

Salient Technical Features for 100 MW/400 MWh BESS at NTPC Ramagundam

“Salient Technical Features of the equipment/ systems/ services covered in IFB No. **RE-CS-5817-004-9** 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	100MW/ 400MWh BESS AT NTPC RAMAGUNDAM
Project capacity	10p0MW and 400MWh Rated Discharge AC capacity at 33KV interconnecting point.
BESS Service Life	Designed service life of BESS shall be of 20 years for daily single cycle operation. O&M of 10 years is included the scope of this project.
Degradation	Rated project capacity has to be demonstrated during commissioning and shall be maintained for first year of operation. Degradation in Daily Discharge capacity and Annual Round trip efficiency shall be allowed on annual basis and shall be quoted by bidder (for 20 years) in relevant attachment of bid.

- Determination of basic design criteria for 100 MW and 400 MWh capacity grid interactive Battery Energy Storage System (**BESS**).
- The BESS shall comprises of Battery System, Battery Management System (BMS), Energy Management System (EMS) and SCADA, Power Conversion System (PCS), Protection system, Communication System, HT & LT System, Auxiliary power system, Fire Fighting, remote control and monitoring, and all other associated materials and accessories necessary for trouble free operation and maintenance of the BESS system.
- Comprehensive Operation and Maintenance (O&M) works of BESS system for 10 years from the date of successful completion of trial run.