

(INVITATION FOR EXPRESSION OF INTEREST)

NTPC Limited

(A Government of India Enterprise)



INVITATION FOR EXPRESSION OF INTEREST (EOI)

FOR

**IDENTIFICATION OF EXPERTS FOR EMPANELMENT WITH NTPC LIMITED TO
PROVIDE CONSULTANCY SERVICES**

- (I) FOR R&M AND LIFE EXTENSION OF OLD THERMAL POWER STATIONS
AND/OR**
- (II) FOR RESOLUTION & TROUBLE-SHOOTING OF SYSTEM/SUB-SYSTEM
LEVEL & EQUIPMENT ISSUES OF OPERATING THERMAL POWER PLANTS**

(INVITATION FOR EXPRESSION OF INTEREST)

(INVITATION FOR EXPRESSION OF INTEREST)

DETAILED NOTICE INVITING EXPRESSION OF INTEREST (EOI)

EOI No.: NTPC/SE/EOI/04/2023

Date: 22.09.2023

NTPC is Inviting an Expression of Interest for “IDENTIFICATION OF EXPERTS FOR EMPANELMENT WITH NTPC LIMITED” to provide consultancy services

- (i) for R&M and LIFE EXTENSION of old thermal power stations
and/or
- (ii) for resolution & trouble-shooting of system/sub-system level & equipment issues of operating thermal power plant

1.0 Objective:

(i) ***R&M and LE:***

To identify system/sub-system experts having hands-on experience of various activities of R&M and Life Extension of thermal power plants/units who may be considered for empanelment as a consultant by NTPC Limited to assist in preparation of Detailed Project Report (DPR) for R&M/LE projects based on studies like Energy Audit (EA)/Performance Evaluation Test (PET)/Thermal Performance Test (PET), Residual Life Assessment (RLA)/Condition Assessment (CA), Financial Viability etc. of any thermal power station/unit.

(ii) ***Site Support:***

(a) To identify experts for trouble-shooting problems of equipment, component and various system or sub-system of thermal power station/unit and extending design and engineering support for the same who may be considered for empanelment as a consultant by NTPC Limited for resolution and trouble-shooting of issues of operating units.

(b) To identify experts who may be considered for empanelment by NTPC Limited to extend engineering support for completion of the facilities of an operating station/unit where OEM/OES are not available for supporting the designing and engineering activities and facilities are partly installed/commissioned.

Based on EOI response, NTPC may explore the possibility of empanelment of consultant for various areas as specified above at Clauses 1.0 (i) and 1.0 (ii).

2.0 Tentative Scope of Work of the Consultants

(i) for R&M and Life Extension

- Visit the site to physically review and assess the station/plant.

(INVITATION FOR EXPRESSION OF INTEREST)

- Gathering relevant information related to performance data, major maintenance data/works carried out during overhauling, inf. about major issues affecting heat rate, efficiency, APC , based on which R&M scope can be finalized.
- Assistance in the following activities:
 - Energy Audit
 - Performance Evaluation Test (PET)
 - Thermal Performance Test (TPT)
 - Residual Life Assessment & Condition Assessment
 - Financial Viability
 - Generation Loss Analysis
 - Water Audit
- Assistance in preparation of Detailed Project Report
- Assistance in finalizing the scope for R&M

(ii) for Site Support

(a) Trouble-shooting Assignments

- Visit to the site to physically review and assess the problem.
- Gathering the relevant information related to design data as well as operational parameters, major maintenance works earlier carried out etc. (as available) from site to analyse the problem.
- Examining the problem using engineering tools (like FEA, STAAD, Surge Analysis tools, CFD or any other software for performance review, efficiency and heat rate improvement etc., as applicable) and applicable handbooks/standards/guidelines.
OR
Reviewing the proposal as per prevailing norms and standards.
- Examining probable cause of failure or non-performance of the equipment/system.
OR
Preparing alternative schemes and examining its technical feasibility for the subject plant/unit.
- Preparing report containing root cause analysis and possible alternatives for rectification with engineering explanation.
OR
Preparing report containing alternative schemes with pros & cons.
- Discussion with NTPC on proposed root cause analysis and alternatives, as above.
- Submission of final report with engineering suggestion for rectification of the problem.

