

Tender No-TPSODL/OT/21-22/063

Package Name-Rate Contract for Supply of O/H Communicable FPI with DCU Associated Material

Reply to Technical and Commercial Pre-Bid Queries

Sr. No.	Detailed Reference to TPSODL Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response																								
1	2	3	4	5																								
1	Page 4 of 17 : 4.5	Ingress Protection of enclosure - IP65 or better	What is the requirement of IP65? Attaching document why IP56 meets the requirement.	Specification to be complied																								
2	Page 4 of 17 : 4.8	Conformal coating - The relay PCB should have conformal coating	Why is conformal coating needed at an elevation in an open environment?	Specification to be complied																								
3	Page 4 of 17 point 5	<table><tr><td>9</td><td>Current setting Trigger value</td><td>100 A to 800 A steps of 100 A and Manually or Automatic Mode- Can be set on site remotely</td></tr><tr><td>10</td><td>Transient faults detection feature</td><td>This feature can be made On or Off, Manually and Remotely as per application site need.</td></tr><tr><td>11</td><td>Minimum fault current impulse filter time</td><td>60 to 300ms (To filter inrush current)</td></tr><tr><td>12</td><td>Beacon Flash Indication Duration (user settable)</td><td>30 min to 720 min in steps of 30 min - Manual and Remote Settable</td></tr><tr><td>13</td><td>Inrush transient restraint</td><td>2 sec</td></tr><tr><td></td><td>Reset (Permanent Fault)</td><td></td></tr><tr><td>14</td><td>Auto-reset on restoration on supply</td><td>Should auto-reset after 30 seconds delay and within one min of supply restoration.</td></tr><tr><td>15</td><td>Pre-set Timer Reset</td><td>30 min to 360 min in steps of 30 min - Manual and Remote Settable</td></tr></table>	9	Current setting Trigger value	100 A to 800 A steps of 100 A and Manually or Automatic Mode- Can be set on site remotely	10	Transient faults detection feature	This feature can be made On or Off, Manually and Remotely as per application site need.	11	Minimum fault current impulse filter time	60 to 300ms (To filter inrush current)	12	Beacon Flash Indication Duration (user settable)	30 min to 720 min in steps of 30 min - Manual and Remote Settable	13	Inrush transient restraint	2 sec		Reset (Permanent Fault)		14	Auto-reset on restoration on supply	Should auto-reset after 30 seconds delay and within one min of supply restoration.	15	Pre-set Timer Reset	30 min to 360 min in steps of 30 min - Manual and Remote Settable	Minimum 2-3sec inrush restraint setting is advised. Why is the inrush restraint setting kept so low? Flashing Indication Duration and Pre-set Timer Reset are the same thing. Different values are	Specification to be complied
9	Current setting Trigger value	100 A to 800 A steps of 100 A and Manually or Automatic Mode- Can be set on site remotely																										
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4	Page 4 of 17 :4.17	Fault Indications : a. Bright Red Flash Light (LEDs) for Permanent Faults, b. Preferably Green LED for transient fault with different blinking rate c. Preferably Yellow LED for low battery indication Bidder to submit the offered equipment details of features for indication of above faults categories.	Why are different color LED needed to signify different faults in case of communicable FPI? Type of fault and simultaneous alarm is generated at SCADA. Why is low battery indication needed on the FPI in case of communicable FPI? Low battery indication alarm is generated at SCADA.	Specification to be complied																								
5	Page 4 of 17 :4.20	Flash Period for permanent faults - 1 flash every 3 sec and/or Red flashing LED	Bright Red Flashing, flash period for permanent faults: (1 flash every 3 s (< 2 h) then 1 flash every 6 s)(Kindly accept)	Specification to be complied																								
6	Page 4 of 17 :4.23	Battery low indication - The FPI should have low battery indication Local and remote alert (Bidder to submit details of provision)	Why is low battery indication needed on the FPI in case of communicable FPI? Low battery indication alarm is generated at SCADA.	Specification to be complied																								
7	Page 4 of 17 :4.24	Internal Battery of FPI - Lithium Ion rechargeable battery (Shall recharge from line current)	Lithium battery has a long life duration and is easily replaceable. Why is rechargeable battery required in OH FPI? Such a battery makes the FPI heavy and more difficult to operate.	Non rechargeable battery may be considered however battery life shall be 10 years																								
8	Page 4 of 17 :4.25	Life of the Battery - More than 10 years	Lithium battery has a long life duration and is easily replaceable.	Specification to be complied																								
9	Page 5 of 17 :4.29	Suitability for Wind Resistance - For wind pressure 126kg/sq m up to an elevation of 10 mts	Wind resistance in km/hr is needed.	Wind velocity: 300 km/hr																								
10	Page 5 of 17 :4.33	FPI power up current - FPI should be power up with Minimum 20A line current & battery power shall be used only after fault	OH FPI shall be supplied with Lithium battery which is easily replaceable and also has a long life duration.	Non rechargeable battery may be considered however battery life shall be 10 years																								
11	Page 6 of 17 :5.0.4	General Instruction - <div><div>1. The Overhead Fault Passage Indicator shall locate the passage of faults on overhead lines. The FPI shall indicate transient faults and permanent faults on the O/H lines. The transient fault detection feature should have disable feature with manual as well as remote settable.</div><div>2. The Overhead Fault Passage Indicator shall operate on passing over of the absolute threshold current (user settable).</div><div>3. Current peaks caused by switching on power equipment like transformers etc. can</div></div>	Minimum 2-3sec inrush restraint setting is advised. Why is the inrush restraint setting kept so low?	Specification to be complied																								

