

NIT No: AEML/ MDB/2019-20/39

**Supply, Installation & Commissioning of SCADA & ADMS System at Adani
Electricity, Mumbai Ltd.**

Following clarifications are provided with respect to integration of SCADA/DMS system with various systems:

1. All developments required at SCADA /ADMS end in order to integrate with existing AEML applications as per project scope shall be in the scope of OEM. No request for upgrade of existing software in order to adapt with the OEM solution shall be accepted.
2. Data exchange with AMR/MDM/ABT/OMS/SAP shall be in the over ODBC or webservice connectivity.
3. OEM shall provide the documentation for consuming the web services developed by them.

4. GIS Integration:

- a. SCADA/ADMS to GIS system:
 - ✓ Integration shall be done using webservice.
 - ✓ Parameters which shall be exchanged shall be configurable and shall be decided during detailed engineering stage.
- b. GIS system to SCADA/ADMS:
 - ✓ Data exchange with GIS shall be through PGDB format.
 - ✓ Landbase files shall be made available in Shape file format from GIS system.
 - ✓ AEML shall provide PGDB files of a sample network for POC

5. Data exchange with MDM/AMR

- ✓ Integration shall be over ODBC or webservice connectivity.
- ✓ Direction of exchange shall be from AMR/MDM to SCADA/ADMS system.
- ✓ The typical tags shall be instantaneous DT loading in A, kW, KVA, KVAR etc with timestamp. However, it shall be possible to integrate any of the available tags in MDM/AMR as per user requirement.

6. Data exchange with SAP

- ✓ Integration with SAP shall be in the over ODBC or webservice connectivity
- ✓ Typically, the data to be exchanged with SAP shall be the alarms related to equipment based on which notifications shall be created in SAP system.

- ✓ The exact methodology, parameters and their mapping philosophy shall be discussed and finalized at the time of project engineering.

7. ABT integration

- ✓ Data exchange with ABT (To and fro) shall be over ODBC or webservice connectivity.
- ✓ SCADA/DMS system shall exchange data of KW of all incommers and transformer breakers from SCADA system along with all quality flags with ABT system. However, the parameters to be exchanged with ABT shall be configurable.
- ✓ Provision of updation of data from ABT to SCADA is required as per the RFP along with all quality flags. The parameters to be exchanged ABT to SCADA/DMS shall be configurable and decided during detailed engineering
- ✓ This integration shall also have provision to integrate any of the SCADA parameters as and when required.

8. Integration with existing OMS for exchange of outage & load transfer operation events

- ✓ With refence to load transfer operation, we signify any operation on automated and non automated switching devices with time stamp.
- ✓ There shall not be any limitation on no of parameters that can be exchange with OMS. User shall configure the parameters to be exchanged as per the requirement.
- ✓ Data exchange with OMS shall be through webservice.

9. ICCP Integration

- ✓ Real time Data exchange on ICCP TASE.2 protocol with other SCADA systems at SLDCs.