

**THE WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED**

(A Government Of West Bengal Enterprise)

SAGARDIGHI THERMAL POWER PROJECT**PO:MONIGRAM, P.S. SAGARDIGHI, Dist:MURSHIDABAD, Pin:742237**

GST Registration Number: 19AABCT3027C1ZQ(WB),20AABCT3027C1Z7(Jharkhand)

SERVICE ORDER**Vendor:**

60001837

Aniketh Engineering

Ghoradhara, Power House Road

Jhargram:721507

Invoicing party:

60001837

Aniketh Engineering

Ghoradhara, Power House Road

Jhargram:721507 GSTIN No.:#NR#

Order Number

: SGTPP/TM2/5010069972

Date

: 28.03.2022

Approved Status

: APPROVED

Reference Document**Contract Number**

: NA

Validity Start Date

: 29.03.2022

Validity End Date

: 28.03.2023

RFQ / File Number

: SGTMD11010176, dt:25.06.22,

Quotation/ Reference

: AE/Q/SgTPP/21-22/5

Date-24.03.2022

Correspondence: TEC-II Meeting no-679, Item
no-1, dt:28.03.22

Subject: High pressure water jet cleaning of all condenser tubes at Unit#3 or 4
at SgTPP,WBPDCL.

We order you for supply & delivery of the following materials/services subject to the terms and conditions specified here.

Condenser tube water jet cleaning**SAC:** 998719

| SL | Service Code & Description | Qty. | Unit | Rate (INR) | Amount (INR) |
|----|----------------------------|------|------|---------------|-----------------|
|----|----------------------------|------|------|---------------|-----------------|

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| SL | Service Code & Description | Qty. | Unit | Rate (INR) | Amount (INR) |
|--|--|-------|-------------|------------|-----------------------|
| 1 | Hydro jet cleaning of Condenser tubes Of U#3 or 4 of 500MW unit. Divided water box surface condenser. No of tubes: 24398. Size of the tubes: OD31.75mm× 0.899mm thk× 13.3mtr (top two row) and OD31.75mm× 0.711mm thk× 13.3mtr (other rows). Tube materials: SS-304. | 1.000 | LUMPS UM | 860000.00 | 860000 |
| 2 | Mobilization & Demobilization of 05 no Hydro jet machine with accessories. | 1.000 | LUMPS UM | 110000.00 | 110000 |
| Tax : CGST: 9.00 % SGST: 9.00 % IGST: 0.00 % 174,600.00 INR | | | | | |
| Approx. Value(Excl. Taxes) | | | | | 970000.00 INR |
| Total Tax | | | | | 174600.00 INR |
| Grand Total(Incl. Tax and Others) | | | | | 1144600.00 INR |
| Eleven Lakh Forty Four Thousand Six Hundred Rupees Only | | | | | |

Terms & Condition:**Payment Terms**

100% after completion of work.

L. D. Clause

NA

Paying Authority

DGM(F&A), SGTPP

Controlling officer/others

Sr.Manager(T&A), SgTPP or his representative.

Duration of Contract

12 months

Scope of Work

Work Name: High Pressure Water Jet Cleaning of Condenser Tubes, Unit#3 or 4, SgTPP.

1.Water Jet Pressure: Not less than 700 bar.

2.Completion Time: 3-4 days including pre & post activities.

3.No. of machine (700 bar): 05 nos. (04 working+ 01 stand by), machines to be deployed.

4.Manpower: Sufficient trained manpower to be deploy to carry out work in 04 nos. tube box parallels 24 hours to achieve completion time Max. 3-4 days.

5.Mobilization Time: To be report at site with man & machines Within 05 days from intimation.

Equipment Details :

Divided water box surface condenser.

No of tubes: 24398.

Size of the tubes: OD31.75mm× 0.899mm thk× 13.3mtr (top two row)

and OD31.75mm× 0.711mm thk× 13.3mtr (other rows).

Tube materials: SS-304.



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Measurement of condenser tube ID, CW #P across each condenser half, CW inlet-outlet temperature difference should be done jointly by the party and SgTPP before commencement and after completion of work. Cleanliness of tubes is to be measured after completion of job. Necessary measuring instrument for ID measurement, cleanliness check to be arranged by the party.

Cleaning process:

- 1.Opening and closing of condenser manhole doors before and after work.
- 2.Measurement of dirty tubes ID in presence of authorized representative of Controlling Officer.
- 3.Removal of all drains lines to avoid chockage of drain lines.
- 4.Checking of all tubes by high intensity light.
- 5.Choked tube to be flushed/pocked with high pressure water or pocking rod. All tubes to be cleaned with water as far as possible
- 6.Selection of nozzle isto be done on the basis of existing tube ID.
- 7.High pressure water jet cleaning for all tubes without affecting parent metal.
- 8.Thorough water flushing of all the tubes for removal of loose scales accumulation within tubes.
- 9.Measurement of cleaned tubes ID in presence of authorized representative of Controlling Officer.
- 10.Sludge/ debris after the job are to be measured jointly with SgTPP and to be disposed to designated place.
- 11.Arrangement of suitable pump with accessories including pressure gauges, pipe lines etc. Spare pump with accessories to be arranged before starting of the job to avert any delay.
- 12.Other accessories like 24VDC converter etc. which are required for execution of the job shall be arranged by the party.
- 13.Necessary scaffolding is also to be done by the party at their cost and efforts.
- 14.3-Ph 415V 32A power supply would be provided at site free of charge as per rules of SgTPP. Water supply is available near to the site.Party has to take their own arrangement for getting water supply to their end from the existing water source. Pump/arrangement suitable for 1Kg /cm² suction pressure is to be arranged by the party.
- 15.Necessary manpower to perform the job (including electrician) is to be arranged by the party. Job may be continued round the clock for timely completion.
- 16.Necessary accommodation for staff is to be arranged by the party.
- 17.Necessary arrangement of high intensity light for final checking of all tubes.
- 18.Detailed report for the job is also to be submitted to the Controlling Officer after successful completion of the job.
- 19.Sufficient Empty bags to be supplied by the party.
- 20.All debris will be bagged and to be disposed to scrapyard.

Attachment Ref.

- 1 Mandatory Safety Clause: Annexure-III.
- 2 Safty guide line for Work at Confined space,Annexure-IV.
- 3 Safty guide line for work at height,Annexure-V.

Note to Vendor

- 1)Job is to started within 48 hours from the time of intimation from Controlling Officer.
- 2) Job is to started after after collecting proper gate pass from HR&A,SgTPP.
- 3) Accomodation will be provided by WBPDCCL on chargeable basis subjected to availability.

Please acknowledge receipt of this order and convey your acceptance within 7 days



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For : THE WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED

Authorised Signatory