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	Page 6 of 17 :5.0.1	<p>3. Current peaks, caused by switching on power equipment like transformers etc. can reach the operating point of FPI and may lead to a wrong evaluation, to avoid this, the incoming impulse must be filtered internally.</p> <p>4. The filtration shall be such that the fault will only be indicated by FPI, if the current impulse lasted longer than the pre-adjusted minimum impulse duration.</p> <p>5. This duration should be internal set as 60ms minimum or/and can be adjustable in range of 60 to 300ms based on equipment in network application.</p> <p>6. The faults are indicated by all FPI indicators placed on line between the source input side and up to the location of the fault. Such that the fault location shall be between the last flashing FPI and the next non-flashing FPI which is in standby mode.</p>		Specification to be complied
12	Page 7 of 17 point 5.1	Trip current and Fault types - 5.1.3 The FPI shall detect and indicate phase to phase faults. In addition to this, the FPI shall also detect and differentiate between transient, temporary and permanent faults.	<p>What is the difference between transient and temporary fault?</p> <p>There are two types of faults: permanent & temporary (transient) faults</p>	OK Noted
13	Page 7 of 17 :5.2	<p>LED/Indication - 1. The FPI shall indicate faults by means of bright red LED for permanent faults so that the indication is clearly visible during night times and by means of a red luminous flag, so as to be clearly visible in the bright sunlight during day times.</p> <p>2. Alternately it is preferred that FPI shall have different color light (LEDs) for permanent faults, transient fault and low battery indication.</p> <p>3. Bidders to mention the options provided for various faults and indication purposes.</p>	<p>Why are different color LED needed to signify different faults in case of communicable FPI? Type of fault and simultaneous alarm is generated at SCADA.</p> <p>Why is luminous flag needed along with LED in case of communicable OH FPI? Type of fault and simultaneous alarm is generated at SCADA. Also, the high intensity of LED is visible 360degrees (Visibility angle) at any time during the day.</p> <p>Why is low battery indication needed on the FPI in case of communicable FPI? Low battery indication alarm is generated at SCADA.</p>	Specification to be complied
14	Page 7 of 17 :5.4.2	Battery - The lithium battery provided inside the FPI shall be replaceable type, in case of battery failures. The Battery shall have a minimum indicating life of 10 years / 1000 hours.	OH FPI shall be supplied with Lithium battery which is easily replaceable and also has a long life duration.	OK Noted with battery life of 10 years
15		<p>Remote Control Unit features - (For communicable FPI)</p> <p>5.6.1 The FPI shall be supplied along with suitable Remote Control Unit, having a LCD display, common for all the Overhead Fault Passage Indicator. The supplier shall supply one number of Remote Control Unit free of charge along with every 9 numbers of FPIs.</p>	<p>Why is a Remote Control Unit needed in case of a communicable OH FPI?</p>	Specification to be complied

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	Page 8 of 17 :5.6	<p>5.6.2 The FPI shall be equipped with remote Test and Reset features, so that the functionalities including status of battery and flag can be tested without removing the FPI from the line. The Remote Control Unit shall capable of performing the following operations:</p> <ul style="list-style-type: none"> i) Perform Test / Reset operations by standing below the FPIs ii) View settings of various parameters of the FPI like trip current, response time, reset time, temporary fault indication status, transient fault indication status, auto-reclosure support status etc. iii) Set various parameters of the FPI like trip current, response time, reset time, temporary fault indication status, transient fault indication status, auto-reclosure support status etc. iv) Perform battery check and flag check. v) View real-time value of the current flowing through the 11kV line on which a particular FPI is installed. This current shall be indicated in terms of Amps (A). vi) Operating range for the Remote Control Unit shall be minimum 30m radius. <p>5.6.3 The settings for the FPI shall be settable at site, without dismounting the FPI from the line. Following parameters shall be settable at time.</p> <ul style="list-style-type: none"> • Trip Current • Response Time • Reset Time • Turn On / Off indication for Transient Faults • Turn On / Off auto-reclosure support function 		
16	Page 9 of 17 :5.7	Master station communication protocol - Support IEC -60870-5-104/MQTT for communicating with master station. Preferably support FTP protocol to transfer disturbance recorder to remote server. Simultaneously communication facility to field engineer for faster local restoration	Kindly elaborate	Both are two separate channels IEC-104 & MQTT
17		Communication - Controller must have at least one TCP/IP Ethernet port to for communication with master station over IEC-60870-5-104 & MQTT. No external protocol converter will be accepted.	It has 2 RS232 Port for communication to the master unit	Specification to be complied
18		Minimum No of TCP/IP Eather Port - 2 (Among them one must be engineering port)	We have 2 RS-232 port (Among them one is engineering port)(Kindly accept)	Specification to be complied
19		Cyber Security - User level authentication, Disabling the DNS, Disabling/enabling/configurable TCP/UDP port.	Kindly elaborate	Specification to be complied
20		Protection Features - Measurement event : 10000, System event 1000, Alarm event 1000, Normal event 5000	It has a capaity of 100 time stamped events	Specification to be complied
21	Page 11 of 17: 7.1	Type test -	All these Type Tests are not applicable to OH FPI. EFT (Electrical Fast Transient) Immunity and Surge Immunity Test are not applicable to OH FPI.	Type Test shall be required as per our specification/Relevant IEC standards
22		The FPI shall indicate faults by means of bright red LED for permanent faults so that the indication is clearly visible during night times and by means of a red luminous flag, so as to be clearly visible in the bright sunlight during day times. 2. Alternately it is preferred that FPI shall have different color light (LEDs) for permanent faults, transient fault and low battery indication.	The device has no Flag	Alternately it is preferred that FPI shall have different color light (LEDs) for permanent faults, transient fault and low battery indication.
23	Page 5: Point No 1.1	Scope of work	We understand that our scope will be limited to supply of - 11kV & 33KV O/H Communicable FPI , DCU and associated equipments only. Installation & commissioning of FPI , DCU & associated equipments are not in our scope. Please confirm.	Installation of the FPI is not in the scope of bidder However Supervision of installation,testing, commissioning & Integration of complete equipments is in scope of bidder
24	Page 13: Point No 7.1	Special Conditions of Contract: TENDER SAMPLE: Bidder has to demonstrate the complete integration of O/H FPI and DCU (up to SCADA) within 10 days of bid opening to Engineering Group.	We recommend to conduct the demo online. However in case onsite demo is required, we will try to do the same within best possible time. Please allow us atleast 20 days of time to conduct the same.	specification to be complied

