OWNER:
THE TATA POWER COMPANY LIMITED

EPC CONTRACTOR:
TBD

PROJECT MANAGER:
THE TATA POWER COMPANY LIMITED

PROJECT:
FGD (FLUE GAS DESULPHURISATION) SYSTEM MAIN PACKAGE
(PACKAGE -1)
2x120 MW (Unit# 2&3) and 2x120 MW (Unit# 4&5)
JOJOBERA THERMAL POWER PLANT

ENQUIRY REFERENCE NO.: CC/RS/FY19-004/JOJOBERA-FGD
**EXPRESSION OF INTEREST (EOI)**

**FGD (FLUE GAS DESULPHURISATION) SYSTEM MAIN PACKAGE, JOJOBERA THERMAL POWER PLANT**

<table>
<thead>
<tr>
<th>Enquiry reference no.:</th>
<th>CC/RS/FY19-004/JOJOBERA-FGD</th>
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<tbody>
<tr>
<td><strong>Name of Package:</strong></td>
<td>FGD (Flue Gas Desulphurization) System Main Package (Package) at for 2x120 MW (Unit# 2&amp;3) and 2x120 MW (Unit# 4&amp;5) Jojobera Thermal Power Plant, in Jamshedpur, Jharkhand – India</td>
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<tr>
<td><strong>Type of Bidding:</strong></td>
<td>E-tendering / Two Part</td>
</tr>
</tbody>
</table>
| **Contact Details:**   | Ravi Shingare  
Lead Engineer - Contracts  
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CENTEC, Mahakali Caves Road, Chakala, Andheri (E), Mumbai 400 093, Maharashtra, India  
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Email: ravi.shingare@tatapower.com  
Website: [https://www.tatapower.com/tender/tenderlist.aspx](https://www.tatapower.com/tender/tenderlist.aspx) |

The Tata Power Company Limited (“Project Manager”) on behalf of Jojobera Thermal Power Plant (“Site”) invites Expression of Interest (EOI) from interested parties for the Two-Part e-Tendering Process of following Relevant Package:

<table>
<thead>
<tr>
<th>Description</th>
<th>Bid Security</th>
<th>Tender Fee</th>
</tr>
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</table>
| Design, engineering, manufacture, shop fabrication, assembly, shop testing, type testing at manufacturer's works, inspection, packing, supply, loading, unloading, transportation, proper preservation at site, storage & handling at site, erection/installation, construction, site testing and commissioning and performance testing of Flue Gas Desulphurization (FGD) plant for 100% of the flue gas flow rate for the 2x120 MW (Unit# 2&3) and 2x120 MW (Unit# 4&5) Jojobera Thermal power plant located at near Jamshedpur, East Singhbhum District, Jharkhand State, India. (“Site”). | INR 15 million  
Or equivalent foreign currency | INR 10,000/-  
Or USD 200/- |
1. INTRODUCTION:

The Tata Power Company Limited (TPC) is among the largest private sector Power Utility companies in India with presence in Generation, Transmission and Distribution of Power through conventional and renewable sources.

The Tata Power Company Ltd. started its operations in Jamshedpur, Jharkhand with the acquisition of 67.5 MW coal based captive power unit of Tata Steel in April 1997. To meet the increasing demand of Tata Steel, Tata Power added five more units of 120 MW each in Jojobera in the year 2001, 2002, 2005, 2009 & 2011 respectively. Unit 2 & 3 of Jojobera Power Station are regulated by Jharkhand State Electricity Regulatory Commission (JSERC) whereas Unit 1, 4 & 5 are captive units. The generating plant is in near Jamshedpur, East Singhbum District, Jharkhand State, India. A brief overview of Owner and Site is given below:

