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STATE LOAD DESPATCH CENTRE
ODISHA POWER TRANSMISSION CORPORATION LIMITED
GRIDCO Colony, P.O.- Mancheswar Rly. Colony, Bhubaneswar-17, FAX-0674- 2748509
CIN: U40102OR2004SGC007553

CORRIGENDUM – I to TENDER NOTICE NO. SLDC-03/2023-24

TENDER NOTICE NO. SLDC-03/2023-24

"SURVEY, DESIGN, DEVELOPMENT, SUPPLY, INSTALLATION, TESTING, COMMISSIONING & ANNUAL MAINTENANCE CONTRACT OF PMU BASED WIDE AREA MEASUREMENT SYSTEM IN SLDC, OPTCL NETWORK"

Following modifications are made in respect of the Part-I, Section-V, TECHNICAL SPECIFICATIONS, JOB-2, Clause.15.0 (Appendix-I, PART-A, BOQ) of the above mentioned tender notice. The Techno-Commercial excel and Price Bid Schedule excel workbook of the above mentioned tender notice has been revised accordingly and re-uploaded in the tender portal.

The bidders who have already submitted the tender documents in the tender portal are hereby requested to resubmit the bid as per the revised Techno-Commercial excel workbook and clauses of this corrigendum notice. The bids submitted earlier to publication of this corrigendum shall not be considered for technical bid evaluation.

Part-I, Section-V, TECHNICAL SPECIFICATIONS, JOB-2, Clause. 15.0

15.0 APPENDIX-I, PART: A (BOQ)

BOQ FOR WAMS PROJECT IN OPTCL

Bill of Quantity for WAMS at Main Control Centre SLDC			
Sl.No.	**Name of the Item**	**Unit**	**Quantity**
A	**SOFTWARE**		
1	Software for Real Time PDC & Analytical Applications		
a	Super PDC Software	Lot	1
b	Analytical Applications-Oscillation Monitoring System(OMS)	Lot	1
c	Programming Development System(PDS) Software	Lot	1
d	Software for remote Consoles	Lot	1
2	Software for Historian & Data Archiving		
a	Data Historian Software	Lot	1
b	Software for NAS	Lot	1
3	Software for Infrastructure Management		
a	Network Management System & Centralized Management System	Lot	1
b	Patch Management software	Lot	1

c	Identity Server Software	Lot	1	
d	Anti-Virus Software for all Machines in the control Centre.	Lot	1	
B	**HARDWARE**			
4	Hardware for Real Time PDC & Analytical Applications	Set	2	
a	Super PDC (The PDCs shall be sized to collect the data directly from PMUs and indirectly from other PDCs)			
b	Time System (GPS Receiver)			
c	Analytical Application Server			
d	Any other Hardware required for Real Time PDC & Analytical Applications.			
e	Programming Development System (PDS) Server			
5	Hardware for Historian & Data Archiving			
a	Storage Area Network (SAN) based Storage or any other specialized Storage Solution of Minimum 500 TB data storage Capacity of RAID 10 or better configuration for storing PMU Data for One yea	No.	1	
b	Data Historian Server	No.	2	
c	Network Attached Storage (NAS) System of Minimum 6TB of RAID 10 or better configuration	No.	1	
d	Any other Hardware required for Historian & Data Archiving	No.	1	
6	Hardware for Infrastructure Management	Set	2	
a	NMS Server cum Centralized Management Console			
b	Patch management Server			
c	Identity Server			
d	Any other Hardware required for Infrastructure Management			
7	Workstation Consoles			
a	Workstation Console integrated with dual Touch-screen Monitors for PDC Application	No.	2	
b	Workstation Console integrated with dual Touch-screen Monitors for Programming Development System	No.	1	
8	Remote Consoles			
a	Remote Consoles, equivalent to Work station console.	No.	2	
9	Networking Hardware			
a	Firewall with NIPS with Minimum 8 x 10Gbps Fiber optic ports and 2 x 1Gbps Ethernet ports	No.	4	
b	WAN Router for Communicating with Super PDCs ,PMUs, SCADA, Remote PDC at RLDCs/NTAMC and Remote Consoles (Minimum 4 x 10 Gbps Fiber Optic Ports and 8 x 1 Gbps Ethernet ports)	No.	8	
c	WAN router at Remote Console end (Minimum 2x10Gbps Fiber optic ports and 4x 1Gbps Ethernet ports)	No.	2	
d	LAN Switch (Layer 3) with minimum 8x10 Gbps Fiber Optic Ports and 8 x 1 Gbps Ethernet Ports for the following LANs			
	PDC LAN	No.	2	
	Historian LAN	No.	2	
	Infrastructure Management LAN	No.	2	
	LAN for Remote Consoles	No.	2	
	Analytical Applications LAN	No.	2	
10	Color Laser Printer	No.	1	
11	Miscellaneous Items	Lot	1	