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25	Page No 27, Point No 11	Wind velocity: 300 km/hr, 200 km/hr and 160 km/hr.	Since it's a O/H equipment, it is recommended that offered product should be tested for heavy wind speed - Atleast 200 km/hr.	Specification to be complied
26	Page No 27, Point No 2	Application - Product shall be suitable for application on overhead lines of different size conductors and ABC	Our proposal is Product shall be suitable for application on overhead lines of different size conductors of dia 5mm to 25mm. Aerial bunch cables run together. It is not possible to mount one FPI on a phase cable of ABC	Product shall be suitable for application on overhead lines of 55-232 Sq mm size conductors and ABC
27	Page No 27, Point No 5	Ingress Protection of enclosure -IP65 or better	We assume that IP65 protection is required for O/H communicable unit only. Please confirm.	Applicable for complete set of equipment
28	page no.28, Specification of FPI for Overhead lines, clausno4, point no.17	Fault indications: a. Bright Red flash light (LEDs) for permanent faults, b. Preferably Green LED for transient fault with different blinking rate c. Preferably Yellow LED for low battery indication Bidder to submit the offered equipment details of features for indication of above faults categories.	We provided flashing pattern on alarm LED (RED): Permanent = 1 flash; Transient = 2 flashes; Battery = 3 flashes. Please accept the same.	Specification to be complied
29	Page No 28, Point No 9	Current setting Trigger value: 100 A to 800 A steps of 100 A and Manually or Automatic Mode Can be set on site or remotely.	Our proposal - 75 A to 1500 A steps of 100 A and Manually Can be set on site or remotely. Wider setting range is suitable for most of the feeders. It is always recommended to have fixed setting (rather than automatic setting) based on fault setting of the particular feeder as load current is always tends to vary over situation.	specification to be complied
30	Page No 28, Point No 11	Minimum fault current impulse filter time: 60 to 300 ms (To filter inrush current)	We assume this is response time. For us response time is 2 ±1 cycle and not configurable	Specification to be complied
31	Page No 28, Point No 12	Beacon Flash Indication Duration (user settable): 30 min to 720 min in steps of 30 min. Manual/Site/Remote Settable	Our proposal - 120 min to 960 min in steps of 30 min. Manual/Site/Remote Settable. Settable longer blinking duration will be helpful for patrolling team to identify the fault location. And also FSI have remote reset option in case the fault is identified in SCADA control centre. Voltage based reset is also available to reset the device once the power is restored.	Specification to be complied
32	Page No 28, Point No 13	Inrush transient restraint: 2 sec	It is recommended to have higher time setting to blocks the fault detection due to magnetization during the voltage restoration on the MV overhead line.	Specification to be complied
33	Page No 28, Point No 15	Pre-set Timer Reset: 30 min to 360 min in steps of 30 min – Manual/Site/Remote Settable	Our proposal - 120 min to 960 min in steps of 30 min. Manual/Site/Remote Settable.	Specification to be complied