(b) Engineering Support for Completion of Facility

- Visit to the site to physically review and assess the problem.
- Gathering the relevant information related to design data as well as operational parameters, major maintenance works earlier carried out etc. (as available) from site to analyse the problem.

(INVITATION FOR EXPRESSION OF INTEREST)

- Examining the problem using engineering tools (like FEA, STAAD, Surge Analysis tools, CFD or any other software etc., as applicable) and applicable handbooks/standards/guidelines.
- Preparing alternative schemes and examining its technical feasibility for the subject plant/unit.
- Developing relevant documents and drawings for execution of the scheme.
- Discussions with NTPC on proposed schemes and documents/drawings.
- Engineering support during execution of the scheme.

3.0 Content of the Qualification Requirement

The qualification documents to be submitted by the experts participating in the EOI shall have the following structure and content:

- i) A brief description of the consultant/s, their profile/s and status.
- ii) Statement of qualification & summary experience of consultant in handling jobs in R&M/ENERGY AUDIT/PET/Trouble-shooting/Resolution of Site Issues of a thermal power station/unit with his key role for such works. Curricula-vitae of consultant personnel who will provide such services including monitoring and back-up services indicating their specific knowledge and experience in specific area like Boiler & its Auxiliaries, Turbine & its Auxiliaries, BOP, Electrical and C&I System or complete BTG& BOP (as applicable) for handling the projects to be furnished.
- iii) An outline of the consultant, recent (10 years & above) experience on assignments of similar nature and the consultant's working knowledge in India / abroad and summarising the consultant's qualifications and experience. For energy audit / water audit / PET related job, certified energy manager / auditor would be preferred.
- iv) Outline of experience on assignments of similar nature especially of 110/200/210/250 MW having experience in either one of the areas or combination of all areas, i.e., complete Steam Generator, Steam Turbine & Generator (BTG) portion & Balance of plant (BOP) mentioned below:
 - (a) Steam Generator & auxiliaries
 - (b) Steam Generator auxiliaries -Air preheaters, Fans, Milling system,
 - (c) Steam Turbine & auxiliaries
 - (d) Generators and auxiliaries including electrical portion
 - (e) BOP covering CW, CT, DM &PT, Makeup water
 - (f) BOP covering Coal Handling Plant & Ash Handling Plant
 - (g) Electrical and C&I SystemsOr
Complete BTG portion & Balance of plant (BOP)

It is required that the consultant shall observe the highest standard of ethics during the selection procedure. Consultant/s should be aware that any fraudulent or corrupt activity disqualifies them immediately from the project.

(INVITATION FOR EXPRESSION OF INTEREST)

4.0 Consultancy charges shall be decided on number of days spent by the consultant at NTPC/State Utility Plant location for the assigned work. Travel expenses to the location shall be borne by NTPC.

5.0 DOWNLOAD AND TIMELINES FOR SUBMISSION OF EOI

a. Interested APPLICANTs may download the documents of EOI free of cost from www.ntpctender.com & <https://eprocurmentpc.nic.in>

b. Last date for query on EOI : 30.09.2023

c. Last date for EOI submission : 30.10.2023

d. Response Validity : 12 months from Last Date of EOI Submission

6.0 NTPC encourages submission of EOI in soft copy. For consideration of EOI, APPLICANTs are required to e-mail softcopy, completed in all respect, from their own e- mail ID to below mentioned e-mail IDs. If APPLICANTs also wish to submit hard copy of the EOI, the same can be submitted either in person or by registered/ speed post till the last date of submission of EOI to the following address: -

To: Manish K Tiwari, AGM (Station Engineering)

Email: manishtiwari@ntpc.co.in

CC to: ashwinimarkandan@ntpc.co.in

Station Engineering,

NTPC Limited, WR-II HQ,

Plot No. -87, Sector-24,

Atal Nagar, Nava Raipur,

Raipur, Chhattisgarh, PIN code: 492018

7.0 NTPC reserves the right to reject or accept any or all applications, cancel/withdraw the EOI process without assigning any reason whatsoever and in such case, APPLICANT shall not have any claim arising out of such action. NTPC bears no responsibility or liability of any kind in reference to the EOI.

