GUJARAT INDUSTRIES POWER COMPANY LIMITED
PRE BID MEETING DATED 18.12.18

DATE OF ISSUE : 06/12/2018

TENDER NO.   : GIPCL/CENTRALIZED MONITORING SYSTEM-DATA INTEGRATION/2018

TENDER FOR   : IMPLEMENTATION OF CENTRALIZED MONITORING SYSTEM BY INTEGRATION OF DATA OF GIPCL CONVENTIONAL AND RENEWABLE ENERGY SOURCES & SUPPLY OF REQUIRED SOFTWARE AND HARDWARE

BID DUE DATE REVISED   : 10/01/2019 up to 14:00 Hrs (IST)

DATE OF AMENDMENT ISSUE: 03/01/2019

Amendment/Addendum/Clarification-3						
Sr. No.	Page No.	Clause No/Point No.	Title	DESCRIPTION OF CLAUSE/ ITEM AS PER GIPCL RFP DOCUMENT	Bidder's Query/suggetions	GIPCL Reply / Clarification/Amendment/Addendum
1	6	3.0 point 7	Bid Information sheet	Part- I (Technical) (Envelop-I) along with Tender Fee and EMD and (Envelop-II) Technical bid to be submitted in Physical form in two separate sealed envelope addressed to Bid Submission Address mentioned at Sr.No.11 of this table. Part-II (Price Bid) is STRICTLY TO BE SUBMITTED ONLINE on or before due date and time to website https://gipcl.nprocure.com in line with Instructions to Bidders as per RFP, (n)procure guidelines and instructions and subsequent clarification, amendment issued thereof if any in this regard. Bid submitted with Physical Price Bids Envelope shall become liable for rejection.	If we are submitting the bid physically, do we have to register online also and submit the bid? Please advise.	In line with GIPCL RFP & subsequent clarifications please note that Price bid strictly to be submitted online on or before due date & time to website https://gipcl.nprocure.com in line with Instructions to Bidders as per RFP, (n)procure guidelines and instructions and subsequent clarification, amendment issued thereof if any in this regard. Bidder will have to upload scanned copy of Bidder & Bid Information (Annexure-II) as per attached format in GIPCL RFP as a part of Technical Bid (Part-I) along with scan copy Tender Fee DD & EMD DD/BG on nprocure portal in the Technical Bid section as per Amendment-Clarification-1. Technical bid alongwith EMD & Tender fee to be submitted in physical from as per Bid submission of GIPCL RFP.