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34	Page No 28, Point No 17	Fault Indications a. Bright Red flash light (LEDs) for permanent faults, b. Preferably Green LED for transient fault with different blinking rate c. Preferably Yellow LED for low battery indication	Our proposal a. Bright Red flash light (LEDs) for permanent faults, b. Preferably Green LED or separate blinking pattern for transient fault & low battery Indication. Separate blinking patterns available for temporary fault, permanent fault and low battery. RED LEDs help to have longer visibility. All these information are also sent to SCADA.	Specification to be complied
35	Page No 28, Point No 22	Standard total flash duration: Min. 1000 Hrs under permanent fault operation	We request to consider 7.5 years of life with 1000 hours of flashing. However, if Energy Harvesting is active for over 30% of time (ie over 30% of time currents are above 60A), we would be able to reach 10 years of life.	Specification to be complied
36	Page No 28, Point No 24	Internal Battery of FPI: Lithium Ion rechargeable battery	We request to consider Lithium Ion non-rechargeable battery. Rechargeable batteries are normally used for high power drain devices. SICAM FSI is a low power drain device and with non-rechargeable battery we claim 7.5 years of life with 1000 hours of flashing.	Non rechargeable battery may be considered however battery life shall be 10 years
37	Page 29: Point No 46	Integration with SCADA: The scope shall include integration of field device with Purchaser's SCADA System.	As an OEM, our scope will be limited to programming of device & availability of signals over IEC 104.	Installation of the FPI is not in the scope of bidder However Supervision of installation, testing, commissioning & Integration of complete equipments is in scope of bidder
38	Page 29: Point No 32	Fixing on line conductor: Should be Easy to fix with hot stick	Details of the hot stick (Qty, length, kV level) not mentioned in the spec. Kindly confirm whether supply of hot stick is vendor scope? If it is vendor scope then our proposal is to supply 12 nos telescopic Hotstick for entire rate contract for each utility with following spec: 12meter, 125KV AC insulation. kindly confirm.	BA shall submit the price for Hotstick on company letter head along with the bid. It will not be evaluated in the price bid.
39	Page No 29, Point No 33	FPI power up current: FPI should be powered up with Minimum 20A line current & battery power shall be used only after fault	FSI is armed & ready to detect fault from 0 A. The Energy Harvesting which start from 60A only reduces the dependency of batteries. 7.5 years of life with 1000 hours of flashing. However, if Energy Harvesting is active for over 30% of time (ie over 30% of time currents are above 60A), we would be able to reach 10 years of life.	Specification to be complied
40	page no.29, Specification of FPI for Overhead lines, clause 4, point no.33	FPI power up current: FPI should be power up with Minimum 20A line current & battery power shall be used only after fault	We assume FPI shall be available & ready to detect fault as per fault parameterization with 20A as minimum line current. Please confirm the same.	Specification to be complied
41	page no.29, Communication Unit device interface, point no.33	Inbuilt modem shall support all technology i.e. 2G, 3G, 4G & 4G LTE, etc.	Device should working properly with GPRS (2G)/GSM connectivity as uplink communication to control center on IEC104 would not require very large bandwidth	Specification to be complied

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42	Page No 30, Point No 38	Line Loading data: FPI should transmit real time line loading (phase wise), fault data to Purchaser's SCADA System through in built 4G/MPLS modem over IEC60870-104 protocol and MQTT.	FPI should transmit fault data spontaneously and line loading (phase wise min, max, avg and inst for the selected wireless reporting time), based on site selectable wireless reporting time configuration to Purchaser's SCADA System. IT is recommended to transfer data periodically from FPI to DCU to save internal battery of the FPI.	Specification to be complied
43	Page No 30, Point No 43	DCU Self-diagnostic Alerts DCU Door open alarm, Battery charger failure, LT Supply failure, Battery low alarm. (Local and on SCADA System)	We are proposing 03 alarms as below: 1. DCU Door open alarm, 2. Battery charger failure & Battery low alarm. 3. LT Supply failure, . PI confirm.	specification to be complied
44	page no.30, Specification of FPI for Overhead lines, clause no.4, point no.45, Installation Supervision	The bidder shall provide installation supervision	Please clarify for how many units / days are required for installation supervision. We prefer to have one time supervision for 3 to 4 days along with utility team.	2 Days Training & Batchesh will be decided as per requirement.
45	page no.30, Specification of FPI for Overhead lines, clause no.4, point no.46, Integration with SCADA	The scope shall include integration of field device with Purchaser's SCADA System.	Please clarify for how many units support required for integration supervision. We prefer to provide 10 sets of FPI randomly selected feeders by utility. Please clarify more in details.	The scope shall include integration of field device with Purchaser's SCADA System for all the units
46	Page No 31, Point No 5.1.2	FPIs shall constantly monitor, measure the line current and evaluate the same. In case current exceeds a pre-set value, a fault has to be indicated. Alternatively, there shall also be an "Automatic Mode", in which the FPIs will get adapted to the service current.	FPIs shall constantly monitor, measure the line current and evaluate the same. In case current exceeds a pre-set value, a fault has to be indicated. It is always recommended to have fixed setting based on fault setting of the particular feeder as load current is always tends to vary over situation. Any time the setting can be updated from remote.	specification to be complied
47	Page No 31, Point No 5.1.3	The FPI shall detect and indicate phase to phase faults. In addition to this, the FPI shall also detect and differentiate between transient, temporary and permanent faults.	Assuming Considering transient fault & temporary fault both are same.	Ok Noted
48	Page No 32, Point No 5.4.2	The lithium battery provided inside the FPI shall be replaceable type, in case of battery failures. The battery shall have a minimum indicating life of 10 years / 1000 hours.	We request to consider 7.5 years of life with 1000 hours of flashing. However, if Energy Harvesting is active for over 30% of time (i.e. over 30% of time currents are above 60A), we would be able to reach 10 years of life.	Specification to be complied
49	Page No 32, Point No 5.6.1	The FPI shall be supplied along with suitable Remote Control Unit, having a LCD display , common for all the Overhead Fault Passage Indicator. The supplier shall supply one number of Remote Control Unit free of charge along with every 9 numbers of FPIs.	Offered equipment supports WEB GUI feature to take care of programming & necessary supervision & monitoring features. Also through wifi facility in our proposed modem, local configuration is possible through standard smart phone device. However, supply of any smart phone is not in our scope.	Specification to be complied

