

NTPC Limited

Vendor Enlistment Cell

USSC, CPG-1, Nava Raipur

Qualifying Requirements for Vendor Enlistment for Hiring of Pumps (Category-1)

A	CEG Details:	
1	CEG No.	OFF-12
2	CEG DESCRIPTION	Hiring of Pumps
3	AREA OF WORK (Refer Annexure-I for scope of work)	<p>Pumping arrangement on hire basis for meeting Station contingency Make-up water purposes, monsoon preparedness, evacuation of water from quarries, CT basin & CW duct dewatering, Misc. overhauling works and contingency water arrangement during project construction works etc.</p> <p>Scope of work mainly includes supply, installation, operation, and maintenance of pumping system on hire basis. Mobilization and demobilization of manpower and machinery is inclusive in scope of work.</p>
4	RESPONSIBILITY CENTRE	CPG-1/ VEC
5	ENLISTMENT PROCESS	<ol style="list-style-type: none">1) Subject proposal is for enlistment of vendors for “Hiring of Pumps” to be deployed for Contingency arrangement for Station Make-up water purposes, monsoon preparedness, evacuation of water from quarries, CT basin & CW duct dewatering, Misc. overhauling works and contingency water arrangement during project construction works etc. Operation and maintenance of pumps shall be in agency’s scope (Refer Annexure-I for detailed scope of work).2) Applicants who meet QR criteria at Sl. No. ‘B’ shall only be enlisted.3) Enlisted vendors as per their execution capability (EC) will be issued tender enquiries for station specific packages. The scope of work of these tenders will generally comprise as detailed in Annexure-I (scope of work) under the station specific tender(s). (Refer Annexure-I for scope of work).

B TECHNICAL CRITERIA OF QUALIFYING REQUIREMENT(QR):

1. The applicant should have executed the work of Supply and Installation of pumping system, having cumulative flow capacity of 500 m³/hr or more in a single order, on turnkey basis including Operation/Maintenance/ 'Operation & Maintenance', during preceding 05 years as on the last date of submission of application.

OR

2. The applicant should have executed the work of 'Deployment of pumping system', having cumulative flow capacity of 500 m³/hr or more in a single order, including Operation/ Maintenance/ 'Operation & Maintenance', during preceding 05 years as on the last date of submission of application.

NOTES:

- (i) The word "Executed" mentioned above means that the applicant should have achieved the criteria specified above, even if the total contract is started earlier and/or is not completed/closed.
- (ii) Reference work executed by the applicant as a sub-contractor may also be considered provided the certificate issued by main contractor is duly certified by owner specifying the scope of work executed by the sub-contractor in support of qualifying requirements.
- (iii) For reference works as per B.1 above, value of Operation/Maintenance/ Operation & Maintenance shall only be considered for arriving execution capability of the applicant. Supply and installation charges shall not be considered for arriving execution capability of the applicant.
- (iv) For reference works as per B.2 above, "Deployment" means Supply and Installation of pumping system on hiring/contingent basis including Operation/Maintenance/ 'Operation & Maintenance'. The executed value towards Deployment of pumping system including Operation/ Maintenance/ 'Operation & Maintenance' (excluding motive power charges) shall be considered for arriving Execution Capability of applicant.
- (v) Pumping system means pumps, motors, DG sets, