

**Pre Bid Queries Response for "SITC of FRTUs at TPCODL"  
NIT No.: TPCODL/P&S/ 100000280/22-23**

Sr. No.	Detailed Reference to Tata Power Technical Document. Please specify Document No / Clause No / Page No	Description as per Bid Document	Remarks - Query / Clarification	TPCODL Response
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	Submissions by Bidders/10.1/99	CPRI report for the product offered as per the Gol order no. 25-17/6/2018-PG dated 2nd July 2020 and subsequent order No. 12/34/2020-T&R dated 8th June 2021	It's mandatory from CPRI or other lab will be considered.	1. Preferably Bidder to submit the certificate before the release of RC. 2. However TPCODL decision will be communicated / discussed with successful bidder for submission of CPRI certificate i.e. before placement of order/before delivery of material at site. 3. Bidder to note the CPRI certificate Cyber Security is mandatory.
2	BOQ Item No-1/Pre-Wired FRTU Panel with FRTU ,FRTU GTP,FRTU Dtasheet	As per BOQ :-The I/O Requirement: with 32 DI, 16 DO, 8 AI with Auxiliary relay for each Digital Input Output and As per FRTU GTP & Datasheet The Capacity of I/O should sufficient for Two 4way RMU automation (Minimum 64 DIs and 32 DOs & 16 AI hardwired capacity).	Clarify the Exact I/O Points required	The current I/O Requirements are 32 DI, 16 DO, 8 AI, however proposed FRTU shall be expandable to accommodate I/O modules i.e. Minimum 64 DIs and 32 DOs & 16 AI
3	129	Bidder shall provide Software up-gradation (if any), Patch Management services including sub-vendor products for next 5 years over and above as mentioned in item a.	Please clarify the exact requirement for next five year we have to provide Remote/Telephonic Support or we have to site visit also	Bidder to make site visit as per the requirement mentioned in the RFP, irrespective of maintenance support (to ensure availability as per SLA), Software Upgradation, Patch Management etc.
4	272	Ruggedcom / Hirschman / MOXA/CISCO	Allow the equivalent vendors also which meet the technical requirement like Phoenix	Bidder to consider the equipment as mentioned in RFP for Preferred make
5	General	Supply of Sim card	Please clarify the Scope of supply of Sim card .	Supply of SIM Cards & Monthly Data Charges shall be in the scope of TPCODL
6	General	LD Clause	LD Clause not mentioned against the delay of delivery	Please refer GCC
7	General	The delivery Schedule for the next Two year	The Delivery Schedule for rate of contract is not clear it will be same as 200 FRTUs delivery time like after approval delivery with in 80 days.	Duration of delivery, Drawing submission, FAT, SAT will be on the similar lines of RFP for the RO released by TPCODL during the contract period of 2 years.
8	8.0/ Bidder's Experience, Evaluation Criteria/90	Bidder shall provide details of projects with application modules, which have been successfully completed during the last 5 financial years	We have to submit the executed Project detail within 5 year or 3 year because as the Qualification requirement clause 1.7 page 6 .The bidder should have demonstrable experience, from among either of the following, of having successfully executed similar works during last Three (03) years ending on the last day of the month previous to the one in which the Tender is issued	Bidder to submit the document against commercial and technical requirement for the period of five years.
9	1.7/ Qualification Requirement / Eligibility Criteria/6	The bidder should have demonstrable experience, from among either of the following, of having successfully executed similar works during last Three (03) years ending on the last day of the month previous to the one in which the Tender is issued,	We have to submit the Tender within 3 year or 5 year because as the Bidder Experience,Evaluation Criteria clause 8.0 .The Bidder shall provide details of projects with application modules, which have been successfully completed during the last 5 financial years	Bidder to submit the document against commercial and technical requirement for the period of five years.

10	Section-A, Clause 3.2.d, Page 14 of 79	Space available near the RMUs will be utilized to house all the FRTU panels. Bidder to ensure optimal utilization of space to accommodate the FRTU panel.	Request TPCODL to confirm the sufficient space is available adjacent to all RMUs to erect the FRTU Panels.	As per the RFP Bidder's are requested to visit sample sites for availability of space and other installation requirement
11	Section-A, Clause 3.2.d, Page 14 of 79	IP class of the panel enclosure shall be IP55/IP65/IP67 as per the site requirement.	We understand that FRTU Panel has to be IP55 with canopy. Kindly confirm.	Bidder to note that, most of the RMUs are installed under the sky, as per the RFP it is proposed to consider panel IP55 with Canopy. However, if the bidder's are considering higher IP class of the panel then, preference will be given during technical evaluation.