(INVITATION FOR EXPRESSION OF INTEREST)

SECTION-I

INFORMATION TO APPLICANT

1. NTPC Limited, a Govt. of India Enterprises, NTPC group produces 399 billion plus units of electricity annually through its cluster of gas, coal, hydro and RE based power stations of more than 73 GW capacity spanning across the world.

2. INTENT OF THE EXPRESSION OF INTEREST (EOI)

This EOI is to identify the experts for Empanelment with NTPC Limited to provide consultancy services:

(I) FOR R&M AND LIFE EXTENSION OF OLD THERMAL POWER STATIONS

-AND/OR-

(II) FOR RESOLUTION & TROUBLE-SHOOTING OF SYSTEM/SUB-SYSTEM LEVEL & EQUIPMENT ISSUES OF OPERATING THERMAL POWER PLANTS

3. THE APPLICANTS SHOULD NOTE THAT:

- a. Language of the responses to EOI or any query/clarifications/correspondences shall be in English only.
- b. For expression of interest, Application Form and Annexures given in Section-II shall be duly filled and sent to NTPC by the APPLICANT in soft copy.
- c. Applicant should go through Section-I thoroughly before filling and submitting the application form and annexures in Section-II.
- d. Applicant shall mention the name and contact details of two persons, with complete address, phone number and official email id for reference.
- e. NTPC Ltd. may, at its sole discretion, ask for additional information/ documents and/ or seek clarifications from the Applicant after the Deadline for submission of response, inter alia, for the purpose of removal of inconsistencies or infirmities in their responses.
- f. Based on EOI response, NTPC may explore the possibility of empanelment of consultant for various areas as specified above at **Appendix – I**.
- g. This EOI is indicative only and non-committal.

4. ENQUIRIES AND CLARIFICATIONS

Any clarifications on the EOI may be sought to the following via email:

To: Manish K Tiwari, AGM (Station Engineering)

Email: manishtiwari@ntpc.co.in

CC to: ashwanimarkandan@ntpc.co.in

(INVITATION FOR EXPRESSION OF INTEREST)

5. CORRIGENDUM

At any time before the last date of submission of EOIs, NTPC may, for any reason, whether at its own initiative or in response to a clarification requested by an Applicant, modify the EOI document. The amendment will be posted on the website and will be binding on the Applicants and the Applicant will give due consideration to the same, while they submit their EOIs, and would invariably enclose documents/ information, as required, on account of the amendment, as a part of the EOI. NTPC may, at its discretion, extend the deadline for the submission of EOIs.

6. VALIDITY OF THE RESPONSES

The Applicant shall submit the responses which shall remain valid up to Twelve (12) months after the response Deadline ("Response Validity"). NTPC reserve the right to reject any response, which does not meet the afore mentioned validity requirement.

NTPC may solicit the Applicant's consent for an extension of the period of validity of the application. The request and the response in this regard shall be in writing.

7. SUBMISSION OF THE RESPONSE TO EOI

The responses to the EOI are to be submitted in soft copy via below e-mail format

To: manishtiwari@ntpc.co.in

CC to: ashwanimarkandan@ntpc.co.in

Ref. EOI No. **NTPC/SE/EOI/04/2023**

Dated: 22.09.2023

Submitted to:

*Manish K Tiwari,
AGM (Station Engineering)
Station Engineering,
NTPC Limited, WR II HQ,
Plot No. -87, Sector-24,
Atal Nagar, Nava Raipur, Raipur, Chhattisgarh
PIN code: 492018*

Submitted by:

Name, address & contact no. of the Applicant

All the pages of the response should be duly signed by the candidate himself.

