

SALIENT TECHNICAL FEATURES



BALANCE OF SYSTEM PACKAGE OF ISTS CONNECTED WIND ENERGY PROJECT(S) UP TO 720 MW CAPACITY ANYWHERE IN INDIA

IFB No. NRE-CS-5918-003(D)-9(R)

“Salient Technical Features of the equipment/ systems/ services covered in IFB No. NRE-CS-5918-003(D)-9(R) 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.”

Minimum No. of Land Footprints (WTG Locations) to be offered by a Bidder at Single Location	20
Maximum No. of Land Footprints (WTG Locations) to be offered by a Bidder at Single/ Multiple Locations	200
Reference Turbine Capacity to be considered for determining Project Capacity and Design (for AEP certification, costing of Internal Evacuation and PSS)	2.7 MW
Quoted Capacity by Bidder	2.7 MW x No. of Land Footprints offered
Rotor Diameter to be considered for Project Design, Land requirement and Spacing Calculations	155 Mtr.
Wind Turbine Capacity Range	2.7 MW to 3.6 MW (Separate WTG Package)
Range of Cumulative Capacity for Development Package	54 MW (20 x 2.7 MW) to 720 MW (200 x 3.6 MW)

- Successful bidder shall be responsible for Detailed design, engineering, micro-siting, manufacturing, supply, erection, testing, commissioning, and proving the guaranteed performance parameters for installation of the offered wind farm starting from 33kV internal evacuation lines from unit substation, pooling substation, Central monitoring and control station (CMCS), reactive power compensating devices Wind monitoring mast(s), external EHV transmission line till ISTS substation etc.
- The bidder shall offer land for the offered windfarm with clear title and free from all encumbrances, liens, encroachments or litigation.
- Successful bidder shall offer land footprints, Minimum – 20 Nos. and Maximum – 200 Nos. which shall be compatible for installation of any WTG of size ranging from 2.7MW to 3.6MW. The

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reference turbine used for AEP certification and evaluation shall be based on base reference turbine of 2.7 MW. (Refer above Table)

- Successful bidder shall also submit Micro-siting report and Estimated Annual Energy Generation report duly vetted by NIWE or Equivalent Agency such as DNV GL/UL/VAISALA etc. during detail Engineering.
- All associated electrical works required for grid interfacing (i.e. internal HT overhead lines, common group control and metering station, common EHV sub-station(s) with necessary switch gear) and grid extension (i.e. external overhead line up to ISTS grid sub-station, bay extension or creation of additional facilities at grid sub stations)
- All associated civil engineering works like internal roads, office cum control room building, pooling substation, storage sheds, permanent water supply arrangements, approach road etc.
- Unshared and Independent Internal Transmission lines from WTGs to pooling substation.
- No sharing on 33 kV side of Pooling S/S of Wind Energy Plant.
- Transmission line for evacuation of power generated from wind energy project.
- Pooling substation and associated civil and electrical works required for interfacing with grid.
- Tariff Meters as per applicable regulation.
- 3 years comprehensive O&M for offered BOS package along-with mandatory spares.

Note: *Supply, civil works and installation of Wind Turbine Generators (WTGs), unit substation & SCADA are not in the scope of BOS package.*