## NIT No. RECPDCL/TECH/SCADA-CED/e-Tender/2016-17/3931 Dated: 09.03.2017

## Pre-bid Clarification-1

Dated:31.03.2017

S. No.	Vendor	Item	Page No. / Clause No.	Technical Specifications as per RFP	Queries / Modifications / Changes Suggested	Clarification
1	M/s Tata Consultancy Services	SECTION-IV-Introduction	Page no. 17	Under this project new SCADA system shall be established at Control Centre, New RTU & IEC-61850 based Numerical relays commissioning at 6 No's substations.	Please provide the Single Line diagram of all 6 Substaions. And Overall electric schecematic network diaagram belons to these substaions.	Please refer to annexure for SLD details
2	M/s Tata Consultancy Services	SECTION-IV-Scope of Work ( e)	Page no. 17	Distribution Management Systems with following functions: - Network Connectivity Analysis (NCA) Jumper, Ground cut	As the requirement is is scada for monitoring and control of 6 Substation. Please confirm upto what level the network will be modeled in DMS.	Upto 11kV DT level only
3	M/s Tata Consultancy Services	SECTION-IV-Scope of Work ( e)	Page no. 17	Distribution Management Systems with following functions: - Network Connectivity Analysis (NCA) Jumper, Ground cut	Distribution network ( Feeder ) will be impoted from GIS over CIM > Please confirm.	As of now utility do not have GIS so SI need to draw network manually, However, SCADA should comply CIM.
4	M/s Tata Consultancy Services	SECTION-IV-Scope of Work ( j)	Page no. 17	Integration with Market Applications: The employer intends to separately procure IT Applications such as Open Access Application, Metering Applications and Scheduling Applications. SCADA System shall exchange data with these applications including database and models. Integration with various OT/IT systems like GIS, MDM, AMI etc. on Interface over SOA.	Please provide the details of GIS available in utility along with Interface for integration with SCADA.	As of now utility do not have GIS.
5	M/s Tata Consultancy Services	SECTION-IV-Scope of Work ( j)	Page no. 17	Integration with Market Applications: The employer intends to separately procure IT Applications such as Open Access Application, Metering Applications and Scheduling Applications. SCADA System shall exchange data with these applications including database and models. Integration with various OT/IT systems like GIS, MDM, AMI etc. on Interface over SOA.	Please provide the details of MDM,AMI available in utility along with Interface for integration with SCADA.	As of now utility do not have MDM, AMI & SCADA System.
6	M/s Tata Consultancy Services	SYSTEM SOFTWARE REQUIREMENTS Data Access through intranet (f)	Page no. 48	The Web server at Control Center shall also facilitate exchange of email messages from ISP (Internet Service Provider) and other mail servers supporting SMTP.	Email server is not part on the BOQ. Please confirm if utility is already having the existing email server.	
7	M/s Tata Consultancy Services	4.2. Archive Storage	Page no. 64	LTO (Linear Tape-Open) media storage shall be provided for general back-up purposes and short-term archiving. The LTO drive shall have sufficient capacity for a complete backup of the SCADA data and software (including all source code) without requiring user action to replace filled recording media. A	SCADA Software Source Code is Bidder IPR. Shall not be supplied .	Any customization logics specific to the project area shall be shared with Utility.
