



Clarification 4

Design, Supply, Installation, Integration, Testing and Commissioning of Substation Automation System (SAS) for Existing Grid Substations in Kathmandu Valley.[PMD/PTDEEP/KVSAP-075/76 – 01]

1. We found Baneshwor substation has been converted from Conventional Substation to SAS Substation, we shall adapt the same model & Implement SAS in all the 11 Substation which is covered in this project. We shall Provide BCPU for Protection and Multifunction Meters for Metering and ensure all the Protection & Metering Data available in SAS.
 - *Confirm, but it should be as per specification.*
2. As discussed, Our scope of work covered in this project is limited to convert existing old busbar protection scheme with New low Impedance Busbar Protection scheme.
 - *Confirm.*
3. Were ever busbar protection being not available at the Substation's covered in this project, we shall not consider Supply & Install New Busbar protection.
 - *Confirm*
4. As discussed, we shall not disturb any existing non-communicable TOD or Energy meters installed in all KV Levels, we shall provide MFM Meters for getting Metering parameters at SAS(Please ref point no: 1). However, we shall supply Energy meter as per the specification for the new CRP which is supplied in the current scope of the tender.
 - *Confirm*
5. Were ever Old Electro Mechanical/Microprocessor based Distance protection Relays are installed in existing 132 & 66KV Line Bays, we shall supply & Retrofit with Numerical Distance Protection Relays with IEC61850 Protocol complaint.
 - *Both main and backup and other relays required for complete integration into the SAS system for the complete functioning should be provided.*
6. Manual Raise and lower operation of OLTC taps of transformer shall be facilitated through Bay controller IED via SAS. Automatic Raise and Lower Operation shall be achieved through the existing AVR's Present in existing substation. New AVR Supply or replacing AVR is not considered in scope.
 - *Replacement of AVR is not in scope; however the bidder shall provide the necessary equipment/transducer for the integration of TPI, other indication function & provision for tap raise/lower function.*
7. We shall provide necessary SAS data on IEC104 protocol till the gateway of SAS at each substation, NEA shall do necessary work to integrate the SAS data @ the SLDC which is of Siemens Sinaut Spectrum. However, we shall extend our support for point to point testing of availability of data on IEC 104 Protocol at the SLDC.
 - *Not acceptable. Being the turnkey project, all works are in the scope of Contractor.*
8. For supply & installation of Line Differential Relay, we shall consider standard PGCIL Specification.
 - *Confirm & shall be finalized during DDE.*