S. no.	Tender Clause	Query / Clarification required	
01 1101		Please confirm whether we have take printout of	
		Annexure-I	
1	Annexure	Annexure-II	
		Annexure-III	
		Annexure-IV	
2	Page No.11, Clause No. 7.3, Delivery Timelines mentions that Supply, Installation, Testing and Commissioning of Test Benches shall be completed within 60 days at TPCODL – Odisha, from the placement of contract.	As these are specialised, customised and Hi- Precision equipment, manufactured in Europe, and also in view of the present Covid conditions, we request that the delivery time be amended to 120 days in place of 60 days.	
3	2.Page 85,Clause 5.5, Technical Specifications of Single Phase meter Test bench (specification of multi secondary voltage transformer/ict) states that "Test bench shall include MSVT to facilitate testing of link-less single-phase meters. MSVT shall be installed in the voltage circuit of the test bench with minimum 22 secondary windings and one primary winding, other specifications being Ratio Error (worst case) : 0.05%, Maximum Sec. Voltage: 300 V AC .ICT is required for test of MAIN & NEUTRAL Element test together. For 20 position test bench 4 Numbers of ICT would be required and delivered. ICT with Ratio (1:1) & Ratio Error: 0.02% or better, Phase Error: 0.8 Min. or better for current range: 100mA 120A., Output VA: 60VA/Phase (with single turn)	In order to test main and neutral Element test together, without changing physical connections and also be possible to test meters like Real time installation (Phase and Neutral elements, together), it is not possible with devices as mentioned in the tender specifications (mentioned above.). There seems to be some typographical errors. Following are the two ways to conduct above test. A. The best way technically is by using 20 Nos. of 2-Phase ICT, one phase of ICT used for phase circuit and other phase of ICT used for neutral circuit. In this case automatic changeover is possible with best and absolute accuracy. B. Other way is to use only MSVT (for 20 meters) and 20 Nos. Single Phase ICTs. In place of 20 Single Phase ICTs, 07 Three phase ICT can also be used but wiring will be easier with single phase ICTs. Benefits of B over A: i. Voltage Transformers (MSVT) do not have any absolute accuracy (Pri: Sec). It only has relative accuracy (Sec: Sec) as they are not electronically compensated, and phase error (Primary: Secondary), will vary with the impedance of the "Meter under test". This is used by some meter manufacturers, for a little lower cost, where the same type of meter is used in one lot. It is assumed that all meters being tested in one lot have the same impedance, which may not be true for a utility. ii. Voltage Transformer (MSVT) specifications, like any other voltage transformer is generally 240V +/- 15%. So accuracy is not guaranteed, when testing is to be done at lower and higher voltages.	
4	 3. Page 83, Clause No.5.1(8) for Single Phase Test Bench and Page 103 (Clasue No.5.1 (8) mentions that "OEM must be manufacturer of following components of Standard Testing Material a. Reference standard meter b. Power source c. Error evaluation & display system d. ICT's e. Scanning head f. Aluminum test rack 	We are manufacturing the Aluminium Test Rack in India as per mutual agreement with OEM, Applied Precision Limited. This is as per their drawings and specifications. We request you to allow supply of Aluminium Test Rack (item 'f') from India, as this part is only the mechanical structure, not affecting the accuracy or stability of Test bench in any way, and manufacture in India can save a lot on cost.	
5	NIT Clause no. 7.3 Delivery timelines Supply, Installation, Testing and Commissioning of Test Benches shall be completed within 60 days at TPCODL – Odisha, from the placement of contract.	Supply, Installation, Testing and Commissioning of Test Benches shall be completed within 180 days at TPCODL – Odisha, from the placement of contract.	The com time clea aske

Bidder Suggestion	TPCODL Reply
-	Filled, signed and stamped copy to be submitted as part of Price Bid Signed and stamped copy to be submitted as part of
-	Technical Bid
-	Filled, signed and stamped copy to be submitted as part of Technical Bid
-	Filled, signed and stamped copy to be submitted as part of Technical Bid
	We require only one specialised manufacturer not mix of all manufacturers.