8	M/s Tata Consultancy Services	5.2. RTU Functions	Page no. 88	The input auxiliary power supply for the RTU/DC should have in the range of 24VDC/48VDC or 220VDC depends upon Station DC Supply.	What is substation DC supply available in the field accorss 6 substations. Please confirm.	For all 66/11 Grids DC voltage is 220 volt DC. For 33/11 grids DC voltage is 24V DC
9	M/s Tata Consultancy Services	5.10. RTU Size and Expandability	Page no. 90	RTU shall be equipped for the point counts defined in the BOQ (Basic+20% spare). It shall be possible to expand the RTU capability for additional 100 % of the basic point counts by way of addition of hardware such as modules, racks, panels, however, RTU software and database shall be sized to accommodate such growth without requiring software or database regeneration.	Please provide the I/O counts for each substation.	Please refer to annexure for I/O count details

10	M/s Tata Consultancy Services	7. Multi-Function Transducers (MFTs)	Page no. 91	7. Multi-Function Transducers (MFTs) The contractor shall provide the multi-function transducers for acquiring the real time analog inputs through 3 phase 3 wire CT/PTs circuits/ 3 phase 4 wire CT/PTs circuits (Based on the field requirement). Based on the CT/PT secondary rating, the multi-function transducer shall be designed for nominal 110 V (Phen Phyoltage) and 1A/5A (per phase current). The MFT shall be suitable for 20%	We assumes that Multifunction Transduceres will be installed in the existing Feeder switchgear Panels in the substation . Please confirm.	MFT shall be mounted on existing C&R panel and all related retrofitting work shall be in the scope of SIA.
11	M/s Tata Consultancy Services	9. DC POWER SUPPLY SYSTEM	Page no. 93	The DC Power Supply system shall be capable of meeting the load requirements for various Telecom equipment's, RTUs and other associated equipment located at indoor, i.e. at the substations,	We assumes that DCPS is only for RTU and Associated router inside RTU Panel. Other Equipments like MFT, BCPU, IED will be powered by substation DC. Please confirm	DCPS is only for RTU and Associated router inside RTU Panel. Other Equipments like MFT, BCPU, IED will be powered by substation DC.
12	M/s Tata Consultancy Services	32. INSTALLATION & IMPLEMENTATION	Page no. 127	Control Centre, Substations, DT locations, HT and selected LT Consumers and Communication network covered under the specification.	There is no DR center as part of this specification. Please clarify. Scope of this RFP is only upto substations. Please modify this.	DR center is not envisaged in the project.
13	M/s Tata Consultancy Services	32. INSTALLATION & IMPLEMENTATION	Page no. 127	The successful bidder shall be responsible for installation and configuration of software, hardware and other equipment supplied to the satisfaction of the owner. This shall include but not be limited to:  a. Installation of the software at Data Centre, DR Centre and various other locations.  b. Installation of SCADA equipment at Sub stations, DTs, HT and Select LT consumers.	There is no DR center as part of this specification. Please clarify. Scope of this RFP is only upto substations. Please modify this.	DR center is not envisaged in the project.
14	M/s Tata Consultancy Services	General Query	-	General Query	There is no UPS for control center being asked in the Specification. We assumes that it will be supplied by RECPDCL. Please confirm	Not in bidder scope
15	M/s CISCO	4.10.1. Servers - page 70	-	32 GB of ECC DDR3 Memory and scalable up to 512 GB memory(Memory slots free for expansion)	32 GB of ECC DDR3/DDR Memory and scalable up to 512 GB memory(Memory slots free for expansion)	Bidder may provide higher specification and should be meet functionalities
16	M/s CISCO	4.10.9. LAN Switch (Layer II Switch) Page 75	-		Reques to add clause " Should be EAL 3/ NDPP certified/Gartner leader quadrant." This will ensure that high standard of equipment are proposed meeting industry security standards	Bidder may provide higher specification and should be meet functionalities
17	M/s CISCO	4.10.9. LAN Switch (Layer II Switch) Page 75	-		Request to add clause "Switch should support IPv6 ACL, IPv6 QOS, IPv6 ACL and secrity like RA guard, ND Guard, DHCPv6 Guard"	Bidder may provide higher specification and should be meet functionalities
18	M/s CISCO	4.10.9. LAN Switch (Layer II Switch) Page 75	-		Request to add "Switch should be line-rate and support 4096 VLANs simultaneously"	Bidder may provide higher specification and should be meet functionalities
19	M/s CISCO	3.4.1. Network Communication - Page 43	-		Request to add firewall at substation meeting harsh environment and temperature range (-10° to 70°C) and complying to IEC 61850	Bidder may provide higher specification and should be meet functionalities
20	M/s DongFang	SECTION-I TENDER INFORMATION	Page No. 9	The EMD (Earnest Money Deposit) is to be submitted by all the participating bidders in the form of demand draft of an amount of Rs 5,11,400/- (Rupees Five Lakh Eleven Thousand and Four Hundred Only) of any schedule Indian bank in favor of REC Power Distribution Company Limited, Payable at New Delhi	We understand EMD BG can be submitted in form of DD or BG as per format given in tender document. Kindly confirm.	Bidder can submit EMD either in DD or in BG form.