a	Armored Fiber Optic Cable and associated termination for connecting PMU panels located in different control room of a station.		
b	Any additional item (Hardware and Software) required to meet the specification requirement.		
c	Any other additional item e.g Server Rack, Computer desk, Power supply cable and networking cable.		
C	**SERVICES: Integration of WAMS System at Super PDC with following units/applications**		
a	Integration of WAMS system at Main SLDCs with existing SCADA/EMS System of Main SLDC.		
b	Integration of existing PMUs & PDCs installed under URTDSM scheme.		
c	Cyber Security Audit by Cert-IN certified Auditors during FAT.		
d	Cyber Security Audit by Cert-IN certified Auditors during SAT.		
e	Integration of WAMS system with Video Projection System.		
D	**TRAINING**		
	Training for SLDC- Man days @15 * 6 persons	Man days	90
E	**ANNUAL MAINTENANCE CONTRACT (AMC)**		
a	Annual Maintenance Contract (AMC) of Complete System Supplied for Initial Period	Lot	1
b	Annual Maintenance Contract (AMC) of Complete system supplied for subsequent 6 years, after completion of initial period of AMC.	Lot	1
c	Annual Cyber Security Audit by Cert-IN certified Auditors during AMC Period.	Lot	1
d	Pre-deployment testing & Installation of Patches/Updates released during the AMC period for all Software Products (developed & supplied by the Contractor and also all 3rd party Software) supplied under this Project	Lot	1
F	**Additional Services during Maintenance period**		
a	Integration of PMUs with SLDC during the AMC period (10 PMUs per year)	Lot	1
b	Services for migration from IPv4 to IPv6 for all equipment control center wise.	Lot	1
Bill of Quantity for PMUs under WAMS Project in OPTCL			
A	**SOFTWARE**		
1	PMU configuration software	Lot	67
B	HARDWARE		
1	PMUs		
a	Minimum No. of PMUs to be delivered at substations/Power plants at locations as identified in Phasors List at Appendix-A.	No.	67
b	Panel for mounting PMUs (complete with all necessary accessories, cables etc. as per specification) along with identified analog channels / modules	Lot	As per Phasor list given at Appendix-A
c	Substation Grade Layer-3 LAN Switches with minimum 4 x 10/100 Mbps Ethernet ports and 2 x 1 Gbps Ethernet ports	Lot	
d	PMU HUB switch (1 no. per each S/S having multiple PMUs)	Lot	
e	Time System (GPS receiver)	No.	21

f	PMU configuration tool (Laptop)	No.	2
B	**TRAINING**		
	Training (For 5Persons @ 3mandays)	Man days	15
C	**Annual Maintenance Contract**		
a	Annual Maintenance Contract (AMC) of Complete System Supplied for Initial Period	LOT	1
b	Annual Maintenance Contract (AMC) of Complete system supplied for subsequent 6 years, after completion of initial period of AMC.	LOT	1
c	Annual Cyber Security Audit by Cert-IN certified Auditors during AMC Period	LOT	1
d	Pre-deployment testing & Installation of Patches/Updates released during the AMC period for all Software Products (developed & supplied by the Contractor and also all 3rd party Software) supplied under this Project	LOT	1
D	**Additional Services During Maintenance Period**		
a	Integration of PMUs with SLDC during the AMC period (10 PMUs per year)	LOT	1
b	Services for migration from IPv4 to IPv6 for all equipment control center wise.	LOT	1
Bill of Quantity for Mandatory Spares for WAMS Project			
A	**Following Spares @ 10% of the supplied quantity or minimum one no of each type (whichever is higher) shall be provided for every Control Center. For similar BOQ items with different configurations, items of highest configuration shall be supplied as spares, provided that the highest configuration device shall be able to replace the lower configuration device.**		
a	Servers		
b	LAN Switches		
c	WAN Routers		
	Workstation Console integrated with dual Touch-screen Monitors		
	GPS Receivers at Control Center		
B	**Spares for Historian Solution**		
C	**Spares for Substation Equipment**		
a	10% of the PMUs of each configuration supplied		
b	10% of the Substation grade L-3 LAN switches of each type		
c	10% of the GPS Receivers supplied		

Sd/-

Director (SLDC)