

Nabha Power Limited
(A wholly owned subsidiary of L&T Power
Development Ltd)

INVITATION FOR EXPRESSION OF INTEREST

Nabha Power Limited (NPL), wholly owned by **L&T Limited** has been successfully operating a 2x700 MW Supercritical Thermal Power Plant at Rajpura in the state of Punjab since 2014.

NPL invites "Expression of Interest (EOI)" for shortlisting of agencies towards below Job

- 1) Annual Maintenance Contract for period of at least three years for Coal Handling Plant.
- 2) Annual Maintenance Contract for period of at least three years for Electrical and C&I Equipment/Instruments.
- 3) Annual Maintenance Contract for period of at least three years for Mechanical Maintenance & Condition Monitoring of Equipments (Boiler, Turbine and Balance of Plant).
- 4) Providing Canteen Services for Nabha Power Limited.
- 5) Providing Security Services for Nabha Power Limited
- 6) Overhauling services viz Boiler, Turbine, BOP, AHP

The agency is required to submit the details as per the format to be obtained from NPL's website as stated hereunder.

Interested parties are requested to refer to the terms and conditions of the EOI and submit their EOI at the e-mail address mentioned below. It may be noted that submission of EOI does not in any way constitute any kind of commitment on the part of NPL.

For more details, may please contact:

Head Procurement

Regd. Office: PO Box No. 28, Near Village Nalash, Rajpura, Punjab 140401, India Tel: +91-1762-277252

Email id: Tender.NPL@larsentoubro.com

Website: <https://www.nabhapower.com/tenders/coal-procurement-tenders/>

The last date of submission of EOI is 25th May 2022

Detailed Invitation for Expression of Interest (EOI) for Various Maintenance Services and Canteen & Security Services at NPL, Rajpura

Date: 09th May 2022

1. Introduction

- 1.1. Nabha Power Limited (NPL) is a wholly owned subsidiary of L&T Limited and has been successfully operating 2 x 700 MW Supercritical Coal Fired Thermal Power Plant near village Nalash of Tehsil Rajpura, District Patiala, Punjab, India since 2014. The units were commissioned on 1st February 2014 and 10th July 2014 respectively.
- 1.2. NPL plant is amongst the best running power plants of the country having the performance parameters at par with the most efficient power plants across the globe.
- 1.3. NPL is having below requirement of 2 x 700 MW Thermal Plant in Rajpura.
 - a) Operation, Maintenance & Housekeeping of Coal Handling Plant for period of 3 years.
 - b) Annual Maintenance contract for a period of 3 years for Mechanical Maintenance (Boiler, Turbine, Auxiliaries and Balance of Plant and their auxiliaries) including condition monitoring of equipments.
 - c) Annual Maintenance Contract for Electrical and C&I equipment/Instruments.
 - d) Providing Canteen Services for NPL
 - e) Providing Security services for NPL.
 - f) Providing Overhauling services viz Boiler, Turbine, BOP, AHP
- 1.4. The objective of this document is to identify vendors who are qualified to execute above requirement and providing services based on the specifications present in EOI.

2. Intent of The Expression of Interest (EOI)

- 2.1. NPL invites "Expression of Interest (EOI)" from reputed agencies having relevant experience for any of the following services at 2 x 700 MW Nabha Power Limited, Super critical Thermal Power Plant, Rajpura (Punjab).
 - a) Operation, Maintenance & Housekeeping of Coal Handling Plant for period of 3 years.
 - b) Annual Maintenance contract for a period of 3 years for Mechanical Maintenance (Boiler, Turbine, Auxiliaries and Balance of Plant and their auxiliaries) including condition monitoring of equipments.
 - c) Annual Maintenance Contract for Electrical and C&I equipment/Instruments.
 - d) Providing Canteen Services for NPL
 - e) Providing Security services for NPL.
- 2.2. Interested parties are requested to refer to the terms and conditions of the EOI and submit their EOI accordingly. It may be noted that submission of EOI does not, in any way, constitute any kind of commitment on the part of NPL. The EOI is published for shortlisting

the prospective agencies.