-	Delivery Timelines: Supply, Installation, Testing and Commissioning of Test Benches shall be completed within 180 days at TPCODL – Odisha, from the placement of contract.
e suggest 'A' above should be incorporated in the acifications. Is means that 20 nos. Two Phase ICT should be applied. In case 20 Nos. three phases ICT is applied, 02 phases of each shall be used. MSVT is to be used.	We require as per specification with 07 Three Phase ICT
-	We require only one specilised maufacturer not mix of all manufacturer.
e asked Test benches are high precision and its nponents are imported which requires additional e for manufacturing, transportation, customer arance etc. in view of the same delivery shall be ted 180 days from the date of contract.	Delivery Timelines: Supply, Installation, Testing and Commissioning of Test Benches shall be completed within 180 days at TPCODL – Odisha, from the placement of contract.

	T I A I			
S. no.	Tender Clause	Query / Clarification required	Bidder Suggestion	TPCODL Reply
6	fication of fully Automatic Twenty position Meter Test be Clause no. 5.3 point no 8 Current Amplifier VA rating not less than 600VA	ench for Single Phase Meters VA rating not less than 1200VA	It may be noted that the asked VA rating for testing of 20 single phase meters are not sufficient hence with the asked VA rating the test bench will not be able to work with its full loading.	Accorted
7		y Display – The reference meter shall have following display parameters (All the parameters I also required in actual graphical mode with waveform with THD% value on associate PC software)	laskad haramatar in actilial drannical mode is	Accepted
	Clause no. 5.5 Specification of Multi secondary Voltage transformer/ICT	It shall be clarified that If 4 nos. of ICT required with test bench which will be sufficient to test 6 nos. of Single	It may be noted that the asked Nos. of ICT are not sufficient to test 20 nos. of Single phase meters with main and neutral element testing together. It shall be	As per technical specification
	ICT is required for test of MAIN & NEUTRAL Element test together. For 20 position test bench 4 Numbers of ICT would be required and delivered.	phase meters with neutral and phase element together but In case of testing of 20 Single phase meters with main and neutral element together 14 Numbers of ICT would be required, accordingly the VA rating of current amplifier also shall be increase to at leas 2800VA	supplied. In view of the same the VA rating of	
	Clause no.7.1			
9	& Clause no. 8.0 Type test	For such system calibration certificate of ERSS shall be asked.	Calibration certificate asked in lieu of type test.	As per technical specification
	Bidder must submit type test certificate of similar model fully automatic test system as per IS12346			
10	Clause no. 8.0 For Communication testing any approved laboratory or international acclaimed lab or equivalent will also suffice at the discretion of TPODCL	It is asked for communication test from national /international accredited laboratory but no whereas it is asked for communication testing in the test bench specification. Details of tests to be conducted on meter communication shall be mentioned in the specification.	We understand that communication testing from approved laboratory asked in view of Testing of smart communicable meters with test bench. Please clarify that testing of smart meters and its communication is required in this test bench or not. If it is required the specification then the test details shall be elaborated. We are attaching herewith specification from other utilities where-in they have asked facility and test for the smart meters testing as per Is15959 and IS16444.	As per technical specification
11	Clause no. 11.0 Guarantee:for a period of at least 60 months Bidder shall further be responsible for free replacement at Site for another period of three years from the end of guarantee period for any "latent defects" if noticed and	There requirement is not clear, is that asked for another warranty for three years.	Already guarantee asked for 60/66 months, requirement for further free replacement for "latent defects" are not clear. It shall be clarified.	
	reported by purchaser.			