<table>
<thead>
<tr>
<th>Site Name</th>
<th>2x120 MW (Unit# 2&amp;3) and 2x120 MW (Unit# 4&amp;5) Jojobera Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>The Tata Power Company Limited</td>
</tr>
<tr>
<td>Project Manager</td>
<td>The Tata Power Company Limited</td>
</tr>
<tr>
<td>Site Location</td>
<td>At Jojobera, near Jamshedpur, East Singhbum District, Jharkhand State, India.</td>
</tr>
<tr>
<td></td>
<td>Latitude: 22° 49’ N</td>
</tr>
<tr>
<td></td>
<td>Longitude: 86° 11’ E</td>
</tr>
<tr>
<td>Nearest Rail head</td>
<td>Tatanagar, Broad gauge, 10 km from plant site.</td>
</tr>
<tr>
<td>Transport</td>
<td>Road/Rail</td>
</tr>
<tr>
<td>Plant Elevation</td>
<td>176.0 m</td>
</tr>
</tbody>
</table>

In order to limit the SO$_2$ emissions in the thermal power units, it is proposed to install Flue Gas Desulfurization (FGD) system at Jojobera for Unit 2 & 3 (Block-I) and Unit 4 & 5 (Block-II) for treating 100% of Flue gas coming out of all these units. The outlet SO$_2$ emissions shall be limited to 600 mg/Nm3 as per latest standards stipulated by MoEF&CC under Environment (Protection) Amendment Rules 2015 for thermal power plants. Bidder may offer a wet limestone based FGD or Dry Ammonia based FGD.

2. SCOPE OF WORK:

The scope of the Bidder shall comprise of design, engineering, manufacture, procurement, inspection and testing at manufacturer’s works, supply, packing and delivery at project site unloading and storage at site, in-plant transportation and handling at site, fabrication, erection, interconnection with existing units, pre-commissioning, testing, successful commissioning, performance testing and handing over of complete FGD system together with wet flue chimney including electrical, C&I, system for 2 x 120 MW Unit (Unit 2 & 3, Block-I) and 2 x 120 MW (Unit 4 & 5, Block-II) of Jojobera thermal power station (hereinafter referred as the “Relevant Package”), to be implemented at Jojobera thermal power station, At Jojobera, near Jamshedpur, East Singhbum District, Jharkhand State, India for Jojobera Thermal Power Plant (hereinafter referred as the “Owner”). Detailed Technical Specifications, Scope of Work, Terms & Conditions are provided in the Bid Documents, which shall be made available to interested parties’ against submission of Tender Fee as prescribed above.
3. **TENDER FEE & TIMELINES:**

a) Interested parties meeting the pre-qualification criteria specified elsewhere in this document can request for Bid Document and participate in the bidding process by submitting their Expression of Interest (EOI) and credentials along with the Tender Fee **not later than 22nd October 2018**. Request for Bid Document/EOI will be not be entertained beyond this deadline.

b) Interested parties to submit Non-Refundable Tender Fee, as indicated in the table above, in the form of crossed demand draft/banker’s cheque/pay order in the name of "Tata Power Company Limited" payable at par at all branches in Mumbai along with a covering letter duly stamped and signed by an authorized signatory clearly indicating the Tender Reference number, your EOI to participate in the tendering process and indicating name of authorized person, contact number / e-mail id (mandatory) on Bidder’s letterhead. It is mandatory to mention Tender Reference no. in the said letter.

c) Detailed Bid Document (also referred as RFQ) shall be issued through Tata Power e-tender portal only to the parties whose EOI meeting above mentioned requirements are received by the deadline mentioned above.

4. **BID SECURITY:**

Interested parties to note that Bidder is required to furnish a Bid Security along with their Bid, in the format prescribed in Bid Document in the form of Bank Guarantee for an amount of **INR 15 million** (or equivalent freely traded foreign currency) and Bids not accompanied by an acceptable Bid Security shall be rejected by the Owner as being non-responsive and returned to the bidder without being opened.

5. **PRE-QUALIFICATION CRITERIA:**

Interested parties to note that Bidder shall be required to fulfill the following conditions and submit relevant supporting documents for each of the following criteria along with the Bid.