- 2.3. Shortlisted agencies will be issued a letter to Participate in the Tendering activities, invitation to enquire and inspect the relevant Equipment as well as visit at NPL.
- 2.4. The letter of Invitation i.e., Tender document by NPL would explicitly contain the commercial conditions, scope of work. The Interested agencies are asked to submit their Bid as per below
 - a) Qualification criteria with supporting documents.
 - b) Price Quote in Bid format document.
- 2.5. It is clarified that the evaluation of the Techno Commercial Proposal instils no obligation on NPL to enter into a Contract.

3. Scope of the Expression of Interest (EOI)

The detailed scope of work will be provided to shortlisted vendor however the brief scope of work is given below.

- a) The scope of work broadly consists of providing complete maintenance services including corrective maintenance, preventive maintenance, predictive maintenance, proactive maintenance, routine and break down maintenance for Boiler, Turbine, BOP & its auxiliaries of 2x700 MW Supercritical Thermal Plant.
- b) Annual Maintenance Contract for C&I and Electrical equipment/instruments at NPL Plant, in strict compliance to the specifications and terms & condition.
- c) Scope of Work includes Operation, Maintenance & Housekeeping of Coal Handling Plant including Coal Sampling System at NPL Plant in strict compliance to the specifications and terms & condition. All seven days of week are working days to provide 'Round the Clock shift support'.
- d) The scope of work includes all services relating to Catering, Service of Meals, Tea, Beverages and Snacks for NPL Office/s and other buildings in NPL.
- e) Providing Security Services to NPL by Deployment of Manpower and Vehicle as per the attached Annexure-II in strict compliance to the terms and condition stipulated as under:
 - Working time: Seven days of week round the clock shift support & Six day of week for 'general shift'.
 - Mentioned manpower is indicative to maintain.

4. Terms and Conditions of the Expression of Interest (EOI)

- 4.1. The order of renewal for Maintenance Services, Canteen and Security services is likely to be start from October 2022.
- 4.2. The interested agencies shall submit EOI. It may be noted that submission of EOI does not, in any way, constitute any kind of commitment on the part of NPL.
- 4.3. NPL reserves the right to assess the capacity/capability of the applicant and viability of the

proposal, based on verification of documents and if required, cross verification for the establishment of the capable applicant(s).

- 4.4. NPL reserves the right to accept or reject any or all applications, cancel/withdraw the EOI process without assigning any reason whatsoever, in case situation arises, and in such a case no applicant / intending applicant shall have any claim arising out of such action.
- 4.5. Interested Agencies shall have to abide by the guidelines of the Central Government / State Government and ensure compliance, in case of award.
- 4.6. The shortlisted agencies may visit the NPL Plant to get detailed information about scope of work and ask to participate in Tendering Process. NPL shall provide all cooperation to the representative of the shortlisted. Agencies in obtaining the required information during the visit to the site for making the Techno Commercial Proposals.

5. **Brief Description**

a) **BOILER:**

Super-critical, sliding pressure once-through boiler, single furnace, single reheat, balanced draft, top suspended, double gas passes, dry ash water impounded, circular fired with 2 fire vortex, pulverized coal fired system.

Boiler Major Specifications

| | | |
|---|---|------------------------|
| MAKE | L&T Mitsubishi Heavy Industries Boilers Pvt Ltd., Hazira, Gujarat | |
| Boiler type | Mitsubishi supercritical sliding pressure operation once through boiler radiant reheat type (indoor type) | |
| Furnace type | Membrane construction, fusion welded type, vertical wall with internal riffled tube | |
| At maximum continuous load (at 100% BMCR) | Main steam team flow rate | 2322 T/hr |
| Steam pressure | Super heater outlet | 256.2 MPa |
| Steam temperature | Super heater outlet Re-heater outlet | 568 Deg C 596 Deg C |
| Fuel | Pulverized coal | |

b) **TURBINE:**

Turbine with three-cylinder, tandem compounding, four flows exhaust, condensing, single reheat turbine (TC4F-30) with eight numbers of extractions.

