

KOLKATA PORT TRUST
HALDIA DOCK COMPLEX

Tender No.: SDM (P&E) / T/45 / 2019-20

E-TENDER No.: KoPT/Haldia Dock Complex/P&E Div/8/19-20/ET/27 dated: June 10, 2019

E-Tender, under single stage two part system [Part I: Pre-qualification & Techno-commercial Bid and Part II: Price Bid] for work of 'Supply, Installation, testing & Commissioning of Outdoor type 3.3 KV, 1010 KVA Diesel Generator Set with AMF Panel & indoor type 3.3 KV HT VCB Panel including Comprehensive operation & maintenance contract (COMC) for the period of 5 years after expiry of 2 years guarantee period for Lock Entrance at Haldia Dock Complex, KoPT"

CORRECTIONS / ADDITIONS / DELETIONS, ETC.

[Total Number of Pages:7]

NOTE:

1. This "Addendum-II" should be read in conjunction with this office above Tender Document.
2. Consequential changes, arising out of this Addendum-II, will be deemed to have been effected, even if the same were not incorporated specifically in the Tender Document.
3. One set of this "Addendum-II", shall have to be submitted along with the Offer (in with each page of it, duly signed and stamped, as token of acceptance.
4. All other terms and conditions of this office above Tender Document will remain unchanged.

HALDIA DOCK COMPLEX

♠ ADDENDUM-II ♠

Tender No.: SDM (P&E) / T/45 / 2019-20

E-TENDER No.: KoPT/Haldia Dock Complex/P&E Div/8/19-20/ET/27 dated: June 10, 2019

Terms and conditions

Sl no	Page No.	Clause No.	As specified in the Addendum-I	To be Read as/ Remarks
1	7	S.O.T 3.13 i)	Starting date & time of submission of e-Tender at http://www.mstcecommerce.com/eprochome/kopt : 03.07.2019 from 11:00 Hrs. (IST).	Starting date & time of submission of e-Tender at http://www.mstcecommerce.com/eprochome/kopt : 12.07.2019 from 14:00 Hrs. (IST).
2	7	S.O.T 3.13 ii)	Closing date & time of submission of e-Tender at http://www.mstcecommerce.com/eprochome/kopt : 16.07.2019, up to 16:00 Hrs. (IST).	Closing date & time of submission of e-Tender at http://www.mstcecommerce.com/eprochome/kopt : 23.07.2019, up to 16:00 Hrs. (IST).
3	7	S.O.T 3.13 iii)	Date & time of opening of Part-I (Techno commercial Bid)-16.07.2019, 16.30 Hrs. (IST) onwards.	Date & time of opening of Part-I (Techno commercial Bid)-23.07.2019, 16.30 Hrs. (IST) onwards.
4	47	G. g)(in full)	Relay shall have LED display to show the metering and protection parameters. All the HT Panel connected at various locations in the Lock Gate shall be connected in the main substation with necessary cabling arrangement with LED display.	All the HT Panel connected at various locations in the lock gate to be integrated to SCADA, which will be installed at main substation. Each switchboard should have Ethernet switch with dual FO Port and each substation needs to be connected through FO Cable in ring topology.
5	56	6.52 (3 rd bullet & 2 nd para)	The relay must have an ethernet port (RJ45) on the front for local parametrization and data retrieval. SCADA to be provided in the main substation with all accessories considering HT Panel in substation including machine houses, impounding pump house. Also to provide mobile app minimum 3(three) connection.	The relay must have an ethernet port RJ45/USB/RS232 on the front for local parametrization and data retrieval. Necessary connecting cord to be provided. All HT & relay operation with feedback at substation including machine houses & Impounding pump house to be incorporated with SCADA. Mobile app minimum 3(three) connection shall be provided for monitoring.

6	57	6.55 (1 st bullet)	Plate earthing shall be provided as per IER standard. Switchgear should be supplied with Earthing switch (cable side) with fault making type.	Plate earthing shall be provided as per IER standard.
7	64	After 6.65 (F)		<p>To be added as 6.65 (G) :</p> <p>Technical specification for substation control and monitoring system through SCADA.</p> <p>1. Scope</p> <p>This specification applies to design, manufacture, supply and testing at works of control and monitoring system and also presents various information pertaining to system requirement as regards the network and also as regards the environment and conditions of installation</p> <p>The control and monitoring system hereby called system shall at least have the features enlisted below and may have features more than those listed. However, no feature included in the attached document should be compromised / deviated from.</p> <p>2. General</p> <p>The system should be interfaced with communicable protection devices and other IEDs in the network in such a way that operator can easily access the essential information regarding the network and control the same so as to ensure availability of electric network at its maximum efficiency giving highest utilization of the installed primary equipments.</p> <p>Also, the system should be easy to use for engineers and maintenance personnel.</p>