5. **A Technical & Financial Criteria:**

1. Bidder should meet qualifying requirements stipulated in any one of the qualifying options i.e. Option-1 (sub-clause 2.1) or Option-2 (sub-clause 2.2) or Option-3 (sub-clause 2.3) or Option-4 (sub-clause 2.4). Definition and prequalification requirement of technology providers (TP) and Engineering Procurement Construction (EPC) company (as referred in the respective options) is as indicated below;

1.1. **Technical & Financial Criteria:** Bidder should meet qualifying requirements stipulated in any one of the qualifying options i.e. Option-1, Option-2, Option-3 or Option-4. Definition and prequalification requirement of technology providers (TP) and Engineering Procurement Construction (EPC) Company (as referred in the respective options) is as indicated below:

1.1.1 **Qualification criteria for FGD System Technology Provider** (TP) must be a company having experience of in-house design, engineering, manufacturing / supply, erection/supervision of erection and
commissioning/supervision of commissioning for at least 2 no. Wet Limestone FGD or Ammonia based FGD plants in India or abroad meeting following criteria of any one of the above respective technology:

a) Projects shall be of capacity to treat flue gas flow of 4,50,000 Nm3/hr or more in case Bidder is offering unitized absorber system or 9,00,000 Nm3/hr if Bidder is offering common absorber for two units.

b) Both reference project to have SO2 removal efficiency >= 90%

c) Both reference projects must be operational for 2 years or more as on the date of Techno- Commercial Bid Submission

d) Both reference projects must have been executed within 10 years prior to the date of Techno- Commercial Bid Submission

1.1.2 Qualification criteria for EPC Company: Must be a company which meets following requirements

a) Company should have executed, in the last 10 years, at least 2 nos. projects each worth INR 1000 million (or equivalent foreign currency value) on EPC basis (with or without civil works) in the area of power, oil & gas, petro-chemical, fertilizer industry. Company shall have establishment in India with experience of executing at least 1 no. of project worth INR 250 million in India in last 3 years.

b) Executed projects scope shall include design, engineering, manufacturing, fabrication, supply, erection, commissioning etc. Bidder to provide the information about the capabilities of design/engineering, project execution (project engineering and project management) etc. proposed for executing the given project.

1.2. Options for Qualification Criteria:

1.2.1 Option 1: Technology provider (TP) bidding directly on standalone basis:

Qualifying bidder under this option shall meet the following requirements-

a) Bidder shall meet the qualifying requirement of TP Company as specified under clause 1.1.1.

b) Average annual turn-over of last 3 years shall be at least INR 5000 million or equivalent foreign currency.

1.2.2 Option 2: Indian Subsidiary of TP Company is a lead bidder:

Qualifying bidder under this option shall meet the following requirements-

a) Bidder shall be an Indian Subsidiary Company of a TP meeting requirements as specified under clause 1.1.1, registered in India under the Companies Act of India, as on Techno- Commercial Bid Submission Date, for manufacturing/supply of Flue Gas Desulphurization
System. The subsidiary company shall share responsibility matrix, division of works etc. between Parent company (TP) and Subsidiary.

b) Bidder shall also have a valid ongoing collaboration and technology transfer/license agreement with TP, valid minimum up to the end of the Latent Defect Liability Period of the contract. In such a case, Bidder can either source the FGD System from such manufacturer or manufacture/get manufactured the FGD System as per the design and manufacturing drawings of such TP.

c) In case of award of a project, the Parent company (TP) will be required to furnish an on demand, unconditional and irrevocable bank guarantee for an amount of 5% of the total contract price of the Flue Gas Desulphurization System Package for the Relevant Package and an aggregate contract performance security of not less than 10% of the total contract price to be furnished by the Bidder including the value of bank guarantee provided by Parent company (TP).

d) Both parent company and subsidiary company shall provide a Deed of Joint Undertaking (DJU) and will be jointly and severally responsible for the execution of contract.

e) Parent company shall have average annual turn-over last 3 years at least INR 5000 million.