Turbine Major Specifications:

| | |
|-------------------|---------------------------------|
| MAKE | L&T Mitsubishi Heavy Industries |
| Rated Turbine RPM | 3000 |

| | |
|------------------------|------------------|
| Rated Generator output | 700 MW |
| Main Steam Pressure | 247 MPa |
| Number of cylinders | 3 (HIP +LP1+LP2) |
| Number of extractions | 8 |

c) BALANCE OF PLANT –

Balance of Plant (BOP) is geographically the largest area of the plant covering all areas apart from BTG, CHP and AHP and plays a vital role as a critical support function to main plant equipment in the process of power generation. Most of the major general plant requirements in terms of raw water, service and potable water, DM water, fire hydrant system and ETP/RO are managed by this group. It ensures the equipment healthiness of the systems starting from raw water intake to wastewater treatment with a commitment to maintain Zero Liquid Discharge of the Plant with active support from other operating functions.

BOP maintains the equipment which produces DM water, which in turn flows as the process fluid through the boiler and turbine, gaining energy and changing state with variations of pressure and temperature and subsequently serving to convert the thermal energy into mechanical work output from the turbine coupled to a generator.

Our two massive cooling towers are the trademark of any thermal power plant and at NPL, they are taller because they are natural draft cooling towers or NDCTs, which are an improvement over the conventional cooling towers (typically IDCTs) since they are more energy efficient. Cooling towers are silent contributors to plant efficiency and heat rate considering that the cold-water temperature has a significant bearing on condenser vacuum.

BOP also ensures the mechanical healthiness of the single largest piece of safety equipment in the plant- the pressurized fire hydrant system complete with its pumping system and labyrinthine network of underground and above ground piping, valves and monitors, which is spread over the whole plant, and which typically serves as the first line of defense against any fire incident.

d) Coal Handling Plant

Coal Handling Plant (capacity 2850 TPH) is established at NPL Plant. The function of Coal Handling Plant is to receive, process, store, feed the coal bunkers consistently. The coal unloaded from Indian Railway wagons through wagon tippers (capacity 25 tips/hr). The unloaded coal in the wagon tippler hoppers is then catered to the conveyors through apron feeders diverted by diverter gates.

Coal conveyed through conveyors (approx. 11km length) from unloading area is screened in

crusher house. Fine coal passes through the vibrating grizzly feeders & oversize coal is crushed in the crushers. Based on the requirement coal can be fed into the bunkers or stacked in the coal stock yards through belt feeders & stacker reclaimers.

Coal is fed from coal stock yards (4 nos. coal stockpiles) to the bunker through stacker reclaimers & travelling trippers. The auxiliary systems include, inline magnetic separators, suspended magnets, metal detectors, pumps for cooling water, service water, dust suppression, CFDS (Cold Fog Dust Suppression) systems, dust extraction systems, ventilations systems, coal settling Ponds, coal sampling systems, EOTs, electrical & manual hoists etc.

TTR operation: - Feeding of coal in the specified bunkers as per instructions of SIC shall be done. TTR shifted to the bunker to be fed with coal. TTR operation shall be done carefully & any abnormality during operation & Positioning shall be intimated to CHP control room. Bunker sealing belt & grizzly shall be monitored simultaneously.

Auxiliaries' operation: - Operation of auxiliaries in CHP includes metal detectors, belt weighers, all the pumps, water system, dust extraction system, ventilation system, UAFs, hoists, EOTs, lifts, compressors, maintenance of stockpiles, surrounding drainage system of CHP etc.

Dozer operation: - Proper compaction of the coal in the stockpiles shall be ensured through the dozers. Coal collection to make heap & in the range of S/Rs (Stacker Reclaimers) approach shall be done through the dozers as per the instructions conveyed through CHP control room. Proper logbook along with daily checks of the parameters & general maintenance activity shall be done.