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50	Page No 32, Point No 5.6.3	The settings for the FPI shall be settable at site, without dismounting the FPI from the line. Following parameters shall be settable at time. o Trip Current o Response Time o Reset Time o Turn On / Off indication for Transient Faults o Turn On / Off auto-reclosure support function	Our propose to consider following The settings for the FPI shall be settable at site, without dismounting the FPI from the line. o Trip Threshold Current settings o di/dt settings o In rush restriant settijngs o Turn On / Off auto-reclosure support function o Turn On / Off indication for Transient Faults o Enable/Disable different reset options o Reset time for timer based reset. Also response time for offered product is fixed. Kindly accept the same.	Specification to be complied
51	Page No 32, Point No 5.7 - GSM/GPRS COMMUNICATION INTERFACE	Minimum No of TCP/IP Eathernet Port - 2 , (Among them one must be engineering port)	For our device, same port can be used for communicating to control center on IEC 104 as well as engineering of the system using web GUI. Separate engineering port is not required. Please consider the same.	Separate engg port required 1) Engg port for local configuration & setting changes 2) COM PORT for continious communication to FEP server /SCADA
52	Page No 33, Point No 5.7 - GSM/GPRS COMMUNICATION INTERFACE	Master station communication protocol - Preferably support FTP protocol to transfer disturbance recorder to remote server. Simultaneously communication facility to field engineer for faster local restoration	Offered device will be connected to O/H Fault passage indicator & periodical data & fault data collected from O/H unit will be transferred to control center on IEC 104. For field enginner, there will be option to send fault details over SMS. Please confirm	Specification to be complied
53	Page No 33, Point No 5.7 - GSM/GPRS COMMUNICATION INTERFACE	DATA Reporting - Device should support periodic data reporting configurable from 2 second to 1 hr interval and spontaneous data as well	Offered device supports periodic data reporting. Time period is configurable. In case of any fault, fault related data will be transferred immediately. Please confirm	OK
54	Page No 33, Point No 5.7 - GSM/GPRS COMMUNICATION INTERFACE	Cyber Security - User level authentication, Disabling the DNS, Disabling/enabling/configurable TCP/UDP port,	Proposed device supports IPSEC & TLS for upward communication to control center on IEC 104. For short range communication it have AES256 based encryption. Please confirm	Specification to be complied
55	Page No 33, Point No 5.7 - GSM/GPRS COMMUNICATION INTERFACE	Preferred modem make ARG-600 (ABB-2G/3G/4G LTE)	Please consider other make as well which will comply to technical spec.	VIOLA -ABB
56	Page No 34, Point No 5.7 - GSM/GPRS COMMUNICATION INTERFACE	Measurement Event: System Event 1000, Alarm Event 1000, Normal Event 5000.	roposed device supports total 100 nos of events as per point no 5.9.2, page no 34	Specification to be complied as per clause no - 5.7 of tender specification
57	Page No 34, Point No 5.8	This kit shall be composed of a PT or solar panel and rechargeable battery. It shall be provided with a cable of minimum length 3m for connection to the GSM/GPRS communication interface installed on the same pole.	We recommend PT over solar panel as average availability of sunlight may impact overall back up hours for GSM/GPRS communication interface.	Specification to be complied
58	Page No 34, Point No 5.10	Communication with the control centre: DCU/DTU interface shall be ready to receive a call from the Control Centre.	We assume here "Call" means data access request from control centre.	ok

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59	Page No 34, Point No 5.11	Equipment configuration and diagnostic shall be performed by connection of a laptop PC to the GSM/GPRS interface using the PC RS232 interface.	as per point no 5.7 at page no 32, ethernet port is required as engineering port (Configuration port). Please confirm	Specification to be complied
60	Page No 34, Point No 6.0	6.0 NAME PLATE & MARKING	We assume here name plate details are required for DCU / DTU & DCU/DTU Box	The DCU / DTU & DCU/DTU Box shall be provided with legible name plate on box with minimum following information: Manufacturer name & address, Model No. PO number & date 'Property of TPSODL, BERHAMPUR along with all technical Parameters
61	Page No 34, Point No 7.1	Type Test	Type test clarification is enclosed in the separate ANNEXURE-A	Type test shall be as per tender specification.
62	Page 38: Point No 14	The bidder shall arrange to provide the installation and operating training at TPSODL, BERHAMPUR offices as and when required for better installation and usage of the product.	Kindly confirm No of days & batches for Product training, Installation & Commissioning training.	2 Days Training & Batchesh will be decide as per requirement.
63	General Query 1	Drawings & location:	We assume that preparation of SLD & finalization of strategic location for installation, arranging shutdown is not in our scope.	Ok Noted
64	General Query 2		ISP / Communication link provider: arrangement of communication link & associated accessories (Static SIM, Leased line etc.) from ISP at various locations along with control center is not in our scope	Ok Noted
65	General Query 3		Site Survey: Kindly get us some data on the total area that encompasses DCU/DTU installation locations. Also provide us the details (height and type of construction) of poles in use.	Details shall be provided after award of contract
66	General Query 4		Scope of Work: We understand supply of earthing equipment is not in bidders scope. Please confirm.	Ok Noted
67	New Recommendations 1		The O/H device shall be made of UV stabilized material and tests shall be conducted for exposure to UV as per ASTM G155.	The test shall be conducted as per the tender specification & Relevant standard
68	New Recommendations 2		Visibility of the LED indication shall be 50 m day and 300m night	Visibility of the LED indication shall be min 150 meter in the day and 1.5 KM in the night
69	New Recommendations 3		Kindly consider local content in the offered device as per revised public procurement (Preference to make in India) order dated 16th September 2020.	All government guidelines shall be followed
70	New Recommendations 4		The short range radio communication between the FPI and DTU shall be secured with AES128 encryption	Noted
71	New Recommendations 5		In outdoor enclosure box, whether surge protection is required ?. Also for PT secondary incoming circuit inside the box whether Fuse or MCB need to be consider. As DCU will be fitted inside.	May please consider MCB

