

Minutes of Meeting between M/s AEML and participating vendors of 33 kV GIS Panels tender during Prebid Meeting held on 15.01.2021 online on Microsoft team.

Reference Tender Doc No: AEML/MDB/2021-22/05 for Supply, Installation, Testing and Commissioning of Assorted ratings of 33 kV GIS panels.

Members Present:

AEML

1. Damodar Sahasrabuddhe - CES
2. Umesh Joshi
3. Rajendrasing Girase
4. Kamlesh Nawdeti -CPG

Vendors

1. Avinash Kulkarni – Siemens Ltd
2. Raturaj Gadekar –SE Ltd
3. Sachin Patil - SE Ltd
4. Bhagyesh Mehendale – ABB Ltd
5. Sayali Baviskar – ABB Ltd
6. Dinesh Panigrahi - CEIPL

In the pre bid meet technical clarifications have been issued to all the vendors and scope of bid explicitly made clear with respect to AEML specification and tender document.

A. 33 kV GIS:

1. 2 nos. of Ruggedcom Ethernet Switches shall be considered for Nirlon B5 and MIAL Rstn respectively with 14 nos. of Ethernet ports and 4 nos. Fiber optic port with ST connector with dual power supply.
 - a. End loop from Ethernet switches of Panel 1 to RTU- 100Mtrs -2Nos.
 - b. 33 kV Panel Switch-1 to Switch-2 1 Mtr – 1 Nos per board.
 - c. Cat 6 cable from 33 kV relays (3 panels and 2 panels boards) to Switch1 and Switch2 to be considered sufficient length with RJ45 connectors (premould)
2. 3 panel SLD is attached for your reference to make arrangement for cable connection provision in panels. STC 31.5 kA for 3 sec
3. Cable sizes and Termination Kit to be provided as per specified.

I/C – 2Rx3Cx400 sq.mm.

O/G (Trafo feeder) – 2Rx(3x1C)630 sq.mm.

Termination kit and accessories for 2 Runs and its termination at site.
4. Vendors to offer approved make of Conformal coated relays with IEC 61850 protocol support with Edition -1 and Edition-2 i.e. ABB make REF620 and Micom 143 with power contacts. Arc flash relay is not a part of this tender.

5. Energy meter shall be supplied by AEML, to be fitted at your factory. ALL CT secondary shall have disconnecting TB and with shorting provision.
6. VPIS shall be provided suitable to 33 kV power source with contacts.
7. Ratings of CT required to be considered as per SLD and calculation to be submitted.
8. Line PT and Bus PT required to be considered as per SLD.
9. Current Test Plug to be considered for testing one set per location.
10. Voltage Test plug with complete accessories to suitable to carry out HVAC test one set per location.
11. Dummy test plugs to be consider wherever cables will not connect immediately. Extra dummy test plug shall be considered as per site requirement.
12. MFM to be considered and inter looping to be done - make Massibus -2160 / Rish -3440 / Satec.
13. 1 no. BCU shall be considered for MIAL /Bandra with 36 BI and 23 BO.
14. OEM Relay Engineers shall be deputed on site for functional testing and point to point testing with RTU and control center.
15. PQ Meter is excluded from the scope of supply,
16. IEC 61850 Panels--: Each O/C and E/F protection relay shall have 36BI+23 BO.
17. Two nos. of Trip Circuit supervision coils to be considered.
18. Numerical Relay- Binary output cards with power contacts shall be provided for protection trip and SCADA open / close commands.
19. Transformer differential Relay shall be with 10 CT inputs and 16 BI /16 BO for all panels.
20. ICOG panels SLD for Bandra and Vile Parle is attached in SLD with Specification.
21. Bidders to consider offer both the variants - Full GIS and Hybrid GIS.
22. For all panels
Incoming Panel is with O/V ,U/V ,Overcurrent + Earth Fault.
Outgoing Panel is with O/V ,U/V ,Overcurrent + Earth Fault and Differential Protection, REF and SEF.

23. Delivery requirement and site details are listed below.

Line	Material Code	Material Description	PR Qty	Rstn	Floor Location	Delivery Schedule
1	2100201825	PNL,ELEC PWR,GIS;33KV;1250A;3PNL	1 set	Nirlon B-5	Ground	31 st July 21
2	2100111398	PNL,ELEC PWR,GIS;33KV;ICOG	3set	MIAL/Bandra	Ground	31 st July 21

24. For in-house training modules and maintaining database for new product procured / installed in AEML network, it is mandatory to submit following documents in case of order placement.

- Autocad drawings of GA, Cross sections
- Exploded views of mechanism, cable, busbar, breaker, and LV chambers.
- 3D Engineering Files in IGES or STP format
- Step-by-step Switching Operation Sequence with supported videos.
- OEM Recommended Maintenance guidelines with supported videos.

25. Complete type test reports along with summary as per attached format to be submitted along with offer. In case of incomplete submission of TTR offer will not be considered for evaluation.

26. Product/ major components catalogue , technical literature and GA drawings to be submitted along with offer.

27. Provision for Termination Kit requirement

28. ITC services will be provided for all the panels. In old stations, Removal of existing panels shall be in scope of AEML. Agency engaged for ITC shall hold Electrical Contractor License on behalf of State Government. Agency shall engage authorized (Designated) Person, who is also a person authorized under Regulation 3 of the CEA Regulations, 2010 (Measures relating to Safety and Electric Supply) to carry out such duties incidental to the distribution and use of electrical energy.

29. For Sr No. 2, work to be carried out in fixed days schedule agreed with our execution department. The outage period for existing ICOG will be provided for 3-4 days maximum. During this period installation of new ICOG, internal wiring, pre commissioning tests, Relay configuration and testing to be completed by

- OEM. Post PO is must in which vendor shall convey all the necessary civil and electrical work required to be done by AEML based on agreed ITC scope matrix.
30. OEM engineer as well as contractor supervisor shall be available on site for ITC supervision round the clock along with sufficient manpower for execution activity with all the necessary testing equipment.
 31. Exhaust Gas duct shall be provided as per site requirement.
 32. Delivery of the panels shall be at location as indicated above.
 33. I/T/C scope matrix is attached herewith in addition to specification - Direct Delivery at Site.
- Balance Points shall be considered as per technical specification no. SP-CES-EL-GIS-01.

Submission date for all the bids shall be strictly as per Tender publication.