S. no.	Tender Clause	Query / Clarification required	Bidder Suggestion	TPCODL Reply
For Spec. 12	<u>ification of fully Automatic Twenty position Meter Test ber</u> Clause no. 1.0 scope DC and even harmonics kit	Asked DC and even harmonics kit but its details are not mentioned anywhere in the specification. Please clarify is it required for supply DC and even harmonics kit or not. If it is required to supply, It shall be mentioned diode based kit as per the requirement of IS13779/IEC62053-21. Any other design will not suffice the purpose of testing as per standard.	The specification shall be asked for DC and even harmonics kit with the diode based design as specified in the standard IS13779 and IEC62053-21	As per technical specification
13	Clause no. 5.2 Specification of Voltage amplifiers Point no. 9 800VA/phase@50Hz RMS (Should be able to handle load of meter of 7W /meters simultaneously 20 meters without heating.	We understand that the asked VA rating in view of testing of smart meters but nowhere it is asked for the testing of smart meters as per IS16444 and IS15959.	The asked VA rating is at higher side. For all type of meters as per asked standard IS13779 / IS14697 then it is sufficient 400VA/phase. Vide specification it has been asked for 7W/meter which is requirement of testing of smart meters as per IS16444/IS15959 when it is communicating on communication medium. This feature is required for testing of smart meters. Please clarify if testing smart meter with communication is required. Since it is asked vide GTP clause no. 19.1 point 2.1 but detailed requirement of test of communication is not available. The offered test bench can be integrated with corresponding Gateway/NIC card etc. for automatic testing of smart meters for metrology as well as communication on optical and RF ports. If it is required the specification then the test details shall be elaborated. We are attaching herewith specification from other utilities where-in they have asked facility and test for the smart meters testing as per Is15959 and IS16444.	As per technical specification
14		Asked VA rating for 20 nos. of energy meters are not sufficient it may be noted that asked 50 VA for ICT itself whereas other VA drop at termination , connection to meters, cables shall be added hence for 20 pos. minimum 2800VA/phase is required.	Itostina at maters with thill conocity with it. Is nonce it	Notod
15	Display – The reference meter shall have following display	iaiso raduirad in actual drannical mode with wavatorm with THUM, value on associate PL		Noted
16	Clause no. 5.7	Shall be added ICT shall be having primary and secondary permanently wounded on core with multiple turns for better flux linkage and long term working of ICT with its full capacity.	It may be noted that ICTs available with loose primary and secondary type with one turn are not viable for long term working since due to core properties the flux linkage will reduce with the age of the equipment and not sufficient to pump the desired current on loading of meters.	Noted

	REPLIES TO PRE-BID QUERIES (SITC OF METER TEST BENCH - Tender no. TPCODL/P&3/29/2020-21)				
S. no.	Tender Clause	Query / Clarification required	Bidder Suggestion	TPCODL Reply	
17	Clause no. 5.9 Point no. 8 Accuracy test for Three phase Meter for phase & Neutral channel for same magnitude of current. Accuracy test for Three phase Meter in case of reverse power for phase & Neutral channel for same magnitude of current.	The requirement is not clear since in three phase meters Accuracy for neutral Element is not applicable. Please clarify if the functionality required for single phase meters testing in three phase test bench.	The requirement shall be clarified.	Accuracy for neutral Element is not applicable.	
18	Clause no.7.1 & Clause no. 8.0 Type test Bidder must submit type test certificate of similar model fully automatic test system as per IS12346	For such system calibration certificate of ERSS shall be asked.	Calibration certificate asked in lieu of type test.	As per technical specification	
19	Clause no. 8.0 For Communication testing any approved laboratory or international acclaimed lab or equivalent will also suffice at the discretion of TPODCL	It is asked for communication test from national /international accredited laboratory but no whereas it is asked for communication testing in the test bench specification.	We understand that communication testing from approved laboratory asked in view of Testing of smart communicable meters with test bench. Please clarify that testing of smart meters and its communication is required in this test bench or not. If it is required the specification then the test details shall be elaborated. We are attaching herewith specification from other utilities where-in they have asked facility and test for the smart meters testing as per Is15959 and IS16444.	As per technical specification	
20	Clause no. 11.0 Guarantee:for a period of at least 60 months Bidder shall further be responsible for free replacement at Site for another period of three years from the end of guarantee period for any "latent defects" if noticed and reported by purchaser.	There requirement is not clear, is that asked for another warranty for three years.	Already guarantee asked for 60/66 months, requirement for further free replacement for "latent defects" are not clear. It shall be clarified.		
21	7.1. Special Conditions of Contract Performance Bank Guarantee	PBG applicable shall be 10% of Order Value. PBG submitted, shall be released after completion of applicable guarantee period plus one month.	As per GCC, PBG for Rate Contract shall be 5% of the order value. Kindly confirm.	PBG applicable shall be 5% of Rate Contract Value PBG submitted, shall be released after completion of applicable guarantee period plus one month.	