12	Section-A, Clause 3.3.1.a, Page 14 of 79	Activities in Existing RMUs Supply, installation and wiring of multipliers for providing potential free contacts for Digital Inputs such as status indication of Isolators, Breakers and others signal in the existing RMUs as per "Indicative Signal List" (Refer Annexure-4 of Section-E for Indicative Signal List).	Request TPCODL to confirm the available space in the RMU panel for Supply, installation and wiring of the MFM, CMRs etc. Also request TPCODL to share the GA drawing of the RMU panel.	As per the RFP Bidder's are requested to visit sample sites for availability of space and other installation requirement. As per TPCODL study the adequate space is available for mounting the MFM and CMRs, However the requirement of space depends on the solution proposed by the Bidder's. In addition TPCODL has also proposed site visit with successful bidder for finalization of BOQ before the release of RO.
13	Section-A, Clause 3.3.1.c, Page 14 of 79	If required, bidder to mount the CMRs with bases in RMUs panel with proper arrangement i.e. segregated for Input, Output and Power Supply requirement. Mounting of TBs for the proposed scope shall not disturb the existing wiring and arrangement.	We request TPCODL to confirm that required spare for installation of CMR in the RMU will be provided by TPCODL . We request TPCODL to confirm the contact voltage of the CMR which needs to be installed in the RMU.	Refer TPCODL Response to Item 3 Contact Voltage of CMR is 24 V DC.
14	Section-A, Clause 3.3.1.e, Page 14 of 79	Supply, Installation and Commissioning of the MFM in the RMUs shall be in the scope of the Bidder. Bidder shall make Din-Rail arrangement in the RMUs panel for installation of MFM.	1. We request TPCODL to confirm that required spare for installation of MFM in the RMU will be provided by TPCODL . 2. We understand that 230V AC will be provided in RMU by TPCODL. Kindly confirm. 3. We request TPCODL to confirm the contact voltage of the CMR which needs to be installed in the RMU.	1. Refer TPCODL Response to Item 3 2. Please note the 230 V AC Supply is available in the RMU Panel, However as per the RFP all the equipment are DC Powered including MFM. 3. Contact Voltage of CMR is 24 V DC.
15	Section-A, Clause 3.3.1.i, Page 14 of 79	Instrumentation and control cable shall be laid properly from RMUs to FRTUs.	Request TPCODL to confirm required trench/cable tray for laying of cable between RMU and FRTU panel will be made available by TPCODL. Kindly confirm.	1. Bidder can use the available trenches and cable tray as applicable. However bidder to note at each site the requirement will be captured during site visit planned as per the RFP with successful bidder. 2. As per site requirement bidder may have to carryout Civil Activity for proper installation of FRTU panel along with trench and Cable tray.
16	Section-A, Clause 3.3.2.a, Page 15 of 79	Data acquisition and Control through BCPUs should be explored. The communicable BCPUs to be integrated with the proposed FRTUs through ethernet switch.	We understand that BCPU available at the time of commissioning will be integrated while signal for other feeders will be hard-wired. Kindly confirm.	Bidder's understanding is in line with RFP
17	Section-A, Clause 3.3.2.f, Page 15 of 79	AC & DC Power Supply used in RMU and FRTU panel shall be monitored and communicated to Purchasers' SCADA System through FRTU.	We request TPCODL that required transducers/soft signal required for monitoring of the power supply shall be provided by TPCODL. Kindly confirm.	Bidder to consider all transducers/relays required for monitoring of Power Supply and shall be mounted in the FRTU panel.
18	Section-A, Clause 3.3.2.i, Page 15 of 79	The ITC cost is inclusive of any addition of Module/s in a FRTU Rack for the RMUs as per the site requirements.	We understand that ITC cost is inclusive of any addition of Module/s in a FRTU Rack due the time of commissioning. Once FRTU is commissioned, ITC of additional module is payable extra by TPCODL. Kindly confirm.	Bidder's understanding is in line with RFP

19	Section-A, Clause 3.4.b, Page 15 of 79	Providing of proper earthing to FRTU and armored cable with separate Earth pit shall be in the scope of the Bidder	We understand that separate earth pit for FRTU can be constructed adjacent to FRTU panel itself. Kindly confirm.	TPCODL proposes to use the existing earthing system of RMU for proposed FRTU Panel. In case of special requirement of the bidder, then earth pit along with cable are in the scope of the bidder.
20	Section-A, Clause 3.6.b, Page 16 of 79	The metal legs of the FRTU panel to properly fastened to fix the panel on the Cement floor through nuts and bolts.	1. Request TPCODL to kindly confirm that Cement floor along with required Civil works for FRTU panel erection will be in scope of TPCODL. 2. Also request TPCODL to confirm that minimum height of the metal legs to be provided in the FRTU panel.	1. Bidder can use the available trenches, cable tray and plinth as applicable. However bidder to note at each site the requirement will be captured during site visit planned as per the RFP with successful bidder. 2. As per site requirement bidder may have to carryout Civil Activity for proper installation of FRTU panel as per minimum height mentioned in the RFP along with trenches and Cable tray.
