

NTPC Limited

(A Govt. of India enterprise)



Invites

Expression of Interest(EOI)

for

**Artificial Intelligence Based Conversational
Knowledge Management Platform**



DOCUMENTS OF EOI

This EOI document comprises of the following sections:

- (i) Section-I: Invitation for Expression of Interest
- (ii) Section-II: Information to APPLICANTs
- (iii) Section-III: Application Form and Annexures



SECTION-I:

INVITATION FOR EXPRESSION OF INTEREST

DETAILED NOTICE INVITING EXPRESSION OF INTEREST (EOI)

EOI No.: ES-ENGG/2023-24/001

Date: 09.09.2023

Expression of Interest for Artificial Intelligence Based Conversational Knowledge Management Platform

- 1.0 NTPC is India's largest power utility with installed capacity of more than 71,000 MW (including its JVs). The company is engaged in the business of generation and sale of bulk power. NTPC is having pan-India presence with own stations coal based, gas based, Hydro, Wind and Solar plants. Established in 1975, NTPC has forayed into diverse arena like coal mining and green hydrogen also.
- 2.0 NTPC leverages technology in its internal and external operation to increase competitive advantage & profitability. Development of Artificial Intelligence Based Conversational Knowledge Management Platform will help in capturing experiential knowledge from credible sources avoiding AI hallucination, providing for wider dissemination avoiding unauthorized use through password protection and retrieval of knowledge in the format sought by the employee.
- 3.0 The primary objective is to make information and contents related to NTPC Ltd. open and accessible to all employees. The Conversational AI Bot (Chat & Voice) on Knowledge Management website of NTPC Ltd. is a step in this direction. The Bot is expected to aid with technical information, experiential knowledge within NTPC including (but not limited to) providing information on employees, project details, work information flow across the organization and making every information knowledge gained with equipment and troubleshooting solutions for various system or sub-system of thermal power station/unit and extend design and engineering support for the same with a few clicks. The platform is expected to serve the familiarization and training requirements of new entrants to a division and provide for their competency and proficiency mapping. Further, to veteran employees of chosen it would ask relevant questions starting with a year in advance to capture their competency on the platform.
- 4.0 In furtherance to the above, NTPC has decided to take up the work for Artificial Intelligence Based Conversational Knowledge Management Platform with all desired features and capabilities as mentioned in this document to:

Build sophisticated, intelligent, and interactive bot (Chat and Voice) capable of carrying out complex queries and produce accurate responses providing seamless experience throughout the entire user journey.

Deploy the Bot over multiple channels (Website & Mobile App-iOS & Android), in English.

Collect conversational data from user queries & feedbacks and use it to train and personalize the conversational AI Bot as a continuous process. The trained AI model shall be owned by the Engineering Division of NTPC Ltd. and may not be used anywhere else without consent of NTPC Ltd.

Integrate with various knowledge sources (Departments, Divisions and Sections of NTPC) and fetch

relevant information for responding to user queries.

Provide Platform Analytics Module to generate reports and leverage the usage data for continuous improvements and **present** the data on a dashboard.

5.0 Through this section, NTPC invites willing APPLICANTS from India who can provide with broad requirements for AI Based conversational Knowledge Management System, providing for

1. AI/ML based solution.
2. English language.
3. It Should be able to get information from NTPC Intranet, web pages, e mails, documents, conversations (with permission), images, time series data including IIOT and database tables. These will be the main data sources. It should have features of NLP (Natural Language processing), deep learning and cognitive computing.
4. It shall have Self-learning capability in case of unanswered questions.
5. It Should be capable enough to update with latest answer (if desired answer is getting changed over the period)
6. It must Report un-answered questions.
7. The platform is expected to serve the familiarization and training requirements of new entrants to a division and provide for their competency and proficiency mapping.
8. **Further, to veteran employees chosen it would ask relevant questions starting with a year in advance to capture their competency on the platform.**
9. The solution shall allow easy incorporation of possible future changes/modifications in KMS or changes in the documents etc., that may take place in future.



SECTION-II: INFORMATION TO APPLICANTS

6.0 Eligibility for Participation in EOI

The APPLICANT shall be a Company / Sole Proprietorship / Partnership / Limited Liability Partnership / Consortium / Cooperative Society registered in India. The qualification documents to be submitted by the experts participating in the EOI is tabulated below.

