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MADHYA PRADESH POWER GENERATING COMPANY LIMITED

OFFICE OF THE EXECUTIVE DIRECTOR (O&M:GEN), BLOCK-6, SHAKTI BHAWAN, JABALPUR

Phone No. (0761)-2661589/2702600; Fax No. (0761)-2664572; email:edomg_mpeb@rediffmail.com



Notice Inviting Expression of Interest (EOI)
for "Assessment of technical minimum operational capacity in MW for thermal units without secondary oil support"

Madhya Pradesh Power Generating Co. Ltd. (MPPGCL) is a wholly owned company of MP Government engaged in generation of electricity in the state of Madhya Pradesh. It is a successor entity of erstwhile Madhya Pradesh State Electricity Board (MPSEB). The Company, while operating and maintaining its existing units, is also constructing new Power Plants for increasing capacity in the State of Madhya Pradesh.

Expression of interest is invited from the reputed consultancy firms/ operation agencies having experience in the field of operation of thermal units of 210MW/250MW/500MW/600 MW capacity to assess technical minimum operational capacity in MW for all thermal power generation units of MPPGCL, without taking support of secondary oil and without sacrificing the efficiency and safety of machines.

Scope of work:-

Performance Evaluation Test and detailed technical study will be carried out on all thermal generating units of MPPGCL to arrive and conclude the minimum operational capacity/ load in MW of each unit, without taking secondary oil support (Technical Minimum) for secured and reliable continuous operation and demonstrate to run the units at this load successfully for 72 hours continuously. Following thermal units are covered in the scope of assignment:

- (i) SGTPS, Birsinghpur-4X210 MW + 1X500 MW Units
- (ii) ATPS, Chachai- 1X210 MW Unit
- (iii) STPS, Sarni-1X200 MW +3X210 MW + 2X250 MW Units
- (iv) SSTPP, Dongalia -2X600 MW Units

The detailed EOI notice is posted on the website of MPPGCL "www.mppgenco.nic.in" and hard copy of the same is available from the office in the address given below. Mere submission of EOI will not confer to applicants any right for receiving or carrying out the tendered job. MPPGCL reserves the right to accept/ reject one or all EOIs or stop the process of approval at any stage, at its sole discretion without assigning any reason and shall bear no liability whatsoever; consequent upon such a decision.

The EOI application along with the relevant documents shall be submitted by 9th June 2017 in a sealed envelope through SpeedPost/ Registered Post or delivered by hand super scribing "Assessment of technical minimum operational capacity in MW for thermal units without secondary oil support" on top of the envelope to the following address.

Address:

Office of the Executive Director (O&M:Gen),
Madhya Pradesh Power Generating Company Limited
Block-6, Shakti Bhawan, Jabalpur

(A. K. Sankule)
E.D. (O&M:Gen.)
MPPGCL: Jabalpur

Notice Inviting Expression Of Interest For Assessment of technical minimum operational capacity in MW for thermal units without secondary oil support:

1. Brief History :-

Madhya Pradesh Power Generating Co. Ltd. (MPPGCL) is a wholly owned company of MP Government engaged in generation of electricity in the state of Madhya Pradesh. It is a successor entity of erstwhile Madhya Pradesh State Electricity Board (MPSEB). The Company, while operating and maintaining its existing units, is also constructing new Power Plants for increasing capacity in the State of Madhya Pradesh.

At present technical minimum of MPPGCL units are in the range of 60% to 70 % of installed capacity without any compensation in lieu of Heat Rate; auxiliary power compensation & specific oil consumption. The ramping up and ramping down is from 20MW to 60 MW per block depending on the unit capacity. However the revision in DC/ schedule is made effective from 4th time block (15minutes) as per provisions of ABT/DSM.