21	Section-A, Clause 3.7.c, Page 17 of 79	As all Communication equipment to be housed inside the FRTU panel, Bidder to ensure the size of the panel accordingly, Panel GA will be finalized during detailed engineering.	Request TPCODL to kindly confirm the minimum size of the panel which has to be provided by the bidder to provide level playing field to all bidders.	1. Size of the panel will be on basis of proposed solution of the Bidders. Minimum Panel Size shall accommodate all the required equipment including battery and Battery Charger, Modem etc. with sufficient cooling for electronics to work properly. 2. As per the RFP the size of the panel shall not be more than the RMU Size.
22	Section-A, Technical Solution Score 1b), Page 31 of 79	Experience on implementation of IOT based application for FRTU based Field Automation Systems (4 marks)	Since IOT functionality is not asked in the FRTU but in 5G Modem router in existing tender specification, request TPCODL to review the marking scheme for the same.	1. As per the RFP MQTT protocol support is envisaged in FRTU, accordingly the marks allocated in the evaluation sheet.
23	Section-A, Technical Solution Score 1b), Page 31 of 79	Project Experience in FRTU Integration over (5 marks) a) IEC 61850 (ED1 & latest ED2), implementation of logic using GOOSE	Since Goose functionality is not asked in the existing tender specification, request TPCODL to review the marking scheme for the same.	Bidder to note that TPCODL may plan to extend the solution for their 33/11 kV Primary Conventional Substations. Hence the requirement is mentioned in the RFP and accordingly the marks are allocated for technical evaluation.
24	Section-A, Technical Solution Score 1b), Page 31 of 79	Maintenance services for the supplied Hardware, System and application Software up-gradation, Patch Management services including sub-vendor products during the Standard warranty period of 5 Years from the date of system handover after SAT, resolution of all punch point of SAT and trouble-free operation of the entire system for a period of one month.	We understand that maintenance services for 5 years will be applicable site wise. Kindly confirm.	Bidder understanding is in line with RFP
25	Section-A, Clause 14.9, Page 71 of 79	Database modification during Warranty Period All database modification major or minor is in the scope of the bidder, after the system handover and during the warranty period. The Scope covers FRTU configuration and necessary changes for control center communication.	We request TPCODL to quantify the numbers of new bays and stations to be included in 5 years warranty as it is impossible for bidders to estimate the cost involved without any estimates for 5 years period.	1. Bidder to add optional service charges in the attached Price bid indicating cost of service for integration of one no. 4 Way RMU per site. 2. The integration cost added in the price bid will be evaluated during technical/commercial evaluation.

26	Section-B, Clause 1.3, Page 5 of 57	The FRTU shall be non-redundant for the current application, however proposed FRTU shall support redundancy in hot standby mode with bump less Auto Changeover.	We understand the CPU and PSU redundancy should be achieved by adding additional CPU/PSU card only and no other card/module should be required for the same. Kindly confirm.	1. For FRTU used for RMU automation will be non-redundant. 2. However if TPCODL plans to use this solution for their 33/11 kV PSS, then the proposed FRTU shall provide the redundancy with additional hardware only without any additional software license for achieving the redundancy.
27	Section-B, Clause 1.8, Page 6 of 57	The FRTU shall be Din Rail Mounted.	We request TPCODL to accept rack mounted/wall mounted FRTU also.	Din Rail mounted FRTUs are preferred. However bidder may propose rack mounted/wall mounted FRTU within the panel size mentioned in the RFP and addressing the environmental conditions of the sites.
28	Page 320 of 327	Information to Bidder for Substation Automation for 70 Nos. 33/11 kV Primary Substations	Annexure – 9: Information to Bidder on page 274 and Information provided from page 320 to 327 is repeated. Request TPCODL to confirm which one we need to be follow against this tender.	Both are identical except the Typographical mistake of "Substation Automation for 70 Nos. 33/11 kV Primary Substations". This should to be consider as "RC for SITC of FRTUs at TPCODL"
29	DATA SHEET :: Multi-Function Meter, Page 303 of 327	CT Type- Ring CT	As per Datasheet optional CT Type- Ring CT is asked in MFM while same is not mentioned in Annexure -9 Sr No. H.1 Multifunction meter Section-E Page 45 of 47.	Ring Type CT is not envisaged however mentioned at optional.