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2	27	9.0 Point A	Detail Scope of work	As shown in above scheme following plants/ Renewable Sources to be integrated in the SCADA. a) Baroda Station-I & II (310 MW Gas based CCPP from respective ABT server) b) SLPP- 1 & 2 (500 MW Lignite based Plant from AB server) c) Baroda Rooftop d) SLPP – 5 MW Solar PV e) SLPP- 1 MW Solar PV f) SLPP Solar Rooftop g) Amrol DSPP Solar PV 1 MW h) 21 MW Suzlon Wind Farms Nakhtrana i) 50.4 MW Suzlon Wind Farms Kucchdi j) 26 MW Inox Wind Farms (Rojmal) k) 15 MW Leitwind Wind Farm(Kotadapitha) l) 80 MW Charanka Solar Park m) 75MW Charanka Solar Park	In order to provide you meticulous solution, we are having below queries. **Amrol Location 1 MW DSPP Plant:** 1. Which port & protocol is available to fetch data & to connect with DCU ? 2. No of devices : 3. No of Parameter/Tags : **Kotadapitha SSRTU:** 1. Which port is available with Modbus protocol to fetch data?(Available System : Dynalog Make) 2. No of Parameter/Tags can be received from Kotadapitha location?	**Amrol Location 1 MW DSPP Plant:** Amrol data is available on Modbus RS485 RTU . Tentative Number of Parameters/Tags is attached as an *Annexure-I* with this Amendment. For any further details , Bidders may request to visit the site and satisfy himself before Bid submission. Available Port for communication is MODBUS RTU. **Kotadapitha SSRTU:** The substation analog as well as digital paramenters are to be fetched. The spare port available in RTU is MODBUS ETHERNET. Details of parameters and mapping shall be worked out during detailed engg.
3					Amrol Location 1 MW DSPP Plant: 1. Mention Inverter's location. 2. Mention the distance between inverter & control room.	Inverter is in the control room itself. Cabling is already available upto the communication panel . A small panel with TBs may be required for termination of few inputs. Bidder to visit and confirm before quoting in case of any details/doubt.
4					Kotadapitha SSRTU: 1. Mention the distance between RTU & Control Room.	RTU is in control room itself.
5					Vadodara 30KV Roof Top Solar 1. Mention the distance between Schneider Inverter from the central location server.	Approx. 50 mts.
6	28	9.0 Point A 1 & 2	Detail Scope of work	1.As shown in above scheme data from Windfarm OEM Servers data is available in (*.CSV) format at Baroda through FTP Server. Kotadapitha wind farm pooling substation RTU data to be fetched at GIPCL Baroda end. 2. Data for 75 MW solar (Under execution) and 80 MW Solar Plant at Charanka shall be fetched through FTP Server in .CSV/ Excel format.	Files from wind farms & charanka location is available at Baroda Location. How will we be able to access FTP Server?	Presently FTP Server with a static IP has been created on a PC where csv/ excel files from various OEM servers are being fetched and stored. Once the Centralized Monitoring System Server is commissioned, the existing FTP link along with Static IP as well as existing data shall be transferred to it.
7	29	9.0 Point A 5.d	Detail Scope of work	Data from two Rooftop Inverters & Energy Meters on RS-485/Modbus shall be fetched using Data Loggers & Media Converters and routed to server through data concentrator/internet.	SLPP Surat Location 70 KW Solar Plant : 1. Inverter with RS485 Modbus is available. Mention the Inverter's location. & also mention distance between 70 KW Solar Plant / Inverter and control room. 2. Also mention the distance between both 70KW Roof Top Solar Plant control room & 500 MW (Existing ABT System) Control Room. 3. If switch available at 70 KW Solar Plant which is connected through out to GIPCL Baroda (Existing LAN) , please mention along with its specifications.	Rooftop Inverters (50 KW & 20 KW) are in SLPP Township and are presently connected to the SLPP LAN Network. The Inverters are of Schneider make & are hooked up to maxDNA System. It is proposed to fetch data for our requirement either directly from the Modbus RS485 output of Inverters or from max DNA system which are accessible through LAN network. Data fetched from the assets at SLPP is envisaged to be centrally stored in the Data Concentrator Unit envisaged for SLPP which shall be located in the Control Bldg. of SLPP. In case of any further details/doubt, bidder may visit the site to satisfy himself before bid submission.

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8	29	9.0 Point A 5.b	Detail Scope of work	Data of 5 MW Solar PV Plant shall be fetched from existing SCADA system and routed via data concentrator at SLPP/ Internet.	SLPP Surat Location 5 MW Solar Plant : 1. Please mention if you have spare serial/Ethernet port available with your ABB SCADA System at 5 MW Solar Plant.	Data from ABB SCADA may be available through OPC/ ODBC /FTP connectivity. GIPCL shall co-ordinate with ABB if required to facilitate data availability in any standard protocol.
9	31	9.0 Point A 13	Detail Scope of work	The DCU can push the data to the centralized server by using web service or TCP/IP. DCU shall have capability for at least 8 DI/DO I/O and 4 AI channels. DCU shall have capability to increase channels if required in future. It shall be supported with RJ45 connection to connect DCU with the external system (Server and other data collection equipment). DCU supports USB Port to connect internet data cards and communicate on TCP/IP.FTP, HTTP, SMTP, UDP and also support MODBUS RTU, MODBUS TCP/IP, BACnet and DLMS, protocol for target device communication. Additional communication capability shall be there in DCU to communicate with other metering equipment, protection equipment or data acquisition equipment in future.DCU shall have at least two nos. of RS232/RS485 and at least One Ethernet port.	As per DCU specifications , DCU should support BACnet & DLMS Protocol. What is the actual need of these protocols? Are we getting data from sources which supports these two protocol?	Protocols mentioned is keeping in mind any future requirement to be incorporated i.e. equipments/energy meter communication from any of the sources as mentioned in GIPCL RFP
10	31	9.0 Point A 14	Detail Scope of work	The SCADA Server shall be connected to GIPCL LAN Network & Internet with specified IP through a firewall & Network Switch. The SCADA software (Dashboard and Reports) shall also be viewable by the users through LAN & Internet. Mobile & Web Application shall be developed by Bidder for monitoring from anywhere at any time.	Do you require Real IP on main server located at Baroda location?	As mentioned above any Static IP requirement shall be taken care by GIPCL.