21	M/s DongFang	SECTION-IV, Scope of Work	Page No. 17	Distribution Management Systems with following functions: -  □ Network Connectivity Analysis (NCA)  □ Jumper, Ground cut	We understand DMS functions like load flow, loss minimization via feeder reconfiguration, FMSR (Fault Management and System Restoration) are not in present scope of supply and may be purchased in CED in future from SCADA Vendor.	Bidder may provide higher specification and should be meet functionalities
22	M/s DongFang	Detailed Scope of Work, 2.2. Data Acquisition	Page No. 22	b) DTMU  1. The proposed DTMU system will meet following requirements and shall be integrated with SCADA system on real time basis  2. Monitor abnormal conditions and send alarm messages.	1. As per figure 2.1 of DTMU tender data from DTMU control LAN has to be brought to SCADA Control Center LAN and no direct connectivity between SCADA CFE and DTMU at site is there. Kindly confirm the exact level of integration required between the two control centers.  2. Also confirm the SMS/E-mail gateway is in scope of DTMU vendor/ RECPDCL.	addition to this, DTMU bidder
23	M/s DongFang	SCADA Hardware Requirement, 4.1.2. Communication Servers	Page No. 61	All PTUs/DTMUs shall be connected to CEE through IEC 60870-	As per figure 2.1 of DTMU tender data from DTMU control LAN has to be brought to SCADA Control Center LAN and no direct connectivity between SCADA CFE and DTMU at site is there. Kindly confirm.	DTMU field unit will communicate on IEC 104 protocol to DTMU control centre as well as master control centre of SCADA. The field unit will report to only one control centre at a time. In addition to this, DTMU bidder has to provision to integrate DTMU system with SCADA system over SOAP/Web service based protocol.
24	M/s DongFang	5. TECHNICAL REQUIREMENTS OF RTU, 5.2. RTU Functions	Page No. 88	atotion(a) IEC 64850 for alove devices & MODRIES protected over	Request RECPDCL to kindly confirm the no of ports required for communication on IEC 60870-5-104, IEC 61850 and Modbus in each RTU.	1. Pls refer to I/O count list as per annexure signal list. 2. IED/MFT details to be incorporated as annexure 3. bidder has to assess and propose solution accordingly.
25	M/s DongFang	5. TECHNICAL REQUIREMENTS OF RTU, 5.10. RTU Size and Expandability	Page No. 90	capability for additional 100 % of the basic point counts by way of addition of hardware such as modules, racks, panels, however,	Since all the signals are soft signals there is no requirment of the IO modules in RTU and we understand no IO modules has to be supplied as spare. Kindly confirm.	All the signals in the substation are envisaged as soft signals. As mentioned in the Clause section 5 & 16 of RFP.
26	M/s DongFang	7. Multi-Function Transducers (MFTs)	Page No. 92		MFTs are mounted in existing C&R panel only. Request RECPDCL to kindly confirm the same	MFT shall be mounted on existing C&R panel and all related retrofitting work shall be in the scope of SIA.
27	M/s DongFang	Form: 2 RTU	Page No. 164	II II I PANGULCAT TOT MONITOTING LIL LIB ANALOGG AND COMMILINICANIA	Request RECPDCL to kindly confirm the specification of DC Transducer to be provided at each sub-station	Please refer to annexure for specification of DC transducer

28	M/s Chemtrols	RTU BOQ	pg 164	IR III B()()	RTU point counts are not defined. This information is needed for RTU sizing.	1. Pls refer to I/O count list as per annexure signal list. 2. IED/MFT details to be incorporated as annexure 3. bidder has to assess and propose solution accordingly.