30	Section-E , Page 39 of 47	Pre-wired FRTU Panel Protocols: IEC60870-5-103, IEC 60870-5-104, IEC 61850 (ED1, ED2), RSTP, MODBUS (Serial & TCP/IP), SNMP (V1.0, V2.0, V3.0), NTP & SNTP, MQTT	1. Data sheet Page 295 of 327 doesn't ask for MQTT support while same is mentioned in Annexure-9. We understand that MQTT support is required in 5G modem cun router. Kindly confirm. 2. Request TPCODL to confirm Data Sheet specification supersede the Annexure – 9: Information to Bidder, Information provided from page 320 to 327 and specification mentioned in price schedule.	1. MQTT support is required (FRTU, Modem). 2. Supply of 5G Modem is also in the scope of the bidder
31	Data Sheet :: Battery & Battery Charger, Page 310 of 327	5.3 Voltage/cell 2 volts	We request TPCODL to kindly consider Li-Ion battery for the FRTU DCPS as it is not practically possible to put 12 cells of 2V VRLA type battery within the FRTU cabinet.	1. Bidder may consider 12 V Cell in place of 2V. 2. Bidder to consider VRLA battery
32	Data Sheet :: Data Sheet :: FRTU Page 296 of 327	FDR Retention Period 1 Month	We Understand that FDR retention period is one month or 10000 Event is Comply the Requirement .	FDR retention period shall be one month for all Digital and Analog points.
33	Data Sheet :: Data Sheet :: FRTU Page 296 of 327	Auxiliary Relays for Digital Outputs- Required, Auxiliary relays with Min 10 Ampere rating with 2 NO contacts for each digital outputs	We understand that Current rating for Interposing Relay (Digital Outputs) will be as Per Interposing Relay Data Sheet Mention on Page no. 301 of 307. Please Confirm	Bidder to refer GTP of Auxiliary Relay for Digital Output (Rating shall be 30 A for 3 sec, 5 Amps continuously at 660V)
34	Data Sheet :: Data Sheet :: FRTU Page 296 of 327	RTU Redundancy- Optional (CPU, Power, Communication & Memory)	We Understand that FRTU is without Redundancy . Redundancy provision is not mandatory for FRTU.	Please Refer TPCODL Response to Item 17
35	Data Sheet :: Data Sheet :: FRTU Page 297 of 327	Auxiliary Power Supply -Redundant 18-72VDC (24VDC) Supply with Diode Oring unit and MCBs with add on NO contact.	Two Separate Source available in RTU. ( one is from Battery charger + One Is Raw Power Provided to FRTU). two PSU/ SMPS with O-ring Diode used to convert 230 Auxiliary Power Supply to 24/48 V DC with redundancy. These Control Supply Voltage Used for FRTU control Supply and Powering up .	FRTU shall be considered with Non-Redundant Power Supply.
36	Data Sheet :: Data Sheet :: FRTU Page 300 of 327	Auxiliary Power Supply Power supply module of 18-72VDC	The Auxiliary Supply Range for any employed instrument is between 25% of tolerance for the upper and lower side of proposed Power (24/48 VDC), which is typically in the range of 18 VDC in the lower side and 60 VDC for the higher side. Please confirm	Auxiliary Power Supply Power supply module shall be 18-72 V DC

37	DATA SHEET :: Multi-Function Meter Page 303 of 327	Accuracy Class Class 0.2S / 0.5S (IEC62053-11 and IEC62053-22)  Sr. 8. Accuracy kW / kWh 0.5 S as per IEC62053:22	As Per MFM Data Sheet accuracy Class is 0.2S / 0.5S However as per Sr. no 8 Accuracy class for kW / kWh is 0.5 S Kindly Confirm the Accuracy class for MFM Meter.	Accuracy Class of MFM meter shall be 0.2 S.
38	DATA SHEET :: Multi-Function Meter Page 279 of 327	Managed Layer2 Ethernet Switch ICommunication Ports: 8 PORT (with 6 Copper ports and 2 Fibre Ports SM) 100/1000 MBPS	According to the Ethernet switch data sheet On Page no 299 of 327, the speed of the copper ports is (10/100 mbps) and the speed of the two SM fibre ports is 1000 MBPS, however according to the BOQ detail, all ports are 100/1000 MBPS. We believed that the Data sheet Specification would be supersede by the BOQ Specification. Please confirm	Speed of the copper ports shall be - 10/100 mbps and Speed of SM fibre ports shall be minimum 1000 MBPS
39	DATA SHEET : Battery & Battery Charger Page 266 of 327	Battery & Battery Charger Output Volatge & current	Kindly confirm the Battery & Battery Charger output voltage & current	Battery Charger Output Voltage - 24 V and Current 10 Amp (minimum)
40	1.2 FRTU/ Page 146 of 327	The FRTU shall be non-redundant for the current application, however proposed FRTU shall support redundancy in hot standby mode with bump less Auto Changeover	FRTUs are Non-Redundant devices, hence future redundancy feature is not applicable. Kindly Confirm.	1. For FRTU used for RMU automation will be non-redundant. 2. However if TPCODL plans to use this solution for their 33/11 kV PSS, then the proposed FRTU shall provide the redundancy with additional hardware only without any additional software license for achieving the redundancy.
