

SALIENT TECHNICAL FEATURES



DEVELOPMENT OF WIND ENERGY PROJECT WITH 540 MW CAPACITY AT ISTS SUB-STATION ANANTAPUR-III IN ANDHRA PRADESH (TRANCHE-II)

IFB No.: NRE-CS-5930-003-9

“Salient Technical Features of the equipment/ systems/ services covered in IFB No. NRE-CS-5930-003-9 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 works and technical features/ specification of equipment/ systems/ services covered in the Bidding Documents. Detailed provisions in regard of scope of works and technical features/ specification of equipment/ systems/ services, contained in the Bidding Documents shall be final and binding.”

Location of Wind Project	Andhra Pradesh
ISTS Sub-station Connectivity	To be arranged by the Employer
Name of ISTS Sub-station to which Wind Project to be inter-connected	ISTS Sub-station Anantapur-III
Total Capacity	540 MW
Project Capacity	Total Capacity of 540 MW shall be divided into Two (02) Independent Projects of 270MW each
Capacity of Wind Project to be offered by a Bidder	270 MW / 2x270 MW
Turbine Capacity to be offered by a Bidder	ALMM (Wind) Listed Turbine with Minimum Rating of 3.0 MW

- Successful bidder shall be responsible for detailed design, engineering, micro-siting, manufacturing, supply, erection, testing, installation & commissioning, and proving the guaranteed performance parameters for complete wind farm including land, ALMM (Wind) listed wind turbine generators (WTGs) within the offered wind farm, Unit substation, 33kV internal evacuation lines from unit substation, pooling substation, central monitoring and control station (CMCS), wind monitoring mast(s), external EHV transmission line till ISTS substation etc.
- The bidder shall be responsible for acquisition of the required land for the offered wind farm project, all roads, storage area and sheds, pooling sub-station etc. as per prevailing govt. rules and transfer of title/ lease deed to Employer including infra-structure development and Right of Way (ROW) complete along with all required approvals.
- The bidder shall offer all required land for the wind project with clear title and free from all encumbrances, liens, encroachments or litigation.

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- Bidder shall submit Micro-siting and Estimated Annual Energy Generation report duly vetted by NIWE at the time of bid submission.
- Unshared and Independent SCADA system for control and monitoring and transmission of data as per specifications.
- Unshared and Independent Internal Transmission lines from WTGs to pooling substation.
- No sharing on 33 kV side of Pooling S/S of Wind Project.
- Tariff Meters as per applicable regulations.
- Telemetry, Power Plant Controller and Data Communication with applicable LDC for the wind project.
- All associated civil works like WTG foundations, USS foundations, control cabins for housing, control panel near tower base (if required), internal roads, office cum control room building, pooling substation, storage sheds, permanent water supply arrangements, approach roads etc.
- All associated electrical works required for grid interfacing (i.e. internal HT overhead lines, system controls and metering station, EHV Sub-stations with necessary switch gear etc. complete).
- Inland Transportation and Insurance for Delivery at site on FOR basis.
- Geotechnical Investigation and Civil Works for all foundations and works.
- Grid compliance study for the complete wind project, SCADA/SAS system, Control Panels, Power Plant Controller, system software(s), supply and installation of SVG and harmonic filter as per requirement to meet the compliance and successful commissioning of wind project.
- The bidders shall offer ALMM (Wind) listed WTG machine having machine capacity of 3.0MW or higher.
- All agreements, statutory approvals and clearances such as govt. order, power evacuation, environmental, central/ state nodal renewable energy agency, electrical, forest, MOD etc. as required/ applicable.
- 10 years Comprehensive operation & maintenance of the complete Wind Energy Project including WTG, Unit Substation, pooling substation, internal and external transmission system, roads and approaches, along with supply of all spare parts, consumables, repairs/ replacement of any defective equipment, payment of applicable charges levied by the respective state govt./ local bodies etc.
- Supply of Mandatory Spares as per specifications.