				<p>3. Functionality</p> <p>Following functionalities should be possible from system:</p> <ul style="list-style-type: none"> • Dynamic Single line diagram with breaker control • Bus bar colouring. • Online Measurements • Relay parameterization (If available from relays on protocol defined in this specification later) • DR Upload (If available from relays on protocol defined in this specification later) • Event and Alarms • Links to documentation • System diagnostic <p>The system should be flexible for future upgradation. I.e. It should be possible to add connectivity to upper level SCADA / ECS with license upgradation without adding hardware to the system.</p> <p>4. Engineering</p> <p>For ease of engineering, the engineering tool designed for the system should be based on latest international guideline protocol IEC61850 modeling.</p> <p>5. Hardware</p> <p>System processor hardware should be of industrial grade and tested for all relevant EMC / CE / IEC tests. It shall have no moving parts so that it needs minimum</p>
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			<p>maintenance. Minimum configuration shall be as follows:</p> <p>1.6GHz, Pentium M, 1 GB flash disk with wide range power supply: 24 – 220V DC, integrated hardware watchdog, suitable for operation temperature range: - 25oc to +70oc & operating humidity of max. 95%. Degree of protection shall be IP4x for the enclosure. External hardware interface shall be as below:</p> <ul style="list-style-type: none"> • 2 nos. LAN (RJ45 copper) • 3 nos. RS232 ports • 1 No. RS485 port • 4 nos. USB ports • Audio output for audio alarm <p>However, it should have provision to optionally include other interface such as additional RS485 or LAN or fiber optic LAN etc.</p> <p>6. Software</p> <p>System shall have web server based HMI software. The HMI license should not be dependent on no. of web clients connected. In other words, it should be suitable for unlimited web clients connection to the system without any additional license cost to user.</p> <p>It should be possible to connect the system to intranet or internet so that the information is accessible anywhere as desired. The system shall have built-in security features for confidentiality, integrity, authentication, authorization, and auditing. Enough security aspects will be ensured such as built in fire wall</p>
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				<p>to defend against virus attack from WAN & encrypted communication to web clients. Also, there should be a possibility to block the control operation over internet.</p> <p>Software shall have different user accounts with role based access for control and monitoring various functionalities. User accounts and access rights shall be possible to be defined for both the application software and the HMI, and are to be protected with individual passwords. Every user login/logout event shall be recorded.</p> <p>7. Communication media and protocols</p> <p>Fiber optic communication media should be considered for protection relays communication to system, as information from protection relays is very critical. However, for other data from non-critical IEDs such as meters, temp. scanners can be taken on electrical RS485 network connected in multi drop fashion.</p> <p>For IEDs, communication hardware should be considered in the bidder's scope / will be free issued by customer / available with customer.</p> <p>Following protocols should be supported by the system, out of which the protocols that needs to be considered will be selected during engineering:</p> <p>Process communication protocol (For communication from IED to system)</p> <ul style="list-style-type: none"> • IEC 61850-8-1 Client • IEC 60870-5-103 Master • MODBUS RTU Master
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				<ul style="list-style-type: none"> • LON • SPA Master <p>For upper level connectivity to central SCADA, following protocols should be supported:</p> <ul style="list-style-type: none"> • IEC 60870-5-101 Slave • IEC 60870-5-104 Slave • DNP 3.2 (Serial LAN/WAN) • External OPC Client • SPA Router <p>Connectivity to upper level SCADA is not in scope of this specification, however, bidder needs to specifically confirm the provision of one port for upper level connectivity. Communication protocol for the same will be selected from above mentioned list in future.</p>
8	138-142	Bidding form – VI Price schedule Part-B		To be added as sl no. 9 (Part-B) SCADA System, as per Technical specification.
				a) Supply – 1 Set.
				b) Installation, Testing & Commissioning - 1 set.
9	138-142	Bidding form – VI Price schedule Part-B		To be added as sl no. 10 (Part-B) Supply & Installation of Fiber optic (FO) cable, as per Technical specification
				a) Supply - 1500 Mtrs.
				b) Installation, Testing & Commissioning - 1500 Mtrs.