41	1.12 FRTU/ Page 147 of 327	Should provide latest Microsoft Windows based maintenance and configuration tools. The tools should have functionality of both remote and local access.	How many configuration software license shall be provided	Configuration Software is considered to be free with Hardware. No additional Cost is envisaged for FRTU configuration tools.
42	1.23 FRTU/ Page 148 of 327	The FRTU should support features i.e. Logic Development, Auto-Change over of source functionality, Communication between FRTUs for automatic GRID management.	Please clarify the requirement of Auto-Change over of source functionality and Communication between FRTUs for automatic GRID management.	Bidder to consider the FRTU supporting all application software and configuration tools for configuration of FRTU to make the grid self sustainable. (Group Control, Load Shedding, Control Logic, Reverse Blocking AutoReclose, Self Healing)
43	1.43.3 Power supply / Page 162of 327	18-72 V DC power supply module, with ±15% tolerance	Ethernet switches does supports separate 24V & 48V DC supply please confirm how many 24V & 48V Switches required	The Auxiliary Power Supply for all equipment shall be 18-72 V DC
44	1.43.3 Power supply / Page 162of 327	Provision for connecting redundant power supply option should be available	Ethernet Switch is proposed with single power supply as per FRTU application. Please confirm.	Power Supply redundancy is not envisaged in the Ethernet Switch
45	2.9.6 Installation Images and Source Code / Page 236 of 327	All customized software shall be supplied as part of the code management library along with the source code or other distribution image against which the code changes are to be applied	Only the project specific configuration files relevant to this project will be provided. Please acknowledge	Bidder to adhere as per the RFP
46	GTP/Ethernet switch/Time Synchronization	SNTP, IEEE1588 V2	We are offering SNTP suitable for this project requirement. Please confirm	SNTP is acceptable
47	7.1.1 SCC / Pg. 13 of 327	After finalization of tender, TPCODL shall place a Rate Contract for a period of 02 years to the successful bidder.	Two is very long period to keep prices valid specially for electronics items considering prevailing global shortage and significant content of copper cables. Please keep the contract valid maximum for 1 years.	Bidder to adhere as per the time lines of RFP
48	3.0 Scope of work / Pg. 74 of 327	Unloading, Storage scope	As per Cl. 12.3.1 , TPCODL can also provide the storage space in nearby substations, so we request to exclude unloading, Security of material and transit of material from substation to installation point from Bidder's scope.	Bidder to consider the entire scope as per the RFP

49	3.1.a General / Pg. 75 of 327	Bidder to note that any addition of the quantity required for sites during detailed engineering, will be in the scope of the bidder, with no commercial implication to TPCODL.	Survey will be mutually done with TPCODL team with best care to capture as much detail as possible. However, in case there arise additional requirements, same shall be extra as applicable. Please confirm.	No Extra Payment will be made to the Bidder after the release of RO. Bidder to note that Site visit is proposed with Successful bidder for finalization of the BOQ as per each site requirement, accordingly the RO will be released by TPCODL. Any additional Item required beyond RO for successful commissioning and handover will be in the scope of the bidder.
50	3.3.1.a FRTUs / pg. 77 of 327	Data acquisition and Control through BCPUs should be explored	Please confirm if there are any BCPUs in existing RMUs. If yes, please confirm the make and protocol.	Make and protocol will be provided during the detailed engineering. However all the required protocols are mentioned in the FRTU RFP.
51	3.4 Electronic Earthing / 77 of 327	Electronic Earthing for BCPU	There is no line item for earthing in Bid Price Schedule , so we understand this clause is not applicable to bidders. Please confirm.	TPCODL proposes to use the existing earthing system of RMU for proposed FRTU Panel. In case of special requirement of the bidder, then earth pit along with cable are in the scope of the bidder.
52	3.12 and 17 / Mandatory & Recommended Spares / pg. 80 of 327	Mandatory & Recommended Spares	There are no mandatory spares mentioned in the Bid Price Schedule so we understand supply of spares is not in bidder's scope. Please confirm.	Bidder to refer Sheet 326 & 327 for required spares.
53	4.1.3 / Terminal Point / Pg. 81 of 327	Integration of the existing system field devices and hardware signals (IEDs)	We understand the configuration of existing IEDs is not in bidder's scope. ICD/SCD files will be provided by TPCODL	Configuration of ny existing devices is not in the scope of the bidder. The required data of IEDs will be provided by TPCODL.
54	17.1.3 / Terminal Point / Pg. 81 of 327	Integration with Control Centre SCADA Systems as specified in the specifications.	We understand the configuration at control center end will be done by TPCODL	Bidder's understanding is in line with RFP
55	11.7.1.m / Bidder's Responsibility / Pg. 104 of 327	Performing the installation of the FRTU and Communication Systems at Purchaser's site under Purchaser's supervision	Please confirm if there is any specific design for installation of FRTU panel base to be followed.	1. Bidder can use the available trenches, cable tray and plinth as applicable. However bidder to note at each site the requirement will be captured during site visit planned as per the RFP with successful bidder. 2. As per site requirement bidder may have to carryout Civil Activity for proper installation of FRTU panel as per minimum height mentioned in the RFP along with trenches and Cable tray.