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11	60	Annexures Point-2	SCHEDULE OF PRICE P-I	Supply & delivery of HMI (minimum 24" LED Display) cum Central Server-Tower type (High End PC) with adequate memory of minimum 1 TB usable space SAS HDD,32 GB RAM with RAID 5 Configuration, minimum 4 USB and 4 Serial ports with adequate LAN ports for communication with Keyboard & speaker, optical mouse, PCI slot for Large format display, CD-RW/DVD-ROM combo drive and redundant Power supply, Xenon processor, Data Concentrator unit with serial & Ethernet port, can support FTP/web service/email/TCP/IP with adequate memory for 45 days and Data logger/suitable media converter at respective places, Network Cabling, Supply of 3 Numbers of Panasonic make Industrial grade Large Format display of minimum 65" with all accessories, stand arrangement, KVM switch etc. As per detailed scope of work.	**We are facing following difficulties and have associated queries:** **65" Industrial Grade Panasonic Display** a. We have checked with Panasonic Vendors and Samsung Vendors, they don't have 65" Industrial Grade b. They only offer Commercial / Professional grade Displays, which are best suitable for any indoor installation.	The displays shall be installed indoors in the Control Room in an industrial environment. The Panasonic Display is expected to give troublefree uninterrupted operation by 24x7 basis. The display shall be of Commercial / Professional Grade. The model considered shall be clearly mentioned in the technical bid.
12					**KVM Switch:** a. Typical use For KVM we can have 4 Input PC and 1 Output HDMI b. Where as in our case we need 3 HDMI Outputs for 65" Displays, and only 1 input device (Server PC), which can be possible only with Display card with 4 outputs connected to 65" LEDs from Server c. Or we need to connect some Thin Clients PCs to 65" Display for local management of Data at individual 65" LED separately and Thin Clients PCs will show browser / remote desktop data on LED Displays connected to Server over LAN.	The objective is to drive multiple large screen high resolution displays(presently 03 nos. 65" Panasonic displays envisaged) with option of selecting single or multiple sessions on each display and separate screens on the three displays at a given point of time from the Client/Operator PC. Bidder shall provide the required hardware and software to achieve the objective with high resolution connectivity (HDMI grade) compatible with Panasonic Commercial / Professional grade specified. The distance between the Operator/ Client PC and the large screen displays may be considered 15- 20 mts.

Total Tentative I/Os, Points to be considered for Acquisition in SCADA System for complete 1 MW Solar plant at Amrol site:

Sr No	Description	Mode of Acquisition of Data	Total No of Panels / Devices / Meters	No of Parameters Per Panel / Device / Meter	Total No of Parameters
1.	Inverters	RS485 (Modbus)	02	20 Nos	40 Nos
2.	String Monitoring JB	RS485 (Modbus)	12 (approx)	20 Nos	240 Nos
3.	HT Panel Numerical Relay	RS485 (Modbus)	01	40 Nos	40 Nos
4.	HT Panel MFM Meter	RS485 (Modbus)	01	20 Nos	20 Nos
5.	HT Panel Tariff Meter (Check)	RS485 (Modbus)	01	20 Nos	20 Nos
6.	HT Panel Annunciator	RS485 (Modbus)	01	20 Nos	20 Nos
7.	Battery Charger Annunciator	RS485 (Modbus)	01	16 Nos	16 Nos
8.	ACDB MFM Incomer-1 / 2	RS485 (Modbus)	02	10 Nos	20 Nos
9.	HT / LT Electrical breaker Feedbacks	Hardwired Digital input (Potential Free DI)	20 Nos		20 Nos
10.	HT / LT Electrical breaker Commands, Inverter reset command	Hardwired Digital Output (Potential Free DO)	10 Nos		10 Nos
11.	UPS / DC Battery Charger	Hardwired Digital input (Potential Free DI)	06 Nos		06 Nos
12.	UPS / DC Battery Charger	Hardwired Analog input (4-20 mA AI)	04 Nos		04 Nos
13.	Weather Monitoring System	Ethernet / RS485 **OR** Hard wired as Analog Input (4-20 mA AI)	01	6 Nos	06 Nos

The above details are tentative and Bidder may consider such other items if required for 01 MW Solar plant data integration work. Bidder can consider same details for 1 MW Solar plant at SLPP also. Any other items (i.e. hardware and software for the SCADA system) if required may be arrange by Bidder.