange is needed to be welded on all four sides and we cannot make the tank cover and flange out of the same single sheet.</p> <p>For best mechanical strength and achieving evenly flat surface for uniform pressing of gasket underneath, these flanges are made of flats available in standards widths of 35 to 40mm. Additional edge bending is not possible with flat of 35 to 40mm.</p> <p>On the other hand, flanges made of a separate wider MS sheet to achieve the bending at edges will fail the intended hermetic sealing as it does not have adequate mechanical strength and secondly it will not provide perfectly even/ flat surface to press the underneath gasket and hence hermetic sealing of the MU tank will not be achieved.</p>	COMPLY AS PER SPECS.

## Response to Pre-Bid Queries (Revision – 1)

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**Tender Description:**

**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
		Since hermetic sealing is extremely vital and cannot be compromised, requirement of bent edges must be eliminated.	
44	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause 5.1.7, 5.7(d)	Kindly clarify the required arrangement pictorially or through suitable diagram	SUITABLE ARRANGEMENT FOR OPENING THE INNER TRANSPARENT POLYCARBONATE PLATE WITH INNER STUD WITH SEALING HOLE AND OUTER COVER WITH 4NOS. SEALING ARRANGEMENT . <b>DIAGRAM ATTACHED FOR REFERENCE.</b> 
45	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause 5.6 (e)	Secondary terminal Box bolt size M6 is adequate. Considering size of box, M10 bolt and associated hardware will be too big in size to be accommodated. Hence, for secondary terminal box cover bolting, M6 bolts may please be accepted.	COMPLY AS PER SPECS
46	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause 7.1	Kindly clarify the HV test 5 minute is to be done at what voltage level. Not that as per IS standards, HV power frequency dry voltage withstand test is to be alone for 1 minute.	HV TEST TO BE DONE FOR 1 MIN & TEST VOLTAGE SHALL BE AS PER IS FOR DIFFERENT PT.
47	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038	Kindly clarify the air pressure level for pressure test to be conducted on CTPT MU tank during final material inspection	PRESSURE LEVEL SHALL BE 10ps

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S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
	Clause (8)		
48	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause 4 GTP (vi)	<p>For low ratio CTs, STC 25KA/1s is very high and technically the designs are not feasible / or become impracticable / very bulky as we move towards lower CT ratios. For achieving 0.2S class, CT ampere turns are also kept on higher side, ie. higher no. of primary turns are to be used, and with higher STC, copper winding cross section increases, and meeting both parameters, ie. high STC and 0.2S class at low CT ratios becomes an impracticable design.</p> <p>Further, considering practical situation, CTPT Metering Units of low CT ratios, ie 5/5A to 20/5A are always used at consumer end. This is the last point in the supply system and is farthest from the supply start point. Hence, at consumer end, the circuit impedance is highest, and therefore the short circuit fault current is lowest. Hence lower STC ratings are technically appropriate for low CT ratios.</p> <p>We therefore recommend the following STC rating:</p> <p>10/5A, 0.2S, 3 kA/1s                      15/5A, 0.2S, 6.4 kA/1s                      20/5A, 0.2S, 6.4 KA/1s                      30/5A, 0.2S, 13.1 kA/1s                      50/5A, 0.2S, 13.1 kA/1s                      100/5A, 0.2S, 25 kA/1s                      200/5A, 0.2S, 25 kA/1s                      800/5A, 0.2S, 25 kA/1s</p>	<p>10/5A, 0.2S, 6.4 kA/1s                      15/5A, 0.2S, 6.4 kA/1s                      20/5A, 0.2S, 6.4 KA/1s                      30/5A, 0.2S, 13.1 kA/1s                      50/5A, 0.2S, 13.1 kA/1s                      100/5A, 0.2S, 25 kA/1s                      200/5A, 0.2S, 25 kA/1s                      800/5A, 0.2S, 25 kA/1s</p>