S No	Basic Requirement	Specific Requirements	Documents Required
1.	Legal Entity	The Bidder (Prime bidder in case of a consortium) shall be registered in India under the Indian Companies Act, 1956 as amended in 2013, shall have registered offices in India and shall have been in existence for at least last 3 financial years as on 31st March 2022.	a) In case of Company: <ul style="list-style-type: none">• Certificate of Incorporation / Company Registration Certificate.• Memorandum and Articles of Associations.• Valid GST Registration Certificate.• Partnership Deed• Valid Income Tax Registration Certificate.• PAN card copy
2.	Financial strength	The bidder (Prime bidder in case of a consortium) shall have a minimum of 1 Crore as an average annual turnover during preceding 3 financial years.	<ul style="list-style-type: none">• Extracts from the audited Balance sheet and Profit & Loss.• Certificate from the Chartered Accountant (CA) regarding turnover

		Income Tax Return of the last 3 Financial Years. Certificate to effect of paying minimum wage to employees.	<ul style="list-style-type: none"> • ITR Copy • Self-Certificate • Self-Certificate
3.	Experience of similar assignment	The Bidder (Prime bidder in case of a consortium) must have successfully executed at least 1 project during last 3 financial years ending Mar'2022) of Conversational AI platform (in English with voice and/or text modality) of cumulative value of 50lakhs INR or more.	Copies of the work order and completion certificate/proof of payments for these projects. Detailed Scope and delivery to be shared as Annexure-4.
4	Basic Certifications	ISO 9001 and 27001 Certification.	Copy of valid certificate.
5	Debarment /Blacklisted	The bidder (Prime bidder in case of a consortium) shall not be in the active debarred list 1. Published by Central Public Procurement Portal. or 2. Procuring Ministry/ Department	A Self Certified letter that the bidder (or any of its successor) is not in the active debarred list published by Central Public Procurement Portal. or Procuring Ministry/ Department.

6	Manpower Strength	Company shall have regular manpower strength of at least 20 employees that are involved and have experience in desired technology project.	HR certificate Submission of PF/ESIC registration and PF compliance is mandatory. Resume of the technology professional needs to be shared.
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7.0 DOWNLOAD AND SUBMISSION OF EOI

- A. Interested APPLICANTS may download the documents of EOI **free of cost** from <https://ntpctender.ntpc.co.in>
- B. For consideration of EOI, APPLICANTS are required to e-mail signed and scanned copy of EOI, duly filled and complete in all respect, through e-mail mentioned here under: bprath@ntpc.co.in
- C. APPLICANTS may send their queries related with EOI through e-mail at bprath@ntpc.co.in
- D. **Date of publication of EOI : --.09.02023**
- E. **Last date for submission of Application:** 15 days from date of publication of EOI (till 17:00 hrs. IST)
- F. **Last date for queries/ seeking clarifications: --.03.2024**
- G. **Response Validity: 6 months from the last date for EOI Submission**
- H. NTPC shall not be liable for any postal/ Mail delivery issue and delays whatsoever in receipt of EOI documents and EOI received after the stipulated date and time shall not be entertained. EOIs submitted without supporting documents (as mentioned in Sec-I clause 10.0 and Annexures mentioned in Sec-III) will be summarily rejected.
- I. 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.
- J. Language of the responses to EOI or any query/clarifications/correspondences shall be in English only.

- K.** APPLICANTs shall mention the name and contact details of two persons, with complete address, phone number and email id.
- L.** The responsibility of Compliance of all applicable statutory provisions are within the entire scope of the Agency and shall indemnify NTPC in case of any claim, procedure, dispute what soever towards the execution of the work in its entirety.
- M.** NTPC Ltd. may, at its sole discretion, ask for additional information/ documents and/ or seek clarifications from the APPLICANT(s) after the Deadline for submission of response, inter alia, for the purpose of removal of inconsistencies or infirmities in their responses.

8.0 Validity of Responses

The APPLICANT shall submit the responses which shall remain valid up to six (6) months after the response Deadline (“Response Validity”). NTPC reserves the right to reject any response, which does not meet the above-mentioned validity requirement.

NTPC may solicit the APPLICANT’s consent for an extension of the period of validity of the response. The request and the response in this regard shall be in writing. In the event any APPLICANT refuses to extend its response validity as requested by NTPC, NTPC shall terminate processing of such APPLICANT’s responses. An APPLICANT accepting NTPC request for validity extension shall not be permitted to modify its response.