2. Intent of Assignment :-

In the present scenario MP state is a surplus power state. For sale of its 100% generation, PPA of MPPGCL is in force with MP Power Management Co. Ltd.. Therefore procedure of scheduling of MPPGCL units was monitored by SLDC/ MPPMCL on the basis of MOD for providing cheaper power to the consumers. As and when demand of power reduces the schedule of MPPGCL units also reduces, but up-to a certain level i.e. technical minimum. If the demand reduces further, then the cheaper power generators are required to back down. Therefore the technical minimum assessment of MPPGCL's following thermal units is required to be ascertained to reduce the overall purchase cost for MP state:

| SL NO | NAME OF PLANT | CAPACITY | Commercial .op. Date | BOILER | TURBINE |
|-------|---------------|----------|----------------------|--------|---------|
| 1 | AMK | 210 MW | 09-Sep-09 | BHEL | BHEL |
| 2 | SGTPS | 210 MW | 07-Oct-93 | ABL | BHEL |
| 3 | SGTPS | 210 MW | 26-May-94 | ABL | BHEL |
| 4 | SGTPS | 210 MW | 01-Sept-99 | BHEL | BHEL |
| 5 | SGTPS | 210 MW | 01-Apr-00 | BHEL | BHEL |
| 6 | SGTPS | 500 MW | 27-Aug-08 | BHEL | BHEL |
| 7 | STPS | 200 MW | 27-Jun-79 | BHEL | BHEL |
| 8 | STPS | 210 MW | 20-Sep-80 | BHEL | BHEL |
| 9 | STPS | 210 MW | 25-Jan-83 | BHEL | BHEL |
| 10 | STPS | 210 MW | 27-Feb-84 | BHEL | BHEL |
| 11 | STPS | 250 MW | 18-Aug-13 | BHEL | BHEL |
| 12 | STPS | 250 MW | 16-Mar-14 | BHEL | BHEL |
| 13 | SSTPP | 600 MW | 1-Feb-14 | BHEL | BHEL |
| 14 | SSTPP | 600 MW | 28-Dec-14 | BHEL | BHEL |

It is to mention that recently the fourth amendment of Indian Electricity Grid Code(IEGC) was issued by Central Electricity Regulatory Commission(CERC) on dt. 06.04.2016 vide which

technical minimum schedule for operation of thermal units of central generating stations shall be 55 % of MCR with compensation in heat rate up to 6% , auxiliary power consumption up to 1% and start up fuel cost over and above 7-start/stop in a year.

3. Scope of Work:

The details of units where assessment of technical minimum of Thermal Units Without Secondary Oil Support is to be carried out are given under the clause "Intent of Assignment" above.

In order to complete the Assignment, following activities will be covered in the scope of the Consultant:

- (i) Visit to all thermal power stations of MPPGCL.
- (ii) Collection of all operating parameters at different loads of the units.
- (iii) Study of OEM manuals for recommendations about part load operation.
- (iv) Consultation with OEM, as may be required.
- (v) Provisions of MP Electricity Grid Code (MPEGC), Balancing and Settlement Code (BSC) and Indian Electricity Grid Code(IEGC) should be taken into account.
- (vi) Testing of equipment's, Performance Evaluation Tests at various loads, if required for ascertaining the technical minimum load, without sacrificing the efficiency and safety of plant and machines.
- (vii) Recommending the Technical Minimum of Thermal Units of MPPGCL without Secondary Oil Support and its successful demonstration for continuous running of units for 72hrs.
- (viii) Any other activity/ specific requirement which is not mentioned herein above but is required necessarily to conduct the test should be in the scope of work.

4. Completion Period:

The duration of assignment shall be 60 days. The consultancy assignment shall commence within a week's time from the date of LOI/order. The duration of the assignment may be extended on mutually agreed basis on same terms & conditions without any extra expenditure for a further period of 60 days.

5. Inputs to be provided by MPPGCL -

- (i) Technical details of units / plant
- (ii) O&M manuals of thermal units
- (iii) Plant O&M history and performance data of last 3 years

6. Prices:-The quoted prices shall remain FIRM and be inclusive of all charges for study/testing of Boiler and Turbine at different loads, local transport/ accommodation in guest house/ office equipment/ computers & software etc.

7. Taxes & Duties

Service tax or any other taxes / duties/ levies and surcharge(s) thereon, shall be reimbursed by MPPGCL as applicable from time to time during tenure of completion period.

8. Terms of payment-

100% Payment shall be made after successful completion of work (i.e. submission of final report and acceptance thereof by MPPGCL). For this purpose invoices will be submitted to Engineer-In-charge, duly supported by completion certificate issued by engineer in charge.

