

Format for Pre-Bid Queries

Tender Reference No	TPCODL/P&S/100000302/2022-23
Tender Name	11 KV Auto Recloser
Bidder :	

Note : Pre-Bid clarification

Sr. No.	Detailed Reference to TPCODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPCODL Response dtd. 20.10.2022
1	2	3	4	5
1	ENG-LV-040 (Page 5 of 16) – Sr. No. 43	Creepage distance- Min. 700mm phase to earth	For outdoor equipment minimum creepage is 31mm/kV. You have also specified same at your technical specification page no. 4 of 29 (Point no. 18). Request to consider minimum creepage distance 372mm	Minimum creepage shall be 31mm/kV or better is acceptable
2	ENG-LV-040 (Page 7 of 16) – Sr. No. 46	GPRS 4G/RF Modem to be connected in one Ethernet port for SCADA communication. Preferred modem make Robustel (Dynalog) Modem R2000L ABB Modem-ARG600 (4G) The Modem should operate on 4G and its fallback only on 2G. IPsec-VPN for Dynalog Modem and L2TP, open VPN for ABB Modem.	Request to consider Teltonika RUT950 / Numus make modem which is already approved in Tata Power	Acceptable , subjected to bidder shall do pilot demonstration before issuance of RC (1 months at three sites) with with Teltonika RUT950 modem or Lantronix make modem (Free of Cost basis) to check compatibility with SOPHOS/ABB m2m as well as the performance. Modems should comply TPCODL 4G Modems specifications. Else bidder shall provide Modem as specified in tender specifications.
3	ENG-HV-2013 (Page 9 of 16) – Sr. No. vi) Remote On-OFF operation of recloser b) On Front panel-RS232 Port/RJ485/Ethernet c) Remote RJ485 port-The RJ 485 must have the capability for multi-drop connectivity. d) Radio RS232 Port. The port must include RTS/CTS handshaking for direct connection to a radio & delayed message flow control. e) TCP/IP Ethernet Port- 2 nos. One must be engineering port	Request to consider USB port on front panel. TCP/IP Ethernet port – 1 no. for IEC - 60870-5-104 communication, 1 no engineering port/maintenance port – rear side USB port	Acceptable, subjected to USB cable shall be provided along with each AR and Software licenses shall be provided by OEM free of cost.
4	Clause No -7.1 (Page No- 13 of 143)	Release Orders shall be placed against the awarded Rate Contract by TPCODL as and when the requirements arise & Delivery within 30 Days from RO.	Request to give minimum 90-120 days delivery period from the date of drawing approval due to shortage of electronic components worldwide	Shall be discussed and finalised at the time of Order
5	Clause No -6.0 (Page No- 33 of 143)	TERMS OF PAYMENT	100% payment shall be released within 45 days from the date of submission of certified bills/invoices.	Pls adhere the tender terms of payment
6	ENG-LV-040 (Page 6 of 16) – Sr. No. 45	The controller shall have battery having capacity of minimum 20 complete operations and 100Hrs of backup which shall be charged by a temperature compensated charging circuit, allowing the battery to charge at an optimal rate to extend battery life	The controller shall have battery having capacity of minimum 20 open close operations and 48Hrs of backup. Battery backup of max. 48 Hrs can be provided	The controller shall have battery having capacity of minimum 20 complete operations and 72Hrs of backup which shall be charged by a temperature compensated charging circuit, allowing the battery to charge at an optimal rate to extend battery life. Battery warantee should be treated equal to AR
7	Doc No. ENG-LV-040 Page No. - Page 5 of 16 Clause No.4.38 -Mounting bracket for Autorecloser and Clause No.4.38 - Mounting bracket for Autorecloser and Aux PT	Hot dipped Galvanized Hardware material suitable for TPCODL poles to be provided for single pole and double pole installation	As the mounting structure design and weight may vary subjected to the different site location. Therefore we request you to kindly remove this clause from the bidder part and kindly allow us to quote without mounting structure.	Scope of supply as per TPCODL Technical Specification. Details shall be submitted during detailed engineering
8	Doc No. ENG-LV-040 Page No. - Page 6 of 16 Clause No.4.45 -Control Cabinet	The controller should monitor battery voltage and provide alarm if the voltage falls below 21V and cut-off at 18 V	(Providing battery monitoring and protection as follows : - Battery alarm when battery voltage drops to less than 22.5 V - Automatic disconnection between battery and control circuit when battery voltage drops to less than 21.5 V	No deviation shall be acceptable from Technical specification.

