

SALIENT TECHNICAL FEATURES

Package Code: NRE-CS-5826-004(L)-9

“Salient Technical Features of the systems /equipment/ services 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.”

Salient technical features of the proposed project are as follows:

Name of the Project	LAND AND POWER EVACUATION PACKAGE FOR DEVELOPMENT OF 300MW ISTS CONNECTED SOLAR PV PROJECTS WITH BATTERY ENERGY STORAGE NEAR 300MW NOKHRA SOLAR PROJECT OF NGEL, RAJASTHAN
Total Project capacity	300 MW
Land Requirement	5 Acres per MW (Usable Land)

1. The Bidders shall bid for entire 300MW only.
2. Bidder can provide Government/private contiguous Land (5 Acres/MW) on freehold/leasehold basis near **NGEL’s Nokhra Solar Project, Rajasthan.**
 - The lease period shall be a minimum of 29 years 11 months.
3. Necessary approach road till Pooling substation including any interconnection between plots (if not readily available) by self or through State machinery.
4. Topography Survey for Land Parcels and any cutting / Filling with compaction, to maintain an average slope of 10% for Solar Project Land for installation of tracker-based MMS. (Tracker system is not included in bidder’s scope). The slope of land would preferably be in one direction for at least 100m length in N-S Direction.
5. Geotech Investigation for Pooling Substation and Transmission System only as required for Design of Foundations.
6. Fencing of the offered Land including entry / exit gates (minimum 2 per plot) including security cabins for Solar Project except Tr. Line related Land.
7. Submission of relevant inputs and land documents to NTPC REL for arrangement of grid connectivity.
8. Design, Engineering, Supply, Erection, Testing & Commissioning of
 - a. **220kV** AIS Pooling Substation(s) including Power Transformer and associated SAS and Protection for evacuating offered MW capacity and required reactive power.
 - b. 33 kV Pooling Switchgear.
 - c. Associated Civil work for substation including Control Room Building and Pooling switchgear building.

9. Design and Construction of EHV Transmission Line from Pooling substation(s) till **Switchyard of NGEL's Nokhra Solar Project** including the "Right of Way" for transmission line.
10. Design and construction of terminal bay at **Switchyard of NGEL's Nokhra Solar Project** as per applicability.
11. Telemetry system for data communication as per specifications.
12. Installation of Power Plant Controller (Main and Sub-PPCs) and Grid Compliance Study for Solar plant capacity associated with above Pooling Substation.
13. Supply and Installation of various Monitoring associated with Tie Transformers.
14. Supply of mandatory spares.
15. O&M of Pooling substation and associated equipment, EHV Transmission Line(s) and terminal bay at **Switchyard of NGEL's Nokhra Solar Project** for a period of 3 years from the date of Project Commissioning.