ABRIDGED INVITATION FOR BIDS

NTPC GREEN ENERGY LIMITED
(A SUBSIDIARY OF NTPC LIMITED)

CONTRACTS SERVICES

INVITATION FOR BIDS (IFB)

FOR

EPC PACKAGE FOR DEVELOPMENT OF 50 MW / 200 MWH BESS AT JHANSI (U.P.) OF NUGEL

(DOMESTIC COMPETITIVE BIDDING)

IFB No.: NGEL-CS-5840-004(BESS)-9 **Date: 11.06.2026**

NTPC GREEN ENERGY LIMITED (NGEL) invites online bids on behalf of **NTPC UP Green Energy Limited (NUGEL)** from eligible bidders on Single Stage Two Envelope (i.e. Envelope-I: Techno-Commercial Bid and Envelope-II: Price Bid) bidding basis, followed by Reverse Auction for "**EPC PACKAGE FOR DEVELOPMENT OF 50 MW / 200 MWH BESS AT JHANSI (U.P.) OF NUGEL".**

For the detailed IFB, please visit https://www.bharat-electronictender.com **or** https://ntpctender.ntpc.co.in **or** https://www.ngel.in **or** https://www.ntpc.co.in or may contact:

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Document Sale Start Date and Time :18.06.2026, 17:00 hrs
Document Sale Closing Date and Time : 29.06.2026, upto 17:00 hrs
Bid Submission End Date and Time : 10.07.2026 upto 14:00 hrs
Bid Opening Date and Time :10.07.2026 at 14:30 hrs

Registered Office:
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NTPC Bhawan, SCOPE Complex,
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Corporate Identification Number (NGEL): **L40100DL2022GOI396282**,
Website: www.ngel.in

Brief Scope of Work for "EPC PACKAGE FOR DEVELOPMENT OF 50 MW / 200 MWH BESS AT JHANSI (U.P.) of NUGEL"

A) BESS Project

The scope of work covers the following activities and services in respect of all the equipment & works specified for BESS portion and covered under the specifications and read in conjunction with "Scope of Supply & services" specified in Technical Specifications

All project deliverables, as specified at the Point of Interconnection (POI) to the UPPTCL grid, shall be met in full. The Contractor shall be responsible for the detailed design, sizing, supply, installation, integration, testing, and commissioning of the BESS so as to achieve the project-level guaranteed parameters. The SOW defined herein is indicative and shall be construed to encompass all activities, systems, and services necessary to meet the overall project requirements and performance guarantees.

1) Design, Engineering, Supply, Packing and Forwarding, Transportation, Unloading, Storage, Installation and Commissioning of grid connected Battery Energy Storage System **(BESS)** on turnkey basis.
2) Unloading at respective site, Erection, Testing, Commissioning, Integration of above equipment with Solar plant Infra at 33 KV Pooling switchgear (being developed through a Separate package) to commission a complete BESS system integrated with Solar plant and grid shall be included in scope of bidder.
3) **Design life of BESS system including that of battery shall be of 25 years (with degraded capacity as per bidder's proposal considering daily single cycle operation) from the date of commissioning.**
4) Batteries offered shall be rated for **minimum 10,000 cycles of operation**.
5) The BESS Supplier shall take into consideration following loss parameters beyond the termination point and up to POI while sizing the nameplate capacity of the BESS:

Head	**Loss to be considered in sizing**
Power Trafo Losses	1 %
Transmission Line Losses	0.25%

6) **Bidder will guarantee minimum 92 % of dispatchable capacity at POI across all 15 years starting with 100 % of rated dispatchable capacity (as mentioned above) at CoD and 95 % for first year. Dispatchable capacity at the time of handover shall be minimum 92%.**

7) **Any augmentation required for meeting above criteria shall be included in scope of bidder.**

Minimum nameplate rated installed capacity of BESS shall be:

	Deliverable capacity*	Min Nameplate capacity
Block 1	200 MWh	220 MWh

- 100% of Dispatchable Capacity.

8) **Comprehensive O&M including associated warranty, annual maintenance contract (Service Level Agreement) and Insurance of BESS for period of 15 years shall be included in scope of bidder.**
9) Minimum monthly Round Trip Efficiency (RTE) shall be 80% including auxiliary consumption (Measured at BESS Termination point at 33 KV)
10) Monthly availability to be maintained is 98%. Detailed Availability requirements and other details will be mentioned in detailed specifications.
11) BESS capacity offered shall be suitable for meeting deliverable capacity at POI including reactive power compensation.
12) Grid compliance study of solar + BESS system is included in scope of bidder. However, inputs of solar plant for conducting grid power study shall be provided by owner. Grid compliance study, if required, for each augmentation shall be in scope of bidder.
13) Reactive power compensations and power quality compliance for entire BESS system upto 220 KV grid interconnection point at UPPTCL switchyard is included in scope of bidder.

14) Aux supply system for the BESS Plant from 33 kV termination point shall be in the scope of Bidder. The aux supply required for Battery Container at site up to final commissioning shall be also in the scope of Bidder. Bidder to ensure the delivery of items at site and other works related to BESS plant accordingly.
15) During operation of the BESS Plant, in case of grid failure, emergency supply requirement for BESS Plant shall be in the scope of Bidder.
16) DSM Charges applicable corresponding to the metering and scheduling of BESS Plant and attributable to Bidder shall be paid by bidder, during the Contract duration.
17) Bidder shall carry out Engineering to execution works of civil, erection, installation, and commissioning works of all the supplied equipment and equipment system(s).
18) Bidder shall provide engineering drawings, data, process calculations, test procedures, Equipment layout, Drawings/Data sheets of bought out items, Performance & Guarantee Test procedure etc for review and approval of owner.
19) Provide documentation for design and expected performance through design calculations, software, design drawings, equipment drawings, and modifications to the existing drawings.
20) Complete manufacturing including conducting all type, routine and acceptance tests, Pre-assembly, (if any), testing, pre-commissioning, and commissioning and putting into satisfactory operation all the equipment including successful completion of initial operation.
21) Scope shall include EMS configuration to operate BESS at various modes as per Grid requirement mentioned in specification and integrated operation with Solar plant and Plant Scheduling as per Grid/RLDC requirement during O&M. Bidder is required to provide Hybrid EMS which shall control the generation of Solar Plant as well BESS Plant and shall be properly integrated with Solar Plant.