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9	Wind Pressure – 300 Km/Hr	<p>We understand that the wind pressure resistant should be for the combined system of Auto Recloser + Mounting Brackets which is also subjected to pole strength. Kindly confirm if DISCOM is planning to install the equipment on Double or Single Pole structure</p> <p>Also recommend the thickness of Galvanization preferred for saline areas</p>		<p>Equipment shall be installed on single/double pole structure. Details shall be submitted during detailed engineering.</p> <p>Minimum thickness of galvanization shall be 100 micron or 705g/mm2.</p>
10	11KV Go Switch Isolator	<p>We propose the isolator to be single break horizontally operated. Please confirm if the isolator will be mounted on same structure where in incoming or outgoing side</p>		<p>Cantilever type Gang operated normal single brake Isolator (GO) shall be in the scope of TPCODL.</p> <p>Requirement is not clear.</p>

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11	Creepage distance min. 700Mm	We suggest that cree page distance of 700mm is too high for 11KV voltage levels. Request you to keep it to specific creepage distance as 31.5mm.KV		Minimum creepage shall be 31mm/kV or better is acceptable
12	he controller shall have battery having capacity of minimum 20 complete operations and 100Hrs of backup which shall be charged by a temperature compensated	100 hours of battery back up would require large sized battery bank. If such high battery backup is required, then we suggest that it should be mounted in a separate enclosure or else lithium ion battery can be proposed. Kindly suggest		The controller shall have battery having capacity of minimum 20 complete operations and 72Hrs of backup which shall be charged by a temperature compensated charging circuit, allowing the battery to charge at an optimal rate to extend battery life. Battery warantee should be treated equal to AR
13	O-0.5s-CO-10s-CO-10s-CO (Duty cycle and the recloser delay	Request you to allow O-0.5s-CO-15s-CO-15s-CO The above duty cycle complies with the requirement of 1 fast and other slow cycles		Operating sequence O-0.5s-CO-10s-CO-10s-CO or better as per OEM Type tested design
14		Kindly confirm how many surge arrestors have to be provided with each equipment?		6 nos. for each unit (AR)
15		Following features are available through relay programming instead of Push Button & LED. Kindly confirm if it is acceptable Local/ Remote Auto Recloser ON/OFF Protection ON/OFF Hot Line Tag ON/OFF		No deviation shall be acceptable from technical specification
16		Kindly provide a reference standard for Vacuum Integrity Test		Refer IEEE C37.20.3 standard
17	Release Orders shall be placed against the awarded Rate Contract by TPCODL as and when the requirements arise & Delivery within 30 Days from RO	Request you to at least provide 6-8 weeks of lead time for the delivery of equipment		Clarification given
18	4-35-General Technical Requirement	Voltage sensors and metering protection a) Should be provided internal to equipment. Bidder to specify details. b) Accuracy up to 12kV ±0.5%	Our RVD (Resistive voltage divider) has 1% accuracy. The 1% accuracy is enough for measuring voltage in distribution line. Hence, we request TPCODL to accept the same.	No deviation shall be acceptable from technical specification
19	4-45 General Technical Requirement	Controller Cabinet The controller shall have battery having capacity of minimum 20 complete operations and 100Hrs of backup which shall be charged by a temperature compensated charging circuit, allowing the battery to charge at an optimal rate to extend battery life.	Our proposed battery backup time is 48 hours (Normally, 24 hours back up time is required in distribution line but we offer 48 hours. There is no battery available in the market for 100 hours back up time) Hence, we request TPCODL to accept the same	The controller shall have battery having capacity of minimum 20 complete operations and 72Hrs of backup which shall be charged by a temperature compensated charging circuit, allowing the battery to charge at an optimal rate to extend battery life. Battery warantee should be treated equal to AR
20	4-47. General Technical Requirement.	Controller Cabinet The controller shall have provision of Multi-Master reporting- 4 masters with single CSADU	Our controller can support only 2 masters with IEC 60870-5-104 protocol. Hence, we request TPCODL to accept the same.	Acceptable.BA to comply the TPCODL requirement as a whole system.