56	14.6.a / Warranty Support / Pg. 129 of 327	Standard warranty period of 5 Years from the date of system handover after SAT	We propose warranty of 60 months (5 years) from handover after SAT or 66 months from supply whichever is earlier on Non-consumable items against manufacturing defects. Please confirm	As per Tender Document
57	14.6.c / Warranty Support / Pg. 129 of 327	SLA will be prepared and adhered by Bidder,	Since AMC is not in scope so SLA is not applicable. Please acknowledge.	SLA is applicable for the standard 5 year warranty and the scope defined during the period.
58	14.9 / Database modification during Warranty Period / 133 of 327	Database modification during Warranty Period	Database modification for any routine configuration changes during warranty shall be excluded from bidder's scope. Warranty support will be provided for trouble-shooting. Please confirm	1. No database modification is required in the FRTU after the handover. 2. Any changes as mentioned during warranty period i.e. Patch mangement, Application on OS Update is in the scope of the bidder for the period 5 years. 3. Bidder to add optional service charges in the attached Price bid indicating cost of service for integration of one no. 4 Way RMU per site. 4. The integration cost added in the price bid will be evaluated during technical/commercial evaluation.
59	3.0 / Modem cum Router Specs	5G Fallback to 4G/3G/2G	We proposed modem to be 4G fallback to 2G as per industry practise. Please confirm.	5G Fallback to 4G/3G/2G
60	3.0 / Modem cum Router Specs	Dual SIM Support	Modem for FRTU is sufficient with single SIM support. Please confirm.	No deviation is accepted

61	4.1.17.1 / Battery-Battery Charger / pg. 184 of 327	The battery should be capable of withstanding normal load of FRTU & operational load of RMU isolators	We understand that RMU will have it's own battery and battery charger provided in FRTU panel needs only for operation of FRTU panel. Supply for Isolator control is not required to be provided through FRTU panel. Kindly confirm.	Battery and Battery charger capacity shall be considered as per the RFP
62	4.1.17.1 / Battery-Battery Charger / pg. 184 of 327	Battery Capacity 50 AH,10Amps	26AH battery is quite big. Generally for FRTU load 26AH battery is good enough. Please reconsider the battery size.	Battery and Battery charger capacity shall be considered as per the RFP
63	MFM Specs / Price Bid Schedule / Pg. 284 of 327	Accuracy Class: 0.2 S as per IEC62053:22	Specs of MFM are contradictory. As per detailed MFM Spec 0.5s Class MFM is required however in Price Schedule 0.2s Class is mentioned. Please confirm the actual requirement.	MFM Accuracy class shall be 0.2S
64	Limitation of Liability		Please confirm The aggregate liability for any or all claims including liquidated damages and indemnification shall not exceed 100% of the total contract value.	As per Tender Document
65	Payment terms		Please confirm the payment terms clause	Refer Section-A Clause 9.3 Milestones, Pg.93 of the Tender D
66	Section A - Project Specification Clause 3.3 Installation & Commissioning Section 3.3.1.e Activities in Existing RMU (Page 76 of 327)	Supply, Installation and Commissioning of the MFM in the RMUs shall be in the scope of the Bidder. Bidder shall make Din-Rail arrangement in the RMUs panel for installation of MFM	Proposed MFM to be mounted in the existing RMU Panel is Flush type or Din rail Type	MFM Flush mounting is preferred, however bidder may consider DIN rail mounted MFM with all functionalities.
67	Section A - Project Specification Clause 3.2 Engineering Section 3.2.d (Page 76 of 327)	Appropriate IP class shall be considered for all the equipment planned under this project. IP class of the panel enclosure shall be IP55/IP65/IP67 as per the site requirement	We are Proposing IP 55 Panels for all sites. Kindly Confirm	Bidder to note that, most of the RMUs are installed under the sky, as per the RFP it is proposed to consider panel IP55 with Canopy. However, if the bidder's are considering higher IP class of the panel then, preference will be given during technical evaluation.
68	Section A - Project Specification Clause 10.0 Submission by Bidders	The technical bid shall be properly indexed and is to be submitted in Soft Copy and three nos. Hard Copy	We understand technical bid has to be uploaded online and no hard copy needs to be submitted. Kindly confirm	No Hard Copy to be submitted
69	General		Kindly provide the recommended dimension for the FRTU Panel	1. Size of the panel will be on basis of proposed solution of the Bidders. Minimum Panel Size shall accommodate all the required equipment including battery and Battery Charger, Modem etc. with sufficient cooling for electronics to work properly. 2. As per the RFP the size of the panel shall not be more than the RMU Size.