1.2.3 Option 3: Indian Joint Venture (JV) of Technology Provider is a lead bidder:
Qualifying bidder under this option shall meet the following requirements-

a) Bidder shall be a Joint Venture (JV) Company incorporated in India under the Companies Act of India, as on Techno-Commercial Bid Submission Date, promoted by

(i) An Indian Company registered in India under the Companies Act of India and

(ii) TP company meeting requirements as defined under clause 1.1.1, specified above, created for the purpose of manufacturing/supplying in India Flue Gas Desulphurization System. Lead Promoter of the JV has to be either TP (meeting TP qualification criteria) or an EPC company (meeting EPC qualification criteria as stipulated in 1.1.2).

b) Average annual turnover in last 3 years of JV promoters proportionate to their respective shareholding in JV taken together shall be not less than 5000 million.

c) Lead Promoter shall have at least 51% stake in JV and the other major partner (EPC company/TP) shall have at least 26% stake in JV.

d) The structure of JV shall be maintained for a lock-in period which should not be earlier than the end of Latent Defects Liability Period for the Relevant Package. Declaration shall be submitted by
authorized signatories of major JV partners (TP and EPC) not to alter JV structure/ dissolve JV, till expiry of latent defects liability period.

e) Bidder should also have a valid ongoing collaboration and technology transfer agreement with TP meeting requirements of clause 1.1.1, valid minimum up to the end of the Latent Defect Liability Period of the contract. In such a case Bidder can either source the FGD System from such manufacturer or manufacture/get manufactured the FGD System as per the design and manufacturing drawings of such TP.

f) In case of any joint venture, the bidding partners shall share the nature of their agreements & its validity, responsibility matrix, division of works, Deed of joint undertaking (DJU) etc. The bidding partners in case of JV shall be jointly and severally responsible for the successful execution of the Contract in case they are the successful bidder and shall accordingly sign an umbrella contract to that effect.

g) Bidder shall furnish a Deed of Joint Undertaking (DJU) executed by it, the promoter(s) having 26% or higher equity participation in the JV Company (as the case may be) and the TP, in which the executants of DJU shall be jointly and severally liable to the Owner for successful performance of the FGD System including meeting the technical guarantees.

h) In case of award of a project, the TP will be required to furnish an on demand, unconditional and irrevocable bank guarantee for an amount of 5% of the total contract price of the Flue Gas Desulphurization System Package for the awarded Relevant Package and an aggregate contract performance security of not less than 10% of the total contract price to be furnished by the Bidder including the value of bank guarantee provided by TP.

1.2.4 Option 4: EPC Company with Technology License Agreement (TLA) is lead bidder:

Qualifying bidder under this option shall meet the following requirements-

a) Bidder shall meet the qualification requirements of EPC company as stipulated in Clause 1.1.2 above.

b) The average annual turn-over of EPC company for last 3 years shall be at least INR 5000 million.

c) EPC shall have Technology License Agreement (TLA) with qualified TP meeting the qualification requirements as indicated under clause 1.1.1 and such TLA shall be valid till expiry of Latent Defect Liability Period. Bidder shall have a technology license agreement as on Techno-Commercial Bid Submission Date between the Bidder & TP which shall necessarily cover transfer/ licensing of technological knowhow for Limestone based Flue Gas Desulphurization System, in the form of
complete design dossier, design software, drawings and documentation, quality system manuals and imparting relevant personnel training to the Bidder.

d) TP (providing technology license) will be required to furnish an “on demand, unconditional and irrevocable” bank guarantee for an amount of 5% of the total contract price of the Flue Gas Desulphurization System Package for the awarded Relevant Package and an aggregate contract performance security of not less than 10% of the total contract price to be furnished by the Bidder including the value of bank guarantee provided by TP.

e) EPC company and TP company (providing technology license) shall share the nature of their agreements & its validity, responsibility matrix, division of works, Deed of Joint Undertaking (DJU) etc. Bidder shall furnish a Deed of Joint Undertaking (DJU) executed by it and the TP, in which the executants of DJU shall be jointly and severally liable to the Owner for successful performance of the FGD System including meeting the technical guarantees. The DJU shall be submitted along with techno-commercial bid, failing which the Bidder shall be disqualified and its bid shall be rejected.