**Response to Pre-Bid Queries  
(Revision – 1)**

**18.07.2023**

**NIT No.: TPCODL / CCG / 23-24 / 006**

**Tender Description:**

**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
49	Technical specifications for 33kV CTPT MU ENG-EHV-1042 / ENG-EHV-1038 Clause (4)(4.1)(viii)	<p>CT RATED BURDEN-  <u>Kindly confirm CT rated burden is 10VA or 15VA.</u>                      Considering modern digital meters that offer less than 1VA burden, <u>10VA is more than adequate.</u> Hence we request to <u>confirm 10VA burden.</u></p> <p>PT RATED BURDEN-                      Note that 50VA rated burden is excessively high and is technically not recommended/not appropriate for the following reasons:-                      a. Class 0.2 is a high precision accuracy class and the associated digital meters at utility end are also of equivalent precision accuracy class.                      Such digital meters impose a very low burden of less than 1VA, Therefore 50VA rated burden called in your Technical specifications is 50 times the actual burden imposed by digital meters.</p> <p>b. Accuracy of a metering class is guaranteed from 25% to 100% of rated burden. Hence, at 10VA rated burden, ratio &amp; phase errors within 0.2 class shall be guaranteed within a range of 2.5VA to 10VA, which suits the actual service condition requirements.</p> <p>On the other hand, with PT designed at 50VA rated burdens, the errors under actual service condition burden within 5VA will be inferior and will fall under 0.5 or 1.0 class, instead of desired 0.2 class (since actual burden is not more than 5VA)</p> <p>Hence, burden imposed by digital meters relays must be thoroughly reviewed and appropriate rated burden must be finalized.</p> <p><u>We request to kindly consider rated PT burden between 10 to 20VA as per service requirements, so that desired accuracy is functionally achieved under actual service</u></p>	COMPLY AS PER SPECS.

**Response to Pre-Bid Queries  
(Revision – 1)**

**NIT No.: TPCODL / CCG / 23-24 / 006**

**Tender Description:**

**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**


S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
50	Technical specifications for 11kV CTPT MU ENG-HV-2032 Clause 4.2	Kindly confirm acceptance of CTPT MU suitable to 3 phase, 4 wire system, with 3 no. CTs for R,Y,B phase, and one 3 phase PT, with primary star point (HT star point) fully insulated and left floated inside the tank and secondary star point accessible to the user, brought out to the secondary terminal box.	OK.
51	Technical specifications for 11kV CTPT MU ENG-HV-2032 Clause 5.1.6	Such nuts & bolts shall be hot-dip galvanized MS hardware, suitable to outdoor exposure. Since the tank finish called in the T.S. is hot dip galvanized, hence hot dip galvanized hardware for tank bolting must be acceptable.	COMPLY AS PER SPECS.
52	Technical specifications for 11kV CTPT MU ENG-HV-2032 Clause 5.1.3	<p>Note that the tank cover shape is sloped at the two extreme sides and flat in the centre. In this type of tank cover, a separate flange is needed to be welded on all four sides and we cannot make the tank cover and flange out of the same single sheet.</p> <p>For best mechanical strength and achieving evenly flat surface for uniform pressing of gasket underneath, these flanges are made of flats available in standards widths of 35 to 40mm. Additional edge bending is not possible with flat of 35 to 40mm.</p> <p>On the other hand, flanges made of a separate wider MS sheet to achieve the bending at edges will fail the intended hermetic sealing as it does not have adequate mechanical strength and secondly it will not provide perfectly even/ flat surface to press the underneath gasket and hence hermetic sealing of the MU tank will not be achieved.</p> <p>Since hermetic sealing is extremely vital and cannot be compromised, requirement of bent edges must be eliminated.</p>	COMPLY AS PER SPECS.
53	Technical specifications for 11kV CTPT MU ENG-HV-2032 Clause 5.1.7, 5.7(d)	Kindly clarify the required arrangement pictorially or through suitable diagram	SUITABLE ARRANGEMENT FOR OPENING THE INNER TRANSPARENT POLYCARBONATE PLATE WITH INNER STUD WITH SEALING HOLE AND OUTER COVER WITH 4NOS. SEALING