9. Mode of Payment (Invoicing):

Consultant shall submit the invoices in quadruplicate for claiming payments to the Executive Director (O&M:Gen), MPPGCL, Jabalpur.

MPPGCL shall be entitled to make deductions from payment to consultant against above work, on account of taxes / duties / surcharges etc. for which deduction at source is obligatory on the part of MPPGCL, as per Indian Law prevailing at the time of execution of the contract.

Payment shall be released within 45 days or on turn as per queue whichever is later. No claim or reason to stop work, if payments are delayed; shall be entertained. No interest on overdue payment shall be made under any circumstances.

10. Deliverables:

The consultant will submit its recommendations in the form of a Detailed Report suggesting the technical minimum load for safe and continuous operation of each thermal unit of MPPGCL covered in the scope of assignment. The recommendations will be substantiated with the analysis carried out by the consultant based on performance history, OEM's suggestions, tests performed and other relevant information.

Initially a draft of report will be submitted in soft copy with three hard copies. After receiving comments of MPPGCL thereon, final report will be submitted in soft copy along with six hard copies, duly addressing comments of MPPGCL.

11. Facilities to be provided by MPPGCL:-

- MPPGCL's guest house / hostel accommodation with basic amenities shall only be provided, if available.
- MPPGCL's medical facilities available at site may be availed by the consultant on chargeable basis at the rates prescribed by the MPPGCL.

12. Force Majeure:-

Force majeure is herein defined as any cause, beyond the reasonable control of MPPGCL or consultancy firm as the case may be with which a reasonable amount of diligence could not have been foreseen & which substantially affects the performance of the respective obligations of the parties, such as:

- (i) Act of god (such as but not limited to tidal waves, epidemics, flood, draught, cyclone, lightning, tsunami, earthquake etc.);
- (ii) Acts of Government (domestic or foreign) including but not limited to war, hostilities (whether war declared or not), invasion, act of foreign enemies, mobilization, requisition or embargos;
- (iii) Rebellion , revolution, insurrection, civil mutiny, commotion, riot terrorist or militants acts, accident by fire, explosion and / or any other cause beyond the control of parties;

(iv) Acts of any Government, including but not limited to war, declared or undeclared, priorities, quarantines;

(v) Hostilities, revolutions, riots, civil commotions, illegal strikes including in the premises of the contractors.

Provided that either party shall within 7 days from the occurrence of such a cause notify the other in writing of the same. The consultancy firm shall not be liable for delays in performing their obligations or delays in respect thereof due to any cause whatsoever beyond their control including force majeure cause as briefly referred to and / or defined above.

13. Termination / short closure of contract

(i) In the event when both the parties mutually agree to terminate the contract on account of force majeure or any other reason, the termination shall take effect from the date and time to be agreed upon mutually.

(ii) In the event of termination of contract compensation shall be paid to consultancy firm for all services performed by it upto the date of termination. In addition consultancy firm shall be paid proportionately for such of those items of works which have been partially completed.

14. Settlement of disputes & Arbitrations

All difference or disputes between the parties arising out of or in connection with this contract shall in the first instance be amicably settled / resolved between the parties. Failing amicable settlement amongst the parties the same shall be settled through arbitration in terms of the Indian Arbitration Act 1996. The venue of Arbitration shall be Jabalpur, Madhya Pradesh, India.

15. Validity of Offers:

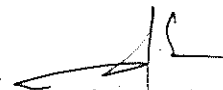
The offers of EOI should be valid for 90 days period from the date of opening.

16 Security Deposit (S.D):

The consultant will submit the SD on receipt of order, in the form of Bank Guarantee equivalent to 10% of the order value as security deposit within 15 days for satisfactory execution of order. The BG shall be suitably kept valid at least for a period of one year. The proforma of bank guarantee will be provided by MPPGCL.

17 Engineer In Charge :

The Addl. C.E.(O&M:Gen.) , O/o E.D.(O&M:Gen.) will be Engineer –In-Charge for work .



(A K Sankule)

E.D. (O&M:Gen.)

MPPGCL: Jabalpur