29	III/I/S SIAMANS	5.10. RTU Size and Expandability	Page no. 90	Kindly provide the I/O Count of the proposed RTU		1. Pls refer to I/O count list as per annexure signal list. 2. IED/MFT details to be incorporated as annexure 3. bidder has to assess and propose solution accordingly.
30	M/s Siemens	Scope of Work Integration with various OT/IT systems like GIS, MDM, AMI etc. on Interface over SOA.	Page no. 17	Is GIS already implemented in CED, if yes please provide the name of the OEM, at which level GIS is implemented ( S/S, DT, Consumer level). In such case, at what level the customer wants an integration of GIS with SCADA.		As of now utility do not have GIS.
31	M/s Siemens	Scope of Work Integration of New RTUs / SASs/DTMUs with Control Centre System for Real time data acquisition over IEC 60870-5-104	Page no. 17	The SCADA software shall have scalabilty to take care of DTMU I/O point.We request you to provide the quantity of no. of I/O (total for RTU, SAS, DTMUs) in order consider our software licensing for this tender.		This ammednment has attached with I/O count list and IED/MFT details bidder has to asses and propose accordingly.
32	M/s Siemens	31. Timelines for Delivery and Installation The bidder is expected to complete the Enterprise Wide - implementation of SCADA system on all connections within 6 months from the date of award of contract by the RECPDCL.	Page no. 135	The timelines provided for execution is very short. Kindly increase it to 14 months.		6 months for project delivery
33	M/s Siemens	Integration with Market Applications: The employer intends to separately procure IT Applications such as Open Access Application, Metering Applications and Scheduling Applications. SCADA System shall exchange data with these applications including database and models.		If OT/IT systems is not available for integration, then in that case SCADA, installation and commissioning will be considered as complete. No milestone payment shall be kept on hold.		Payment will be done as per payment terms
34	M/s Siemens	Payment criteria: 2 & 3	Page no.	Time duration between SAT and go live is not defined. May SAT will be considered as Go Live?		SAT will not be considered as Go Live

		Day was a set to the set			
35	M/s Siemens	Payment procedure: Milestone: On installation, commissioning and integration of all SCADA Hardware, Software, field material in all Project Area, completion of trainings and user acceptance by RECPDCL and CED Project In-charge.		Please clarify on the involvement of CED/ RECPDCL in Handing over process.	RECPDCL is facilitator as PMA and CED will be final authrotiy for Accepatnce.
36	M/s Siemens	BOQ	Page no.	Clarification is required on S/S BOQ. In BOQ, only equipments mentioned with Qty will be considered.	Plese refer to page no 17-18 , Scope of work.
37	M/s Siemens		Page no.	All signals are considered to be connected to RTU through BCPU over IEC61850 protocol and No hardwired signals are considered. Please confirm.	Plese refer to page no 17-18 , Scope of work.
38	M/s Siemens	MPLS Link	Page no.	Is POC required for MPLS link?	No
39	M/s Siemens		Page no.	Utility to provide separate earthing for RTU panel.	Yes
40	M/s Siemens	Recommended Spares	Page no. 125	Spares within 5% of total value will be considered. Unit price above 5% of total value, modules will be considered, instead of complete unit.	Item list shall be submitted by Supplier however minimum one unit need to be supplied
41	M/s Siemens	9. DC POWER SUPPLY SYSTEM	Page no.	Rectifier modules in DCPS shall have N+1 or N+2 redundancy. Please clarify.	N+1 to be considered in solution
42	M/s Siemens	11. IEC 61850 compliance Ethernet switch Ethernet switch shall operate at 24 to 220 VDC/VAC	Page no. 98	Switch will be either working on 20-60 VDC or 220VDC/VAC. It is not possible to have compatibility of both levels in in one power supply. Please confirm supply voltage 24VDC or 220VDC.	For all 66/11 Grids DC voltage is 220 volt DC. For 33/11 grids DC voltage is 24V DC
43	M/s Siemens	Form: 3 Communication system - VPN (MLLN/ MPLS) Broadband Bandwidth Charges	Page no.	Network connectivity charges will be applicable from the date of link delivery.	Link delivery will considered from the date of successful SAT.