70	General		Please share the IED details & communication interface and compatibility for each type at site	IED details will be shared during the detailed engineering with successful bidder. However all the required protocol for integration with FRTUs are mentioned in the RFP.
71	General		Supply of SIM Cards & Monthly Data Charges shall be TPCODL Scope	Yes Bidders understanding is in line with RFP
72	General		Kindly Provide drawings/photos of existing RMU Panels of each type to understand the available space to carry out to the adaptation works in existing RMU Panels	As per the RFP Bidder's are requested to visit sample sites for availability of space and other installation requirement. As per TPCODL study the adequate space is available for mounting the MFM and CMRs, However the requirement of space depends on the solution proposed by the Bidder's. In addition TPCODL has also proposed site visit with successful bidder for finalization of BOQ before the release of RO.

73	Annexure -9 Information to Bidders page 274 of 327	Bidder shall ensure the proposed architecture are certified by Cyber Security auditor for the compliance as per Industry standards. Bidder to demonstrate all the cyber security measures considered and implemented during FAT and SAT	Please Quantify the no of sites to be audited for Cyber Security	1. Cyber Security Audit to be conducted for 5% of the sites as per the number of RO released by TPCODL in period of two years. i.e. 5% against each RO. 2. However bidder to fix the gaps for all sites/FRTUs and submit the final report
74	Annexure -9 Information to Bidders page 274 of 328	Bidder to ensure that all the product own and sub-vendor product offered are tested at CPRI Lab for cyber security as per the Guidelines of MoP Order No.25-L7 /6/2018-PG dated 2nd July, 2020	Kindly clarify whether undertaking in this regard for the respective OEM to provide such certifications before delivery upon contract award is acceptable or not	1. Preferably Bidder to submit the certificate before the release of RC. 2. However TPCODL decision will be communicated / discussed with successful bidder for submission of CPRI certificate i.e. before placement of order/before delivery of material at site. 3. Bidder to note the CPRI certificate Cyber Security is mandatory.
75	Submissions by Bidders/10.1/99	CPRI report for the product offered as per the GoI order no. 25-17/6/2018-PG dated 2nd July 2020 and subsequent order No. 12/34/2020-T&R dated 8th June 2021	It's mandatory from CPRI or other lab will be considered.	1. Preferably Bidder to submit the certificate before the release of RC. 2. However TPCODL decision will be communicated / discussed with successful bidder for submission of CPRI certificate i.e. before placement of order/before delivery of material at site. 3. Bidder to note the CPRI certificate Cyber Security is mandatory.
76	BOQ Item No-1/Pre-Wired FRTU Panel with FRTU ,FRTU GTP,FRTU Dtasheet	As per BOQ :-The I/O Requirement: with 32 DI, 16 DO, 8 AI with Auxiliary relay for each Digital Input Output and As per FRTU GTP & Datasheet The Capacity of I/O should sufficient for Two 4way RMU automation (Minimum 64 DIs and 32 DOs & 16 AI hardwired capacity).	Clarify the Exact I/O Points required	The current I/O Requirements are 32 DI, 16 DO, 8 AI, however proposed FRTU shall be expandable to accommodate I/O modules i.e. Minimum 64 DIs and 32 DOs & 16 AI
77	129	Bidder shall provide Software up-gradation (if any), Patch Management services including sub-vendor products for next 5 years over and above as mentioned in item a.	Please clarify the exact requirement for next five year we have to provide Remote/Telephonic Support or we have to site visit also	Bidder to make site visit as per the requirement mentioned in the RFP, irrespective of maintenance support (to ensure availability as per SLA), Software Upgradation, Patch Management etc.
78	1.43/Ethernet Switch/160 & BoQ/279	As per Technical Specs the requirement is Switch shall have minimum 8 ports – o No. of CU Ports : 6 Ports (RJ45 - 10/100Mbps) o No. of FO Ports : 2 Ports (SM)But as per BOQ the Switch Communication Ports: 8 PORT (with 6 Copper ports and 2 Fibre Ports SM) 100/1000 MBPS	Please correct this may be it will be typing mistake.	Managed Ethernet Switch shall have the following Ports Configuration a) Total Number of Ports : 8 a.1) Cu Ports : 6 nos. with 100 MBPS Speed a.2) SM Fibre Port : 2 Nos. with 100/1000 MBPS b) Power Supply : 18-72 DC, Non-Redundant
79	272	Ruggedcom / Hirschman / MOXA/CISCO	Allow the equivalent vendors also which meet the technical requirement like Phoenix	Bidder to consider the equipment as mentioned in RFP for Preferred make
80	General	Supply of Sim card	Please clarify the Scope of supply of Sim card .	Supply of SIM Cards & Monthly Data Charges shall be in the scope of TPCODL
81	Appendix 1	Process Flow Chart for Vendor Registration	Please confirm if this will be applicable after the contract is awarded and not during bid submission	Vendor registration shall be done for the successful bidder/s only
82	Annexure IX	Safety	Please let us know which forms related to safety are required to submit during bid or all the safety forms need to submit after award of contract.	Please refer Tender Document.