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72	GUARANTEE Page	36 months from the date of commissioning or 42 months from the date of last supply made under the contract whichever is earlier	Warranty shall be 36 months from the date of commissioning or 42 months from the date of supply of material whichever is earlier	36 months from the date of commissioning or 42 months from the date of last supply made under the contract whichever is later																																								
73	Pg. 17 Scope of Supply	DCU along-with complete accessories require at field end (Panel, router / modem, earthing accessories, cabling etc.) in line with Technical specifications	As this tender is supply of FPI only, therefore installation accessories like GI frames/Clamps, Conductor/Wire for PT connection, Earthing Accessories shall be excluded from the scope of the rate contract as these items can not be appropriately evaluated & pre-manufactured in factory in absence of correct details of location for installation and type, shape & size of the poles for installation etc which are not provided by TPSODL.	Installation of the FPI is not in the scope of bidder However Supervision of installation,testing, commissioning & Integration of complete equipments is in scope of bidder																																								
74	Page no. 15,Schedule for Items, ANNEXURE I	<div style="text-align: right;">NIT No.: TPSODL/07/21-22/063</div> <div style="text-align: center;"><u>ANNEXURE I</u> <u>Schedule of Items</u></div> <table><thead><tr><th>Sr. No.</th><th>Description</th><th>Qty</th><th>UoM</th><th>Ex. Work (In Rs.) A</th><th>GST (In Rs.) B</th><th>Unit Price with GST (In Rs.) A+B</th><th>Amount (In Rs.) Q x (A+B)</th></tr></thead><tbody><tr><td>1</td><td>11kV O/H Communicable FPI</td><td>1080</td><td>EA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>Data Control Unit for 11kV</td><td>360</td><td>EA</td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>33kV O/H Communicable FPI</td><td>540</td><td>EA</td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td>Data Control Unit for 33kV</td><td>180</td><td>EA</td><td></td><td></td><td></td><td></td></tr></tbody></table>	Sr. No.	Description	Qty	UoM	Ex. Work (In Rs.) A	GST (In Rs.) B	Unit Price with GST (In Rs.) A+B	Amount (In Rs.) Q x (A+B)	1	11kV O/H Communicable FPI	1080	EA					2	Data Control Unit for 11kV	360	EA					3	33kV O/H Communicable FPI	540	EA					4	Data Control Unit for 33kV	180	EA					1. Our proposed unit is built in RTU (DCU) with mounting device type. No additional PT is required, so that utility can save the PT cost + Mounting bracket cost, Modem cost, batteries maintenance cost, cables cost. In this regard, please confirm to submit as option-2 in price bid. Please confirm is that acceptable for utility ? 2. we strongly recommended to add colons for price break up for PT, Transportation. So that over all actual unit price of FPI will be known for utility for cost consideration. Please confirm the same.	Specification to be complied
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75	page no.28, Specification of FPI for Overhead lines, clausno4, point no.17	Fault indications: a. Bright Red flash light (LEDs) for permanent faults, b. Preferably Green LED for transient fault with different blinking rate c. Preferably Yellow LED for low battery indication Bidder to submit the offered equipment details of features for indication of above faults categories.	We provided flashing pattern on alarm LED (RED): Permanent = 1 flash; Transient = 2 flashes; Battery = 3 flashes. Is this acceptable?	Specification to be complied																																								
76	page no.29, Specification of FPI for Overhead lines, clausno4, point no.33	FPI power up current: FPI should be power up with Minimum 20A line current & battery power shall be used only after fault	All power components are used at the same time. Is this acceptable?	Specification to be complied																																								

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77	page no.29, Specification of FPI for Overhead lines, clausno4, point no.34, Data Transmission / collector Unit package	This package shall include, a) Data Collector or Communication unit b) c) Solar panel or resin cast PT for auxiliary supply, d) 4G/MPLS Modem for SCADA communication and the proposed modem shall be industrial grade and for the use of out of outdoor application. e) Communication cables and supply cables f) Installation hardware with GI material for all equipment (Bidder to mention the package details along with Make and model of equipment)	Our RTU is fully integrated into one of the conductor mounted indicators, which would have no need for a pole mounted device. There is no additional requirement of Auxiliary transformer, Solar panel, DCU, Cables etc.. for point no.d- 3G/UMTS and 2G GPRS sufficient? Is this acceptable?	Specification to be complied/ SMS Shall also be generated in case of fault ..
78	page no.30, Specification of FPI for Overhead lines, clausno4, point no.39, Data Transmission Rate	Compatible to send data over 4G/MPLS modem connected to the Ethernet port of the FPI DCU.	Would 3G/UMTS and 2G GPRS suffice? Is this acceptable?	Specification to be complied
79	page no.30, Specification of FPI for Overhead lines, clausno4, point no.40, Data Transmission Rate	Data Transmission rate over Ethernet should be 10/100Mbps	its not applicable in our case as our FPI is built in RTU type. Please confirm.	Specification to be complied
80	page no.30, Specification of FPI for Overhead lines, clausno4, point no.41, Multi Master Reporting	One DCU (if required)/FPI should report at-least 6 master with single CASDU	is this to 6 masters at the same time or in a back-off strategy if ons cannot be reached?	Same time
81	page no.30, Specification of FPI for Overhead lines, clausno4, point no.43, DCU Self-diagnostic Alerts	DCU Door open alarm, Battery charger failure, LT Supply failure, Battery low alarm. (Local and on SCADA System)	Our RTU is fully integrated into one of the conductor mounted indicators, which would have no need for a pole mounted device. I/O indication can be done to SCADA but our RTU is built in type in FPI it self. Device removal indication can be configured	Specification to be complied
82	page no.30, Specification of FPI for Overhead lines, clausno4, point no.44, Communication unit battery back up	Battery (Along with charger) backup of 4 hrs should be provided for FPI DCU/DTU.	Its not applicable in our case as our FPI is built in RTU type. Please confirm.	Specification to complied
83	page no.30, Specification of FPI for Overhead lines, clausno4, point no.45, Installation Supervision	The bidder shall provide installation supervision	Please clarrify for how many units / days are required for installation supervision.We prefer to have one time supervision for 3 to 4 days along with utility team.	Ok Noted