44	M/s Siemens	Scope of Work: b) Selected bidder will propose & establish the solution initially for approx. 6 Nos. Sub stations but it should be horizontally & vertically scalable to cover the entire utility S/stn i.e. approx. 25 Nos.	Page no. 17	Maximum S/S connection to SCADA system will be 25. Please confirm. Also confirm max. no. of DTMU connections with SCADA system.	Yes (25 Nos. Grid S/Stn), Distribution S/Stn can be up to 3000 in case of scaling up for entire CED.
45		4.10.6. Video Projection System (VPS) / Tower type Video Wall	Page no.	Please clarify on array of VPS cubes.	Please refer page no. 162 of BoQ for VPS
46	M/s Siemens	13. Software License and Upgrades A certificate to this effect shall be furnished by the bidder at the time of predispatch inspection for each software package.	Page no. 101	Some of the License will be furnished after before Go live.	Bidder need to mentioned the license availability in the technical proposal as per utility project plan and at what stage these license swill be delivered.

47	M/s Siemens	2.10. Patch Management Internet connection shall also be provided and shall be shown in System Architecture diagram submitted during Bid submission.	Page no. 141	Internet is not in bidder scope. Customer shall make arrangement of internet.		Internet availabilty for patch management need to be done by bidder till Go-Live
48	M/s Siemens	(a) Integration of new equipment All future Field devices & other System integration shall be the responsibility of contractor and shall be part of the maintenance charges.	Page no. 142	Please specify what do you mean by new equipment.		Considering Standard Open protocol suported Equipments (IED's) addition in the network withing 6 Nos of S/Stn, Any feeder addition, Power Transformer Addition, Isolator Addition, Bay extension during Project Commissioning or in FMS period.
49	M/s Siemens	SECTION-I TENDER INFORMATION & Pre- Qualifying Criterion Documents/Technical Bid)	Page no. 9 & 16	FMD of successful hidder will also be returned after	We propose to provide an option of submitting the DD or Bank guarantee from Sch bank . For that REC to provide the EMD bank guarantee format .	Bidder can submit EMD either in DD or in BG form.
50	M/s Siemens	24	Page no. 152	The RECPDCL/CED shall be at liberty to deploy the solution anywhere within the Chandigarh UT and at any other location (Outside Chandigarh).	The solution envisaged in the tender is based on the defined scope of work, BoQ, Commercial terms & Condition. The bidder will not be able to provide the same solution if the location, scope, BoQ is changed.	it is for CED Only
51	IIVI/s Siemens	General conditions of contract	Page no.	Please provide the document of General conditions of contract		Already mentioned as page no 150
52		Qualification Requirement	Page 124 Point 10		Request that M/S CED shall provide the space for Project Management Office.	