The responses to the EOI should be submitted within the Deadline as mentioned in this document.

8. COSTS AND EXPENSES TOWARDS RESPONSE TO EOI

(INVITATION FOR EXPRESSION OF INTEREST)

The Applicant shall bear all the costs associated with the preparation of the response and participation in discussions and finalization & execution of the documents related with this EOI, regardless of the conduct or outcome of this process.

9. CONFIDENTIALITY

The Applicant undertakes to hold in confidence this EOI and any document related or pursuant to this EOI and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

- (a) To their professional advisors;
- (b) To their officers, contractors, employees, agents or representatives, financiers, who need to have access to such information for the proper performance of their activities;
- (c) Disclosures required under applicable Law, without the prior written consent of the other parties of the concerned agreements.

Provided that the Applicant agrees and acknowledges that NTPC may at any time, disclose the terms and conditions of this EOI and any document related or pursuant to this EOI to any person, to the extent stipulated under the applicable Law.

xxxx

(INVITATION FOR EXPRESSION OF INTEREST)

APPENDIX – I

(INVITATION FOR EXPRESSION OF INTEREST)

APPENDIX – I

S.No.	For Renovation & Modernization and Life Extension Support
1.	R&M of Steam Generator & associated systems including Burners, Windbox, Air & flue gas systems, Ducting, Insulation, Dampers, MSV & other valves
2.	R&M of Steam Generator Auxiliaries – Air preheaters, Fans, Milling System
3.	R&M of ESP
3.	R&M of Steam Turbine & associated systems
4.	R&M of Steam Turbine & Auxiliaries-BFP, CEP, HPH, LPHs, Deaerator, Vacuum pump/Steam Ejectors, other pumps, Drain valves etc.
4.	R&M of Generators and Auxiliaries including electrical portion
5.	R&M of BOP covering CW, CT, DM & PT, Make-up Water System
6.	R&M of BOP covering Coal Handling Plant & Ash Handling Plant
7.	R&M of Electrical and C&I Systems
8.	R&M of Complete BTG portion & Balance of Plant

S.No.	For Site Support
1.	Boiler & Auxiliaries
	i) Pressure Parts & associated systems including Burners, Windbox, Air & flue gas systems, Boiler circulation pump, Ducting, Insulation, Dampers, MSV & other valves
	ii) Rotary Parts (APH, Fans & Milling system)
2.	Turbine & Auxiliaries
	i) HPT/IPT/LPT/Condenser
	ii) Pumps (BFPs/CEPs)
	iii) Heaters (HPH/LPH)
3.	Balance of Plants
	i) CW Systems
	ii) Cooling Tower
	iii) Water Chemistry
	iv) Coal Handling Plant
	a. Wagon Tippler & Truck-tiplers
	b. Stacker-cum-Reclaimer
	c. Paddle Feeder
	d. Hydraulics for equipment like WT/SCR/Paddle Feeder
	e. Bucket Elevator
	v) Ash Handling Plant
	a. Coarse (Eco/APH/Duct Hopper) Ash Extraction System
	b. ESP Hopper Ash Evacuation/ transportation System (Pressure / Vacuum)
	c. High Concentration Slurry Disposal System
4.	Electrical Systems
5.	Control & Instrumentation

(INVITATION FOR EXPRESSION OF INTEREST)

SECTION-II
APPLICATION FORM & ANNEXURES

(INVITATION FOR EXPRESSION OF INTEREST)

Annexure-1

FORMAT FOR COVERING LETTER CUM UNDERTAKING

(The covering letter should preferably be on the Letter Head of the Applicant)