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84	page no.30, Specification of FPI for Overhead lines, clausno4, point no.46, Integration with SCADA	The scope shall include integration of field device with Purchaser's SCADA System.	Please clarify for how many units support required for integration supervision.We prefer to provide 10 sets of FPI randomly selected feeders by utility. Please clarify more in details.	Complete support for integration																																								
85	page no.37, Specification of FPI for Overhead lines, clausno13, tender sample	Bidders to submit one sample of FPI at TPSODL, BERHAMPUR for verification of all desired features. For communicable FPI- Bidders to provide all required equipment and demo of one communicable FPI unit data communication and integration testing and only successful bidder shall be qualified for further processing.	We are working with Tata power other project as pilot project. Same can be considered for sample. Due to covid situation we could not able to submit the sample, we can demonstrate on webcall, . Please confirm the same.	Kindly submit the feedback report for review																																								
86	page no.37, Specification of FPI for Overhead lines, clausno14, training	The bidder shall arrange to provide the installation and operating training at TPSODL, BERHAMPUR offices as and when required for better installation and usage of the product.	Please clarify for how many units / days are required for training.We prefer to have one timetraining for 3 to 4 days at utility training centre. Mobilisation of team under scope of utility. OEM will conduct the training.	2 Days Training & Batchesh will be decide as per requirement.																																								
87		1.7.5 Indian companies in joint venture relationship with global OEM or authorized Indian channel partner/sales representative of global OEM are also eligible to bid if the qualification requirements stated above are met independently or in combination with the OEM. Authorization letter / certificate from the OEM to be submitted along with bid. Note: In case the bidder has a previous association with TPSODL/Tata Power group companies for similar products and services, the performance feedback for that bidder from TPSODL/ Tata Power group companies User Group shall only be considered irrespective of performance certificates issued by any third organization	We have supplied the Fault Path Indicator to the Primary Utility in our country and globally, for the past 5 years. We have also partnered with a local company for the tender, our channel partner has offered services (EPC contracts execution) to number of utilities in India for many years. Please confirm our financial experience will be considered for our partner to bid as primary bidder? we understood that the same clause applicable for 1.7.1, 1.7.2, 1.7.3 & 1.7.4. we will provide the exclusive manufacturing authorisation to our partner in utility given partner. will it be accented.	Please refer tender QR including point no 1.7.5 to check the eligibility for participation. No change in QR																																								
88	Page no. 15,Schedule for Items, ANNEXURE I	<div>NIT No.: TPSODL/OT/21-22/063</div> <div>ANNEXURE I Schedule of Items</div> <table><tr><th>Sr. No.</th><th>Description</th><th>Qty</th><th>UoM</th><th>Ex. Work (In Rs.) A</th><th>GST (In Rs.) B</th><th>Unit Price with GST (In Rs.) A+B</th><th>Amount (In Rs.) Q x (A+B)</th></tr><tr><td>1</td><td>11kV O/H Communicable FPI</td><td>1080</td><td>EA</td><td></td><td></td><td></td><td></td></tr><tr><td>2</td><td>Data Control Unit for 11kV</td><td>360</td><td>EA</td><td></td><td></td><td></td><td></td></tr><tr><td>3</td><td>33kV O/H Communicable FPI</td><td>540</td><td>EA</td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td>Data Control Unit for 33kV</td><td>180</td><td>EA</td><td></td><td></td><td></td><td></td></tr></table>	Sr. No.	Description	Qty	UoM	Ex. Work (In Rs.) A	GST (In Rs.) B	Unit Price with GST (In Rs.) A+B	Amount (In Rs.) Q x (A+B)	1	11kV O/H Communicable FPI	1080	EA					2	Data Control Unit for 11kV	360	EA					3	33kV O/H Communicable FPI	540	EA					4	Data Control Unit for 33kV	180	EA					As a part of Tata group policy for encouraging the new vendors who maintains Quality & global standards, we request to consider the price offer for 25% Qty or 50% Qty of the schedule items & accordingly to submit the propositional % value of EMD. We strongly request to consider waiver offer EMD with submitting the undertaking letter.	No Change
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89	Page no.17, Clause no.6, Payment terms	On completion of supply of complete material - 70% of invoice amount shall be paid within three months from the date of receipt of verified invoice (s) at designated BIRD counter. On completion of installation – 10% of invoice amount shall be paid within one month from the date of receipt of verified invoice (s) at BIRD counter. On completion of charging - 20% of invoice amount shall be paid within one month from the date of receipt of verified invoice (s) at BIRD counter.	As utility procuring under rate contract for 1 year, we will not be known for payment mile stones of installation, commissionioing acitivies. We request to accept as below terms. A. 80% payment from the date of delivery of the materials with in 45 days. b. 20% after completion 7months from the date of delivery materials.	No Change																																								

