

Salient Technical Features

Salient Technical Features for EPC Package for Development of 80 MW/ 320 MWh BESS Capacity by NGEL at KSEB Substations at Pothencode and Sreekantapuram in Kerala

“Salient Technical Features of the equipment/ systems/ services covered in IFB No. **NGEL-CS-5833-004(BESS)-9** are mentioned below. These Salient Technical Features are mentioned only to facilitate the prospective bidders to prima-facie understand the requirements under the tender and shall not in any way limit or alter the scope of work and technical features/specification of equipment/ systems/ services covered in the Bidding Documents. Detailed provisions in regard of scope of work and technical features/specification of equipment/ systems/ services, contained in the Bidding Document shall be final and binding.”

Name of the Project	EPC Package for Development of 80 MW 320 MWh BESS Capacity by NGEL at KSEB Substations at Pothencode and Sreekantapuram in Kerala.
Project capacity	Project is divided into two blocks as follows: Block-1: 40 MW / 160 MWhr at KSEB Pothencode Block-2: 40 MW / 160 MWhr at KSEB Sreekantapuram.
BESS Service Life	Designed service life of BESS shall be of 12 years for daily single cycle operation. O&M of 12 years is included the scope of this project.
Degradation	As mentioned in Technical Specifications

- Determination of basic design criteria for the Battery Energy Storage System (**BESS**).
- The BESS shall comprise of BESS containers with Battery Racks, Battery Management System (BMS), Energy Management System (EMS) and SCADA, Power Conversion System (PCS), Protection system, Power Transformers, Power Evacuation system, Communication System, HT & LT System, Auxiliary power system, Monitoring & Control system, Fire Fighting, remote control and monitoring, any other associated materials and services necessary for trouble free operation and maintenance of the BESS.
- Comprehensive Operation and Maintenance (O&M) works of BESS system for entire design life of 12 years from the date of commissioning.