21	4. General Technical Requirement-45.	Controller Cabinet Cyber security- User level authentication, Disabling the DNS, Disabling/enabling/ configurable TCP/ UDP port, ☐	We proposed as below. Disabling the DNS : Our controller doesn't support DNS (Domain Name Server) since it is not applicable to the network. Disabling/enabling/configurable TCP/UDP port Our operating software for controller is developed based on TCP. It doesn't support UDP. And we don't provide disabling function of TCP port since it has to maintains the enabling status for security. Hence we request TPCODL to accept the same.	Acceptable.

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22	4. General Technical Requirement-45.	Controller Cabinet Controller must have at least one TCP/IP Ethernet port to for communication with master station over IEC60870-5-104 & MQTT. Support IEC - 60870-5-104/MQTT for communicating with master station. Preferably support FTP protocol to transfer disturbance recorder to remote server.	Our controller can support the protocol IEC-60870-5-104. The MQTT is not a common protocol for distribution line Hence we request TPCODL to remove MQTT from the specification. .	BA system as a whole should comply with both protocols.
23	7.1 TYPE TESTS	Vacuum integrity test	Vacuum integrity test is not required in IEC 62271-111. Hence we request TPCODL to remove this test from the tender specification.	Refer IEEE C37.20.3 standard
24	7.2 ROUTINE TESTS	Following routine tests are to be done on 100% of the lot quantity, As per Clause 8 of IEC 62271- 111 2019 & Clause 8 of IEC 62271-1 d) Tightness tests;	Tightness tests will not be included in Routine test since we are proposed Solid insulated Recloser. This test applicable for GAS insulated Recloser .	Routine Tightness Test is not applicable for Vacuum Interrupting medium Autorecloser
25	7.3 ACCEPTANCE TESTS	Vacuum integrity test	Vacuum integrity test is not required in IEC 62271-111. Hence we request TPCODL to remove this test from the tender specification.	Refer IEEE C37.20.3 standard
26	7.5 Payment Terms	On delivery of the materials in good condition and certification of acceptance by certified official, Associate shall submit the Bills/ Invoices in original in the name of TP Central Odisha Distribution Limited to Invoice Desk. The payment shall be released within 60 days from the date of submission of certified bills/ invoices.	Requested to consider Payment through TReds Platform available for MSMEs.	Shall be done as per TPCODL laid down process
27	7.1 SSC Clause	Business Associate (BA) shall submit applicable Performance Bank Guarantee as per GCC within 30 days of issuance of order. PBG applicable shall be 5% of Order Value. PBG submitted, shall be released after completion of applicable guarantee period plus one month.	It is requested to consider Performance Bank Guarantee amount @3% of contract value instead of @5% inline to the guidelines of the GOI vide notification # No. F.9/4/2020-PPD dt. 12.11.2020, pls. confirm.	Pls adhere tender norms
28	1.0 Event Information - 1.4 Mandatory documents required along with the Bid- Cl. No. 1.4.4 - Page No. 6 of 143	Drawing, Type Test details along with a sample of each item as specified at Annexure I (as applicable)	Annexure I, does not mention anything about any sample. Please clarify whether a sample of each item to be submitted along with the bid? Please clarify.	Sample is not required.