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90	Page no.8 Clause 3.1 Bid Submission	FIRST PART: "EMD" of Rs. 9,00,000 /- (Rupees Nine Lakh only) shall be submitted.	We are MSME registered vendor, many of the utilities are considering MSME for EMD exemption or reduction of EMD in order to support the small vendors & making the strong competition. We request to consider the waiver off EMD submission with self undertaking letter submission for MSEM registered bidders, or to reduce min of 50% BG to submit.	Please refer GCC document for relaxation for MSME vendor
91	Page no.5, Clause No.1.3 Calendar of Events	(e) Last date and time of receipt of Bids 08.11.2021 up to 17:00 Hour	We strongly request to consider for extending the tender minimum of 20 days in view of banking holidays by next week due to Diwali festival, for making the proper bidding.	Please refer the corrigendum regarding the same.
92	Clause No : 1.7.1 , Page No : 06	The Bidder should have an average annual turnover of Rs. 5 Crores in any of last three Financial Years out of FY 17-18, FY18-19, FY 19-20 and FY 20 - 21.	Our is a Group Company of M/s Rajesh Power and System Integrator of M/s Schneider Electric. Accordingly We will submit our Balance Sheet and Audited P & L Account.	Please refer tender QR point no 1.7.5 to check the eligibility for participation
93	Clause No : 1.7.2 , Page No : 06	The Bidder should have executed similar items either 100 % of the total tender value during last three years ; or Single order of 50 % of the total tender value during last three years; or 2 orders of 30 % each of the total tender value during last 3 years. Copy of work order /completion certificate to be submitted in this regard.	As You are Aware Government DISCOMS are biggest Users of Fault Passage Indicator. However, because of Covid - 19 Pandemic, There were no big Tenders since Last Two Years. We had executed The Order of Approx around 21 Crores from Gujarat Utilities from 2014 to 2018. We request You to consider above and allow us to Participate in the Bid.	No Change
94	ANNEXURE II, Page No : 18, Clause No : 6 - Payment Terms	On Completion of Supply of Complete Material - 70 % of Invoice Amount shall be paid within One Month from the date of receipt of The verified invoice (s) at TPSODL. On Completion of installation - 10 % of invoice amount shall be paid within one Month from the date of receipt of verified invoice (s) at TPSODL. On completion of charging - 20 % of invoice amount shall be paid within one month from the date of receipt of verified invoice (s) at TPSODL.	90 % Payment with 100 % Taxes through 45 days irrevocable LC negotiable against Original Proof of dispatch, i.e. invoice, delivery Challan etc. Balance 10 % against installation or within 60 days from Date of Dispatch whichever is earlier. LC to be established Prior to dispatch.	No Change
95	Clause No : 27 - Insurance, Page No : 28	Insurance	Storage and Storage Insurance is not in Our Scope. Only Transit Insurance will be to Our Account.	The insurance as mentioned in GCC shall be applicable
96	Payment Terms , Clause no 6 page no 18	On completion of supply of complete material - 70% of invoice amount shall be paid within one month from the date of receipt of verified invoice (s) at TPSODL. On completion of installation – 10% of invoice amount shall be paid within one month from the date of receipt of verified invoice (s) at TPSODL. On completion of charging - 20% of invoice amount shall be paid within one month from the date of receipt of verified invoice (s) at TPSODL.	Since the scope is for Supply only. We request you to make the payment terms as below : 1) 80 % payment within 45 days on receipt of the materials 2) Balance 20% shall be released within 45 days on commissioning of the materials . If the commissioning is delayed beyond 60 days , the same amount shall be released against submission of equivalent amount of BG	No Change
97	Validity of the Rate Contract, Page 16, Footnote of Schedule of Items and Page 17 Cl. 1	Rate Contract Validity mentioned is conflicting. Pg 16 mentions 2 years and pg. 16 mentions 1 year.	We understand that validity of the Rate Contract will be for one year for this bid.	Rate Contract will be valid 2 Years.

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98	Pg. 18 Delivery Schedule	The material shall be delivered within 60 days from issue of approved drawings or issue of RO whichever is later for 1st order/lot and for balance orders/lot material shall be delivered within 60 days from issue of release order. The complete drawings as per technical specification shall be submitted within 7 days from receipt of rate contracts.	Drawing submission for first order shall be in 16 weeks from drawing approval and subsequently 16 weeks from RO for further order. Drawing submission in 4 weeks from receiving clear design inputs.	<u>Revised Clause as under</u> The material shall be delivered within 90 days from issue of approved drawings or issue of RO whichever is later for 1st order/lot and for balance orders/lot material shall be delivered within 80 days from issue of release order. The complete drawings as per technical specification shall be submitted within 7 days from receipt of rate contracts.