6. Estimated Manpower for the upcoming contracts

- 6.1. BTG- 134 Nos
- 6.2. CHP – 171 Nos
- 6.3. Electrical and C&I – 50 Nos
- 6.4. Security Services – 114 Nos
- 6.5. Canteen Services – 20 Nos
- 6.6. Overhauling service – As Per requirement

Annexure-I

Form of Application of EOI for BTG, Electrical and C&I, and CHP Maintenance
(To be printed on the letterhead of the interested Party)

Ref No.

Date:

(This is only an enquiry for shortlisting of agencies towards Annual Maintenance contract for a period of 3 years for Mechanical Maintenance (Boiler, Turbine, Auxiliaries and Balance of Plant and their auxiliaries) including condition monitoring of equipments. at Nabha Power Limited (2 X 700 MW)).

To,

Head Procurement Nabha Power Limited,
Near Village Nalash, Rajpura, Distt. - Patiala, Punjab-140401

Dear Sir,

We are interested in the providing Annual Maintenance contract for a period of 3 years for Mechanical Maintenance (Boiler, Turbine, Auxiliaries and Balance of Plant and their auxiliaries) including condition monitoring of equipment/ Annual Maintenance Contract for period of at least three years for Electrical and C&I Equipment/Instruments/ Annual Maintenance Contract for period of at least three years for Coal Handling Plant., We hereby express our willingness to participate in RFP / RFQ as and when NPL invites the proposal for the same.

| | |
|--|--|
| Name and Designation of the contact person | |
| Address | |
| Mobile Number | |
| E-Mail Address | |
| Turnover certificate (as per Annexure-IV) | |
| Any other relevant information | |

Place:

Date:

Name:

In the Capacity of:

Signed:

Duly authorized to sign the application for and on behalf of: (Seal of the company)

Annexure-II

Form of Application of EOI for Providing Security Services at NPL
(To be printed on the letterhead of the interested Party)

Ref No.

Date:

(This is only an enquiry for agencies Providing Security services at Nabha Power Limited (2 X 700 MW)).

To,

Head Procurement Nabha Power Limited,
Near Village Nalash, Rajpura, Distt. - Patiala, Punjab-140401

Dear Sir,

We are interested in the providing security services at NPL., We hereby express our willingness to participate in RFP / RFQ as and when NPL invites the proposal for the same.

| | |
|--|--|
| Name and Designation of the contact person | |
| Address | |
| Mobile Number | |
| E-Mail Address | |
| Turnover certificate (as per Annexure-IV) | |
| Any other relevant information | |

Place:

Date:

Name:

In the Capacity of:

Signed:

Duly authorized to sign the application for and on behalf of: (Seal of the company)

Annexure-III

Form of Application of EOI for Providing Canteen Services at NPL
(To be printed on the letterhead of the interested Party)

Ref No.

Date:

(This is only an enquiry for agencies Providing Canteen services at Nabha Power Limited (2 X 700 MW)).

To,

Head Procurement Nabha Power Limited,
Near Village Nalash, Rajpura, Distt. - Patiala, Punjab-140401

Dear Sir,

We are interested in the providing Canteen services at NPL., We hereby express our willingness to participate in RFP / RFQ as and when NPL invites the proposal for the same.

| | |
|--|--|
| Name and Designation of the contact person | |
| Address | |
| Mobile Number | |
| E-Mail Address | |
| Turnover certificate (as per Annexure-IV) | |
| Any other relevant information | |

Place:

Date:

Name:

In the Capacity of:

Signed:

Duly authorized to sign the application for and on behalf of: (Seal of the company)

Annexure-IV (Turnover Certificate)

We confirm that annual turnover of M/s[Applicant] for the preceding three financial years is as under:

| S. No. | Financial Year | Turnover amount (In Lakhs) |
|---------------|-----------------------|---------------------------------------|
| 1. | 2019-2020 | |
| 2. | 2021-2020 | |
| 3. | 2021-2022 | |

Place:

Date:

Name:

In the Capacity of:

Signed:

Duly authorized to sign the application for and on behalf of: (Seal of the company)