83	8.0/ Bidder's Experience, Evaluation Criteria/90	Bidder shall provide details of projects with application modules, which have been successfully completed during the last 5 financial years	We have to submit the executed Project detail within 5 year or 3 year because as the Qualification requirement clause 1.7 page 6 .The bidder should have demonstrable experience, from among either of the following, of having successfully executed similar works during last Three (03) years ending on the last day of the month previous to the one in which the Tender is issued	Bidder to submit the document against commercial and technical requirement for the period of five years.
84	1.7/ Qualification Requirement / Eligibility Criteria/6	The bidder should have demonstrable experience, from among either of the following, of having successfully executed similar works during last Three (03) years ending on the last day of the month previous to the one in which the Tender is issued,	We have to submit the Tender within 3 year or 5 year because as the Bidder Experience,Evaluation Criteria clause 8.0 .The Bidder shall provide details of projects with application modules, which have been successfully completed during the last 5 financial years	Bidder to submit the document against commercial and technical requirement for the period of five years.
85	General	As per Prebid Meeting The Bidder can Use Existing Earthing	Please clarify that the earthing available on every site	TPCODL proposes to use the existing earthing system of RMU for proposed FRTU Panel. As per the standard practice earthing system is a must for operation of the equipment either outdoor or Indoor. However, in case the Existing earthing System is not in Good condition, then it is the responsibility of the bidder to make the earthing system with Earthing Pit, Cables etc. for FRTU Panel. In case of special requirement of the bidder, then earth pit along with cable are in the scope of the bidder.
86	General	Only RTU required or with encloser panel required?	please clarify	1. The TPCODL requirement is mentioned at Section-A, Clause 3.2 & 3.3 of the RFP. The requirement is FRTU with encloser panel and the size of the panel will be on basis of proposed solution of the Bidders. Minimum Panel Size shall accommodate all the required equipment including battery and Battery Charger, Modem etc. with sufficient cooling for electronics to work properly. As per the RFP the size of the panel shall not be more than the RMU Size 2. The IP class of the panel enclosure shall be IP55/IP65/IP67 as per the site requirement. Most of the RMUs are installed under the sky, as per the RFP it is proposed to consider panel IP55 with Canopy. However, if the bidder is considering higher IP class of the panel then, preference will be given during technical evaluation. 3. As per site requirement bidder may have to carry out Civil Activity for proper installation of FRTU panel as per minimum height mentioned in the RFP along with trenches and Cable tray.

87	General	Cyber security certificate from CPRI is during order execution?	please clarify	<p>1. Preferably Bidder to submit the certificate before the release of RC.</p> <p>2. However TPCODL decision will be communicated / discussed with successful bidder for submission of CPRI certificate i.e. before placement of order/before delivery of material at site.</p> <p>3. Bidder to note the CPRI certificate Cyber Security is mandatory.</p>
88	90	Product Conformance as per Gol Letter No. 12/34/2020-T&R dated 8th June 2021, Ministry's Order No. 25-17/6/2018-PG dated 2nd July 2020	Testing as per CPRI can be done after order placement before dispatch of material.	<p>1. Preferably Bidder to submit the certificate before the release of RC.</p> <p>2. However TPCODL decision will be communicated / discussed with successful bidder for submission of CPRI certificate i.e. before placement of order/before delivery of material at site.</p> <p>3. Bidder to note the CPRI certificate Cyber Security is mandatory.</p>
89	149	It shall be possible to increase the number of communication ports in the FRTU by addition of cards, if required in future.	Offered FRTU has sufficient number of ports, expansion of ports is possible via external switch.	<p>As per the RFP the FRTU shall support minimum 2 Nos. Ethernet Ports and 2 Nos. RS485 Ports for communication with IEDs and Control Centre as per the protocol mentioned in the RFP.</p> <p>Bidder to note that Additional Ethernet ports can be expanded using Ethernet Switch. Bidder to confirm the expansion of RS485 Ports if required in future.</p>
90	149	2 Nos. RS 485 electrical ports for communication with serial devices over serial protocols	We have one No. RS485 and one RS 232 Port. On one RS 232 port we will p	Bidder to comply with 2 Nos. RS485 ports as mentioned in the RFP.
91	157	The FRTU shall be powered from the 18-72 VDC (24/48 V DC) Power Supply	Our FRTU will support 24 V DC. For 48V DC Supply we will be supplying DC-	As per the RFP and discussed in the morning, All equipment shall support 18-72 V DC range. Bidder may consider external power supply of industrial grade to meet the RFP requirement for all 200 Nos. FRTU panels.