53	M/s L&T	Qualification Requirement	Page 126 Point 29		Please clarify the number of sites	5000 Nos. of remote sites
54	M/s L&T	Qualification Requirement	Page 136		Please incorporate the Advance Payment term. An adance of 10% against an ABG of equivalent amount.	Pl. refer Amendment
55	M/s Alstom	-	BOQ Performa of Schedule Rates	11 RIII0	Please confirm the name, address and location of 6 No's of new RTU's are to be installed.	Refer to the SLD/IO list provided on website and vendor need to site survey

56	M/s Alstom -	BOQ Performa of Schedule Rates	1. RTUs	In order to check the feasibility of Network connectivity of MPLS, address of location is required for Service Provider. Please share the format of Tri-party agreement for acceptance	Pls refer to the tri partite format uploaded on website
57	M/s Alstom -	BOQ Performa of Schedule Rates	1. RTUs	Please confirm Tri-party agreement will be signed between Purchaser, bidder and Service Provider as per GOI TRAI ruling.	Yes. Between CED, NBSP and Bidder
58	M/s Alstom -	BOQ Performa of Schedule Rates	1. RTUs	Please confirm/share the IO list/SLD of each substation wise in order to estimate the requirement.	Refer to the SLD/IO list provided on website and vendor need to do site survey for actual requirement
59	M/s Alstom -	BOQ Performa of Schedule Rates	1. RTUs	Please share the substation Layout in order to estimate and understand the actual requirement. Further please confirm all IO's required under present scope are available in control room for further tapping the same to RTU.	Refer to the SLD/IO list provided on website and vendor need to do site survey for actual requirement
60	M/s Alstom -	BOQ Performa of Schedule Rates	General	Please confirm the location, name and address of Control Centre of SCADA/DMS at Chandigarh	UT Press Building, Sec 18A , Chandigarh
61	M/s Alstom -	BOQ Performa of Schedule Rates	Tr Differential Relays	Please confirm the split of number of Transformer Differential relay substation location wise in order to estimate complete requirement	Refer to the SLD/IO list provided on website and vendor need to do site survey for actual requirement
62	M/s Alstom -	BOQ Performa of Schedule Rates	2. BCPU	Please confirm the split of number of BCPU relay substation location wise in order to estimate complete requirement	Refer to the SLD/IO list provided on website and vendor need to do site survey for actual requirement
63	M/s Alstom -		Preparation of real time reports as per utility requirement.	We request you to please elaborate the requirement. Please confirm the utility requirement.	to be finalized during detailed engineering plan. Bidder may submit already available standard report, if any.
64	M/s Alstom -		Figure-2 SCADA Conceptual Configuration	Please confirm what DT Location signifies and please suggest the following is covered under present scope. If yes please include the same in BOQ & Price Schedule. Further, please suggest the applications, Hardware, Software required at following locations along with Address of Location for MPLS feasibility.	For the project requirement, Sub Div. no. 5 has been envisaged DTMU shall provide output on IEC 104 protocol to SCADA/DMS Control center.
65	M/s Alstom -		Figure-2 SCADA Conceptual Configuration	Please confirm the M2M Gateway requirement. Please confirm following is covered under present scope. We request you to include the same in BOQ & Price Schedule.	Not Reqired in this tender
66	M/s ETAP Automation	SECTION-IV Scope of work & Service Level Agreement	Deployment of SCADA system for 6 nos. of grid substation including computer hardware and software along with associated items at respective Control Centre. The new system shall be deployed in such a way that the operation of the existing system is not disturbed.	Please provide the detail of Exsiting system ? What are the resources commonly will be used by both the system .	No SCADA System Available a son date
67	M/s ETAP Automation	2.2. Data Acquisition	Signal List for RTU	Please provide us the final singal list to be considerd for RTU.	Refer to the SLD/IO list provided on website

68	M/s ETAP Automation	4.1.2. Communication Servers	imanufacturers as NERU/UIP compliant to comply with future	Many Server vendor doesn't certify as NERC/CIP complied .Please remove this point.	Further the nodes and CFE shall be self-certified by manufacturers/Solution Providers as NERC/CIP compliant to comply with future smart grid requirements.
69	M/s ETAP Automation	General	GIS, MDM, AMI	What is the status of GIS,MDM and AMI system? Please provide us more details on exsisting GIS, MDM, AMI Syestem.	There is no existing GIS/MDM/AMI system
70	M/s ETAP Automation	SCADA Hardware Requirement	4.1. General Requirement for Hardware :The redundant hardware such as Servers, Firewall etc. shall work in hot standby manner. All the servers and networking equipment (Firewalls, LAN switches etc.) shall be mounted in rack panel.	Redundancy of firewall between two different OEM vendor is not possible . Please remove this clause .	No redundant Firewall needed, however two firewalls shall be provided, one between Web servers & SCADA dual LAN and another between Web servers & Web server dual LAN. Moreover other system will be in redundant mode as specified in specs.