**Response to Pre-Bid Queries  
(Revision – 1)**

**NIT No.: TPCODL / CCG / 23-24 / 006**

**Tender Description:**

**Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
			ARRANGEMENT . DIAGRAM ATTACHED FOR REFERENCE. 
54	Technical specifications for 11kV CTPT MU ENG-HV-2032 Clause 5.6 (e)	Secondary terminal Box bolt size M6 is adequate. Considering size of box, M10 bolt and associated hardware will be too big in size to be accomodated. Hence, for secondary terminal box cover bolting, M6 bolts may please be accepted.	COMPLY AS PER SPECS.
55	Technical specifications for 11kV CTPT MU ENG-HV-2032 Clause 7.1	Kindly clarify the HV test 5 minute is to be done at what voltage level. Not that as per IS standareds, HV power frequency dry voltage withstand test is to be alone for 1 minute.	HV TEST TO BE DONE FOR 1 MIN & TEST VOLTAGE SHALL BE AS PER IS .
56	Technical specifications for 11kV CTPT MU ENG-HV-2033 Clause (8)	Kindly clarify the air pressure level for pressure test to be conducted on CTPT MU tank during final material inspection	PRESSURE LEVEL SHALL Be 10ps.
57	Technical specifications for 11kV CTPT MU ENG-HV-2033 Clause 4 GTP (vi)	For low ratio CTs, STC 18.4KA/1s is very high and technically the designs are not feasible / become impractiable / very bulky, as we move towards lower CT ratios. For achieving 0.5S class, CT ampere turns are also kept on higher side, ie. <u>higher no. of primary turns</u> are to be used, and with <u>higher STC, copper winding cross section increases</u> , and meeting both parameters, ie. <u>high STC and 0.5S class at low CT ratios becomes an impracticable design.</u>  Further, considering practical situation, <u>CTPT Metering Units of low CT ratios, ie 5/5A to</u>	5/5A, 0.5S 3 kA/1s 10/5A, 0.5S, 6.4 kA/1s 15/5A, 0.5S 6.4 kA/1s 20/5A, 0.5S 6.4 kA/1s 50/5A, 0.5S 13.1 kA/1s 100/5A, 0.5S 18.4 kA/1s 200/5A, 0.5S 18.4 kA/1s



**Response to Pre-Bid Queries  
 (Revision – 1)  
 NIT No.: TPCODL / CCG / 23-24 / 006**

**Tender Description:  
 Rate Contract for Supply of 33KV & 11KV Metering Units & Metering Cubicles,**

S. No.	Tender Reference	Pre-Bid Query raised by Bidder	CCG/CEQG (TP-Odisha) response
		<p><u>20/5A are always used at consumer end. This is the last point in the supply system and is farthest from the supply start point. Hence, at consumer end, the circuit impedance is highest, and therefore the short circuit fault current is lowest.</u> Hence lower STC ratings are technically appropriate for low CT ratios.</p> <p>We therefore recommend the following STC rating:</p> <p>5/5A, 0.5S 3 kA/1s                      10/5A, 0.5S, 3 kA/1s                      15/5A, 0.5S 6.4 kA/1s                      20/5A, 0.5S 6.4 kA/1s                      50/5A, 0.5S 13.1 kA/1s                      100/5A, 0.5S 18.4 kA/1s                      200/5A, 0.5S 18.4 kA/1s</p>	
58	Technical specifications for 11kV CTPT MU <b>ENG-HV-2033</b> Clause 4 GTP	Kindly clarify that all the 11kV CTPT Metering units under Lot II (Estimated Quantity), from 5/5A to 200/5A are required with CT accuracy 0.5S and PT accuracy 0.5.	COMPLY AS PER SPECS.

**Note:**

***This document shall be an integral part of the tender and bidder shall submit signed/stamped copy of this document along with technical bid, as a token of acceptance. The tender document stands modified to the extent stipulated herein above in this document. All other terms & conditions shall be strictly followed as per Bid documents.***

***The responses to pre-bid queries issued on 13.07.2023, may please be ignored.***

***All other terms of Original Tender, remains unaltered.***