# NTPC RENEWABLE ENERGY LIMITED

(A NTPC Group Company)



**INVITATION FOR BIDS (IFB)** 

## NTPC RENEWABLE ENERGY LIMITED (A NTPC group Company)

### INVITATION FOR BIDS (IFB) FOR

## APPOINTMENT OF CONSULTANT for "ASSESSMENT OF POTENTIAL FLOATING SOLAR CAPACITIES IN DIFFERENT STATES and UTs OF INDIA"

IFB No.: NRE-CS-CONS-FS-001

Bidding Document No.: NRE-CS-CONS-FS-001

- 1. NTPC RE Ltd. invites online bids on **Single Stage Two Envelope bidding basis** (Envelope-I: Techno-Commercial Bid & Envelope-II: Price Bid) for aforesaid Package, as per the Scope of Work mentioned hereinafter.
- 2. The Bidding Documents for the aforesaid package has been uploaded on GePNIC Portal of NIC (Tender ID No.: 2023\_NTPCR\_76894) and may be downloaded through GEPNIC e-tender portal (https://eprocurentpc.nic.in).

#### 3. BRIEF SCOPE OF WORK

The intent of the proposed study is to evaluate the feasibility of developing floating solar PV plant at reservoirs of States/ UTs as mentioned in subsequent clause. Broadly the scope of work shall include,

- 1. Collection of relevant data and satellite imagery for reservoirs and carrying out a preliminary study for assessing the suitability of FSPV installations.
- 2. Site visit as per requirement.
- 3. Meeting with States/ UTs authorities.

### 4. Collection of Historical and Relevant Data:

- a. Prime purpose of the reservoir / water body (irrigation, hydro power generation, multi-purpose, etc.)/ storage type.
- b. Age of the existing dam / reservoir project, remaining life of the reservoir based on the previous sedimentation analysis reports.
- c. Design reservoir levels (maximum water level [MWL], full reservoir level [FRL], minimum draw down level [MDDL]), flood cushion etc., any change in these levels as per current siltation in the reservoir, safety etc.
- d. Past occurrence of flood and its magnitude, no. of events at which dam gates were required to be opened, occurrence of extreme weather conditions for preceding 20 years or since the commissioning of the reservoir, whichever is higher
- e. Collection and review of design Area Elevation Capacity curve of reservoir available with the owner / regulator of reservoir.
- f. Collection of Sedimentation analysis / hydrographic analysis /Bathymetry data and open-source data.

- g. Collection and review of historical daily water levels MWL, FRL, MDDL, inflow and outflow data, water velocity for preceding 20 years (or since the commissioning of the reservoir, whichever is higher) from owner / regulator of reservoir, Central Water Commission (CWC), state and local authorities, if available. An assessment of water body surface area at various water levels (such as FRL, MDDL etc.) and average water body surface area during the above-mentioned period to be presented.
- h. Regional geological setup, seismicity of the region and site area and past occurrences of earthquake.
- i. Based on the data collected and opensource data the Variation of water level has to be estimated and maximum possible capacity of all reservoirs has to be estimated.
- 5. Assessing the site suitability for FSPV installations including
  - Solar resources, local climate conditions, Shading, soiling, and other site conditions
  - Subsurface soil conditions likely to be encountered.
- 6. Environmental considerations (sanctuary, migratory birds' zone, forest areas, etc., to be identified and excluded from project area).
- 7. Social considerations include the potential impact on the livelihood.
- 8. Grid access, substation location, power evacuation scenario and construction power availability.
- 9. Access rights, permits, and regulations.
- 10. Economic viability cost estimation.
- 11. Cognizance of earlier study, if any.
- 12. Rank the potential reservoirs based on the key considerations mentioned above
- 13. Policy and Regulatory due diligence.
- 14. Gathering of all forms of data/ resources and co-ordination with state/ UT authorities
- **4.** NTPC RE Ltd. intends to finance the subject package through Own Resources.
- **5.** Dates for Bid Submission and Opening shall be as per the following schedule:

Issuance of IFB	09.06.2023
Last Date for receipt of queries	22.06.2023
Last date for receipt of bids comprising both	04.07.2023 up to 1500 Hrs.(IST)
Techno-Commercial and Price Bid	
(Envelope-I & Envelope-II)	
Techno–Commercial bid (Envelope-I)	06.07.2023 at 1500 Hrs.(IST)
opening Date & Time	
Envelope-II (Price) bid opening Date & Time	Shall be intimated separately

**6.** All bids must be accompanied by a Bid Security for an amount of Rs, 5,00,000/- (Indian Rupees Five Lakh only) in the form as stipulated in the Bidding Documents

ANY BID NOT ACCOMPANIED BY AN ACCEPTABLE BID SECURITY IN A SEPARATE SEALED ENVELOPE SHALL BE REJECTED BY THE EMPLOYER AS BEING NON-RESPONSIVE AND SHALL NOT BE OPENED. IN CASE, THE BID SECURITY IS SUBMITTED THROUGH ELECTRONIC FUND TRANSFER (EFT), BIDDER TO SUBMIT THE PROOF OF E-PAYMENT OF BID SECURITY EITHER IN SEPARATE SEALED ENVELOPE OR IN THE E-TENDERING PORTAL.

- 7. NTPC RE Limited reserves the right to reject any or all bids or cancel/withdraw the Invitation for Bids without assigning any reason whatsoever and in such case no Bidder / intending Bidder shall have any claim arising out of such action.
- **8.** Detailed specification, scope of work and terms & conditions are given in the Bidding Documents which may be downloaded from our e-Tender website (<a href="https://eprocurentpc.nic.in">https://eprocurentpc.nic.in</a>).
- 9. Bids shall be submitted online and opened at the address given below in the presence of Bidder's representatives who choose to attend the bid opening. Bidder shall furnish Bid Security Details and Power of Attorney in physical form as detailed in Bidding Documents before the stipulated bid submission closing date and time at the address given below.
- **10.** Issuance of Bidding Documents to any bidder shall not construe that such Bidder is considered to be qualified.
- 11. This letter along with the Bidding Documents transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. You are requested to keep all the information confidential and do not disclose them to any other third party, persons or firms.

### 12. Address for communication:

Addl. General Manager (CS)/ Senior Manager (CS)
Contracts Services
NTPC Renewable Energy Limited
4th Floor, NETRA Building
E-3, Ecotech-II, Udyog Vihar, Greater Noida
Gautam Budh Nagar, Uttar Pradesh, India, Pin – 201306

Telephone No. +91-120-2356521, +91-120-2356627, +91-9650990576 E-Mail: shailendra@ntpc.co.in / akchaddha@ntpc.co.in