29	1.0 Event Information - 1.7 Qualification Criteria - Page No. 6 of 143	c) Bidder should have at least the Purchase order single / Multiple copy of experience in supply of similar item (in Govt. Org/Discoms/Utilities/ Industries/PSU) with performance certificate.	We have supplied more than 780 numbers of 12kV & 36kV Outdoor Compact Permanent Magnetic Actuator Operated VCBs, to various DISCOMs/Utilities/Industries, a many of which are used for single shot auto reclosing too. Hope this supply & performance record is acceptable. Please clarify.	Qualification criteria shall be as per tender documents.
30	1.0 Event Information - 1.7 Qualification Criteria - Page No. 6 of 143	d) Bidder must have successfully executed the supply order of minimum 35 Nos within last 3 Year. Copy of completion certificates to be submitted in this regard.	We have supplied more than 780 numbers of 12kV & 36kV Outdoor Compact Permanent Magnetic Actuator Operated VCBs, to various DISCOMs/Utilities/Industries, a many of which are used for single shot auto reclosing too. Hope this supply & performance record is acceptable. Please clarify.	Qualification criteria shall be as per tender documents.
31	1.0 Event Information - 1.7 Qualification Criteria - Page No. 7 of 143	f) The bidder should have performance certificates for similar works for one year satisfactory performance from at least one reputed power utility for similar or higher voltage rating. The work against the issued certificate should be completed in last three years from the date of bid submission	We have supplied more than 780 numbers of 12kV & 36kV Outdoor Compact Permanent Magnetic Actuator Operated VCBs, to various DISCOMs/Utilities/Industries, a many of which are used for single shot auto reclosing too. Hope this supply & performance record is acceptable. Please clarify.	Qualification criteria shall be as per tender documents.
32	12.0 INSPECTION/PARTICIPATION - 12.2 Facilitating Inspection - Page 40 of 143	Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc-as specified in the contract document and submit copies of the test certificates to TPCODL along with the inspection call, for scrutiny of TPCODL.	Whereas, Cl. 3.9 (Page 10 of 143) specifies that "The type tests specified in TPCODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids". As the type test reports are required to be submitted along with the bids, should they be submitted again before raising the call for inspection, vide this clause? Please clarify.	All type test reports should be submitted along with bid submission. All routine tests reports as per TPCODL technical specification should be submitted alongwith other related documents as per TPCODL before raising of inspection call.
33	13.0 MDCC & DELIVERY OF MATERIALS - 13.1 Material Dispatch Clearance Certificate	In case Pre-dispatch inspection is waived at the discretion of TPCODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.	Whereas, Cl. 3.9 (Page 10 of 143) specifies that "The type tests specified in TPCODL specifications should have been carried out within five years prior to the date of opening of technical bids and test reports are to be submitted along with the bids". As the type test reports are required to be submitted along with the bids, should they be submitted again, vide this clause? Please clarify.	All type test reports should be submitted along with bid submission. All acceptance & routine tests reports as per TPCODL technical specification should be submitted alongwith other related documents as per TPCODL for MDCC & delivery of materials.

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34	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	b) IEC 62271-102 - HV switchgear and control gear-Alternating current disconnectors and earthing switches	Alternating Current Disconnectors and/or Earthing Switches are not in the scope of supply. Then, why this standard is listed in the Applicable Standards? Please clarify.	Applicable standards are for general HV switchgear and controlgear.
35	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	c) IEC 62271-1 - Alternating-current circuit-breakers	IEC 62271-1 is NOT the Standard for Alternating-current circuit-breakers. It is the Standard for High-voltage switchgear and controlgear - Part 1: Common specifications for alternating current switchgear and controlgear. The standard for alternating current circuit breakers is IEC 62271-100. Please clarify.	Applicable standards are for general HV switchgear and controlgear.