Date: _____

Place: _____

To,

Manish K Tiwari,
AGM (Station Engineering)
Station Engineering,
NTPC Limited, WR II HQ,
Plot No. -87, Sector-24,
Atal Nagar, Nava Raipur, Raipur, Chhattisgarh
PIN code: 492018

**Subject: IDENTIFICATION OF EXPERTS FOR EMPANELMENT WITH NTPC LIMITED
TO PROVIDE CONSULTANCY SERVICES**

**(I) FOR R&M AND LIFE EXTENSION OF OLD THERMAL POWER STATIONS
(Strike-out, if NOT APPLICABLE)**

-AND/OR-

**(II) FOR RESOLUTION & TROUBLE-SHOOTING OF SYSTEM/SUB-SYSTEM
LEVEL & EQUIPMENT ISSUES OF OPERATING THERMAL POWER
PLANTS (Strike-out, if NOT APPLICABLE)**

Ref.: EOI No. NTPC/SE/EOI/04/2023, dated 22.09.2023

Dear Sir,

I, the undersigned[insert name of the "Applicant"] having read, examined and understood in detail the **(INVITATION FOR EXPRESSION OF INTEREST)**.

1. I give my unconditional acceptance to the EOI, issued by NTPC, as amended. In token of my acceptance to the EOI, the same have been signed & stamped by me and enclosed to the response. I hereby confirm that the provisions of the EOI shall be binding on me.
2. I have submitted my response strictly as per provisions and formats of the EOI, without any deviations, conditions and without mentioning any assumptions or notes.
3. I hereby unconditionally and irrevocably agree and accept that the decision made by NTPC in respect of any matter regarding or arising out of the EOI shall be binding on me. I hereby expressly waive any and all claims in respect of EOI process. I confirm that there are no litigations or disputes against me, which materially affect our ability to participate or function under the obligations with regard to EOI.

(INVITATION FOR EXPRESSION OF INTEREST)

4. Details of the candidate are furnished as below:

Name:

Designation:

Address:

Contact numbers:

email id:

Candidature for (*Specify the specific area as per Appendix – I*) :

5. I am enclosing herewith the entire response containing duly signed formats in electronic format sent via email to manishtiware@ntpc.co.in as per the EOI for consideration.
6. It is confirmed that my response is consistent with all the requirements of submission as stated in the EOI and subsequent communications from NTPC, if any.
7. The information submitted in my response is complete, strictly as per the requirements stipulated in the EOI and is correct to the best of our knowledge and understanding. I would be solely responsible for any errors or omissions in my response.
8. I confirm that all the terms and conditions of our response are valid for acceptance for a period of Twelve (12) months from the response Deadline.

I remain,

Yours sincerely

(Name, Designation and Signature of the Candidate)

(INVITATION FOR EXPRESSION OF INTEREST)

Annexure-2

CURRICULA-VITAE TO BE SUBMITTED BY APPLICANT

(The Curricula-vitae shall contain as a minimum the following information:

- (i) Personal Details including contact information*
- (ii) Educational Qualification*
- (iii) Work Experience*
- (iv) Area of Expertise in line with Appendix I*
- (v) Assignments executed in the field of expertise*
- (vi) Specific role in S.No.(iv) above*
- (vii) Any consultancy assignment in the area of expertise in last (minimum)10 years.*
- (viii) Information on Membership of Professional Bodies*
- (ix) Any other information in line with Clause 3.0 (Contents of Qualification Requirements)*

The applicant has to preferably enclose relevant documents in support of experience & expertise)

(Signature of the Candidate)

(INVITATION FOR EXPRESSION OF INTEREST)

Annexure-3

PRESENTATION IN SUPPORT OF CANDIDATURE FOR EMPANELEMENT

(The candidate has to submit a copy of power point presentation containing not more than 15 slides in support of his candidature for empanelment as a consultant for the area applied for in line with Appendix I.

The candidate may be asked to deliver the presentation in person or through MS TEAM platform subsequently)

(Signature of the Candidate)