71	M/s ETAP Automation	3.4.4. Security Services	System shall have Multilayer (at least network, application layer) firewall which shall protect the complete system network from unwanted users. Further the separate firewall of different OEMs shall be provided to take care the security of all the servers & shall have High Availability architecture with No Single Point of Failure (NSPOF).	Redundancy of firewall between two different OEM vendor is not possible . Please remove this clause .	No redundant Firewall needed, however two firewalls shall be provided, one between Web servers & SCADA dual LAN and another between Web servers & Web server dual LAN. Moreover other system will be in redundant mode as specified in specs.
72	M/s ETAP Automation	Price schedule	There is no breakup mentioned for Integration with GIS ,MDM, AMI system	Please provide the integration price also in price schedule.	There is no existing GIS/MDM/AMI system
73	M/s ETAP Automation	Form 3 BOQ	Web server with load balancing	Please confirm that load balancing will be done through hardware or through software .Pleae share the sepecification of Load balancing server .	Through software
74	M/s ETAP Automation	SECTION-IV Scope of work & Service Level Agreement	New RTUs / SASs/DTMUs	Please share the location of RTU /SASs/DTMUs	Refer to the SLD/IO list provided on website
75	M/s ETAP Automation	2.9.3. Cyber security System monitoring	The Centralized Monitoring Console (CMC) shall monitor and continuously collect the above logs. The Cyber security system shall also be subjected to Annual Security Audit from CERT-In listed auditors at the cost of the Contractor. Contractor shall implement the recommendations/remedial actions suggested by the Auditor after audit.	This Requirement is very subjective in nature . Please provide what are the Cyber security standard to be follow .	NERC/CIP and ISO 27001 to be complied.
76	M/s ETAP Automation	Network Connectivity Analysis (NCA)	mode: loops and/or parallel may be intentionally or inadvertently	In order to run NCA in LV distribution network we will need complete LV network ,Staus of exsisting GIS system . Please share the detail and some sample GIS files ,Also give more clearity on this .	Network diagram shall be provided during detailed engineering, NO existing GIS System is there at CED.

1//	M/s ETAP Automation	3.4.4. Security Services	System shall have Multilayer (at least network, application layer) firewall which shall protect the complete system network from unwanted users. Further the separate firewall of different OEMs shall be provided to take care the security of all the servers & shall have High Availability architecture with No Single Point of Failure (NSPOF).	High Avilability of firewall between two different OEM vendor is not possible . Please remove this clause .	No redundant Firewall needed, however two firewalls shall be provided, one between Web servers & SCADA dual LAN and another between Web servers & Web server dual LAN. Moreover other system will be in redundant mode as specified in specs.
178	M/s ETAP Automation	General	Location of BCPUs	Please share the location to install the BCPUs? Functional requirement of BCPUs	Refer to the SLD/IO list provided on website
179	M/s ETAP Automation	General	Details of Substations ,Meter	Please provide the details of S/S and their SLDs with metering & Protection diagram and SLDs?	Refer to the SLD/IO list provided on website
180	M/s ETAP Automation	General	Configuration of IEDS	Will all the IEDs will be in star or ring topology?	Star Topology
181	M/s ETAP Automation	General	Power cable, communication cable, cable try	Please provide the Technical Specification of power cable, communication cable, cable try,	As per Industry standard
82			ii. DMS software supporting at least two functions out of load flow, loss minimization via feeder reconfiguration, FMSR (Fault Management and System Restoration).	Add "Outage management" also as a required function.	Bidder may provide additional feature in their proposal, however, proposed solution should meet asked requiremnt.

Note: Rest of the bid will be evaluated as per tender specifications