36	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	f) IEC 62262 - Degrees of protection provided by enclosures for electrical equipment against mechanical impacts (IK Code)	IK Degree of Protection is not specified anywhere in the Specification. Then, why this standard is listed in the Applicable Standards? Please clarify.	Refer TPCODL technical specification. Degree of protection is IP55
37	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	i) IEC 60947 /IS 13947 - Low voltage switchgear and control gear	IS 13947 is withdrawn. The latest Indian Standard for Low Voltage Switchgear and Controlgear is IS/IEC 60947. Please clarify.	Noted.
38	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	j) IEC 60439-1 - Low-voltage switchgear and control gear assemblies-Type tested and partially type tested assemblies	IEC 60439-1 is withdrawn and is replaced by IEC 61439-1. Please clarify.	Noted.
39	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	k) IEC 60255-3 - Electrical relays – Part 3: Single input energizing quantity measuring relays with dependent or independent time.	IEC 60255-3 is withdrawn and is replaced by IEC 60255-151. Please clarify.	Noted.
40	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	l) IEC 61869-2 / IS 2705 - Current Transformers	IS 2705 is withdrawn. The latest Indian Standard for Current Transformers is IS 16227-2. Please clarify.	Noted.
41	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	m) IEC 60376 - Specification of technical grade sulphur hexafluoride (SF6) for use in electrical equipment	SF6 gas is not specified anywhere in the Specification. Then, why this standard is listed in the Applicable Standards? Please clarify.	Not required.
42	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	n) IEC 61869-3/ IS 3156 - Voltage Transformers	IS 3156 is withdrawn. The latest Indian Standard for Current Transformers is IS 16227-3. Please clarify.	Noted.
43	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 2 of 16 (129 of 143) - Cl. 2. APPLICABLE STANDARDS	o) IEC 62271-206 - High-voltage prefabricated switchgear and control gear assemblies – Voltage presence indicating systems.	IEC 62271-206 is withdrawn and is replaced by IEC 62271-213. Please clarify.	Noted.
44	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 3 of 16 (130 of 143) - Cl. 2. APPLICABLE STANDARDS	p) IS 13573-2 - Cable accessories for extruded power cable for Working Voltages from 3.3 kV up to and including 33kV	Cable accessories for extruded power cable for Working Voltages from 3.3 kV up to and including 33kV are not specified anywhere in the Specification. Then, why this standard is listed in the Applicable Standards? Please clarify.	Cable accessories of 11kV required for AR connected with cables.
45	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 3 of 16 (130 of 143) - Cl. 2. APPLICABLE STANDARDS	r) IEC 61000-4 - Electromagnetic Compatibility for relays	IEC 61000-4 is not the Standard for Electromagnetic Compatibility for relays. It is the Standard for Electromagnetic compatibility (EMC) - Part 4-1: Testing and measurement techniques. Please clarify.	Refer IEC TR 61000-4-1 : Electromagnetic compatibility (EMC) - Part 4-1: Testing and measurement techniques - Overview of IEC 61000-4 series
46	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 3 of 16 (130 of 143) - Cl. 2. APPLICABLE STANDARDS	t) IS 9921 - Alternating Current Disconnectors (Isolators) for Voltages Above 1000 V - Part III: Design and Construction & Part 4 : Tests	IS 9921 is withdrawn. The latest Indian Standard for Alternating Current Disconnectors (Isolators) for Voltages is IS/IEC 62271-102. Please clarify.	Noted.
47	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 4 & 5 of 16 (131 & 132 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	34. b) Accuracy up to 630A ±0.5% c) Fault data 1000A & above accuracy class 5P20	As per Standards, the RMS ratio error of a Class 5P CT is only +/- 1%. As such, if you specify a Class 5P CT, it can only be equivalent to a Class 1.0 Measurement CT. As such, +/- 0.5 % accuracy cannot be achieved in a Class 5P CT. Please clarify.	No deviation shall be acceptable from technical specification.
48	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 5 of 16 (132 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	41. Surge arrester - Approved make - Raychem, Oblum, Elpro. (Bidder to mention offered make)	We propose to provide DONGWOO Make Surge Arrestors. Please approve.	It is not TPCODL approved make. BA to supply from TPCODL approved make.