SECTION-III: APPLICATION FORM AND ANNEXURES

Instructions to APPLICANTS

- This Expression of Interest (EOI) is to identify interested parties for Work mentioned at:
Clause No. 5.0 of Section -I of this EOI
AND / OR
Clause No. 6.0 of Section-I of this EOI
For expression of interest, Application Form and Annexures given in Section-III shall be duly filled and sent to NTPC by the APPLICANT in soft copy. Following are the list of Annexures:
 - **Annexure -1:** Application Form
 - **Annexure- 2:** APPLICANT's Profile
 - **Annexure- 3:** Acceptance of Fraud Prevention Policy of NTPC
 - **Annexure- 4:** Any other information

- **APPLICANTS should go through Section-I and Section-II thoroughly before filling and submitting the application.**
- The Annexure-B to Section-I should also be duly filled and submitted
- Along with submission of application & form, APPLICANT must ensure that they have provided following information without which EOI shall be rejected:
 - GSTN and PAN of firm (or individual if applying as individual).
 - Address/ Contact number/ e-mail address/ Name of Contact person.

(EXPRESSION OF INTEREST: APPLICATION FORM)

(To be submitted on APPLICANT's Letter Head)

Ref No.

Date:

Additional General Manager, Engineering Services

Email: bprath@ntpc.co.in

NTPC Limited, Engineering Office Complex,

Plot No. A-8A, Sector-24,

Noida, Gautam Budh Nagar

Uttar Pradesh, PIN code: 201301

Dear Sir,

Sub: Expression of Interest for Artificial Intelligence Based Conversational Knowledge Management Platform, as per Detailed Notice Inviting Expression of Interest (EOI), (Ref No. EOI No.: ES-ENGG/2023-24/001) dated 00.09.2023

We, the undersigned, express our interest for the subject EOI and declare the following:

- (a) We are duly authorized to represent and act on behalf of _____(name of the firm/company/individual).
- (b) We have examined and have no reservations to the EOI document including Amendment No(s) & Clarification No(s)_____ (if any).
- (c) With reference to your invitation for EOI dated _____, we are furnishing herewith all the required details as per the prescribed Annexures.
- (d) We hereby express our willingness to participate in RFP/ forthcoming tender as and when NTPC Ltd invite the same.
- (e) NTPC and /or its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents and information submitted in connection with this application and to seek clarifications from our bankers/suppliers and clients.
- (f) This application will also serve as authorization to seek/ request information as deemed necessary from any individual or authorized representative of any institution referred in the supporting document provided by APPLICANT.

(Annexure-1)

(g) NTPC and /or its authorized representatives may contact the following nodal persons for further information on any aspects of the application:

Name and designation of contact Person	Address for Communication	Telephone No	Email ID

(h) This application is made in the full understanding that:

This EOI is not intended for empanelment of APPLICANT or pre-qualification of APPLICANT.

1. EOI process will be subject to verification of all information submitted at the discretion of NTPC.
 2. NTPC Ltd 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.
- (i) We declare that we have read and abide by the provisions of Fraud Prevention Policy of NTPC and submit the form of Acceptance of Fraud Prevention Policy duly filled as per NTPC's format.
- (j) The undersigned declare that the statements made and the information provided in the duly completed application are complete, true and correct in every detail

SIGNATURE (AUTHORISED

SIGNATORY)

(OFFICE STAMP)

DATE _____ NAME _____ DESIGNATION _____

PLACE _____

Applicant's Profile

- 1. Name of the interested party:
- 2. Address :
- 3. Classification of Company
Public Limited Partnership Limited Private Limited
Others Please Specify:
- 4. Contact Details
NAME:
DESIGNATION:
MOBILE NO.:
EMAIL-ID:
- 5. Years of experience in the business:
- 6. Annual Turnover in the last three financial years and Net worth:

Sl. No.	Financial Year	Annual Turnover Amount in INR
1		
2		
3		

Sl. No.	Description	As on last date of preceding financial year
1	Paid-up share capital	
2	Net worth	
3	% of net worth to paid-up share capital	

- 7. PO Copy of the similar contracts enclosed ----- (Y / N)
- 8. End user certificate for successful operation for the above contracts enclosed ----- (Y / N)

(FORM FOR ACCEPTANCE OF FRAUD PREVENTION POLICY)

We have read the contents of Fraud Prevention Policy of NTPC displayed on the tender website <https://ntpctender.ntpc.co.in/> and undertake that we shall strictly abide by the provisions of Fraud Prevention Policy of NTPC.

SIGNATURE

(AUTHORISED SIGNATORY)

(OFFICE STAMP)

DATE _____ NAME _____ DESIGNATION _____

PLACE _____

(Annexure-4)

(ANY OTHER INFORMATION)

If Applicant desires to share any other additional Information relevant to the work / assignment like brochure, future plan or any suggestion, it may be given in this Annexure.