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49	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 5 of 16 (132 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	43. Auxiliary PT Details - Basic Insulation Level (BIL) - 12kV/28kV/110 KV peak	As per Standards, the BIL for any equipment with a rated voltage of 12kV is only 12/28/75kV and NOT 12/28/110kV. Please clarify.	BIL shall be 12kV/28kV/75kV(peak)
50	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 5 & 6 of 16 (132 & 133 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	45. Controller Cabinet - The control panel should have inbuilt firmware in hardware or relay with feature that the same control panel can be used for Autorecloser & sectionlizer with reprogramming of firmware. The firmware updates and reprogramming for ACR tutorials should be provided by bidder.	The tendered product is only Auto Recloser. Also, the controllers available in the market are different for Auto Recloser & Sectionalizer. As such, same control panel cannot be offered for Autorecloser & sectionlizer. Please clarify.	No deviation shall be acceptable.
51	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 6 & 7 of 16 (133 & 134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	45. Controller Cabinet -32 bit ARM Core CPU operating @ minimum 450MHz; RAM-64 MB.	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
52	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	45. Controller Cabinet - Controller must have at least one TCP/IP Ethernet port to for communication with master station over IEC-60870-5-104 &MQTT.	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
53	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	45. Controller Cabinet - Support IEC - 60870-5-104/MQTT for communicating with master station. Preferably support FTP protocol to transfer disturbance recorder to remote server.	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
54	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	Device should support periodic data reporting configurable from 2 second to 1 hr interval and spontaneous data as well.	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
55	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	Digital data should have higher priority than Analog data. The dead band for reporting Analog data by exception shall be initially set to 1 % (in 1%) of full scale value.	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
56	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	Multi-Master reporting- 4 masters with single CSADU	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
57	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	Cyber security- User level authentication, Disabling the DNS, Disabling/enabling/ configurable TCP/ UDP port, PT Failure, Charger Failure, Battery Failure/Door lock alarm integrated to Controller	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
58	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	Event storage in internal memory of controller.	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
59	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	Measurement event-10000	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
60	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	System Event- 1000	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.

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61	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	Alarm Event- 1000	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
62	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	Normal event- 5000	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
63	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	46. Modem/Router	This is NOT in our scope of supply. Please clarify.	BA to comply as per TPCODL technical specification.
64	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 7 of 16 (134 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	47. Integration with SCADA -	This is limited to provision of controller software and hardware potential-free wiring upto a designated terminal block in our control cabinet. Any other integration is NOT in our scope. Please clarify.	BA to comply as per TPCODL technical specification.
65	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 8 of 16 (135 of 143) - Cl. 4. GENERAL TECHNICAL REQUIREMENTS	5.2 CONTROL PANEL DETAILS	These will be as per Controller manufacturer's standards. Please clarify.	BA to comply as per TPCODL technical specification.
66	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 8 of 16 (135 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	1. Insulation (Dielectric Test) - PF withstand voltage test (Dry & Wet), Lightning impulse voltage withstand test. - Cl 7.2.IEC 62271-111/ IEEEC37.60	We have performed these tests as per IEC 62271- 1. Hope it is acceptable. Please clarify.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
67	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	5. Verification of the protection - Cl 7.7 of IEC 62271-111 & IEEEC37.60	We presume that this is same as items 17 & 18 of this clause. Please confirm.	BA to submit the IP55 Type test report conducted at CPRI/ERDA or International accredited Laboratory like KEMA
68	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	6. Additional tests on auxiliary and control circuits - Cl 7.10 of IEC 62271-111 & IEEEC37.60	Vide Cl. 7.10 of IEC 62271-111, "The successful completion of the interrupting duty, mechanical endurance test, and continuous current test of the main circuit is considered adequate verification of the auxiliary and control circuits". As such, no special tests are necessary. Please confirm.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
69	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	7. Line-charging current and cable - charging current interruption tests - Cl 7.101 of IEC 62271-111	We have performed these tests as per IEC 62271-100. Hope it is acceptable. Please clarify.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
70	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	8. Making current capability - Cl 7.102 of IEC 62271-111 & IEEEC37.60	We have performed these tests as per IEC 62271-100. Hope it is acceptable. Please clarify.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
71	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	9. Vacuum integrity test	No such type test is mentioned in IEC 62271-111. So, this clause is not applicable. Please confirm.	Refer IEEE C37.20.3 standard
72	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	10. Rated short-circuit breaking current tests - Cl 7.103 of IEC 62271-111 & IEEEC37.60	We have performed these tests as per IEC 62271-100. Hope it is acceptable. Please clarify.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
73	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	11. Low current tests - Cl 7.104 of IEC 62271-111 & IEEEC37.60	We have performed these tests as per IEC 62271-100. Hope it is acceptable. Please clarify.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
74	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	12. Partial discharge (corona) tests - Cl 7.106 of IEC 62271-111 & IEEEC37.60	We have performed these tests as per IEC 60270. Hope it is acceptable. Please clarify.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.

Sr. No.	Detailed Reference to TPCODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPCODL Response dtd. 20.10.2022
75	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	13. Time-current tests - Cl 7.108 of IEC 62271-111 & IEEEC37.60	We have not done this type test and as we understand facility to conduct this test is not available in India. Please clarify.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
76	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	14. Mechanical duty tests Cl 7.109 of IEC 62271-111 & IEEEC37.60	We have performed these tests as per IEC 62271-100. Hope it is acceptable. Please clarify.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
77	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	15. Control electronic elements surge withstand capability (SWC) tests Cl 7.111 IEC 62271-111 & IEEEC37.60	We are outsourcing the controller. We will try to get this Type Test Certificate from our Controller vendor. Please confirm.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
78	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	16. Thermal runaway test Cl 7.113 IEC 62271-111 & IEEEC37.60	As per Cl. 7.113 of IEC 62271-111, this test is necessary, only if the results of the Rated Continuous Current Test are in question. If the continuous current test is successful, then this test is not applicable. As we would submit a type test report for the continuous current test, this clause is not applicable. Please confirm.	BA to submit the type test reports alongwith bid as per TPCODL technical specification. No deviation shall be acceptable.
79	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	17. IP55 Test of Switchgear unit Clause 5, IEC-60529 & clause 6.14, IEC62271-1	We have performed these tests as per IEC 60529. Hope it is acceptable. Please clarify.	Noted.
80	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 10 of 16 (137 of 143) - Cl. 7. TESTS 7.1 TYPE TESTS	18. IP55 Test of Controller Enclosure Clause 5, IEC-60529 & clause 6.14, IEC62271-1	We have performed these tests as per IEC 60529. Hope it is acceptable. Please clarify.	Noted.
81	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 12 of 16 (139 of 143) - Cl. 7. TESTS 7.2 ROUTINE TESTS	b) Modem	MODEM is not in our scope of supply. Hence, this clause is not applicable. Please confirm.	Scope of supply as per TPCODL Technical Specification.
82	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 12 of 16 (139 of 143) - Cl. 7. TESTS 7.3 ACCEPTANCE TEST	d) Vacuum integrity test	No such test is mentioned in IEC 62271-111. So, this clause is not applicable. Please confirm.	Refer IEEE C37.20.3 standard
83	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 12 of 16 (139 of 143) - Cl. 7. TESTS 7.3 ACCEPTANCE TEST	m (ii) Modem	MODEM is not in our scope of supply. Hence, this clause is not applicable. Please confirm.	Scope of supply as per TPCODL Technical Specification.
84	SPECIFICATION FOR 11 KV POLE MOUNTED AUTORECLOSER - Page 12 of 16 (139 of 143) - Cl. 7. TESTS 7.3 ACCEPTANCE TEST	m (v) Isolator as per IS 9921 part 4 (Inspection at OEM factory can be conducted by TPCODL team)	Isolator is not in our scope of supply. Hence, this clause is not applicable. Please confirm.	Noted.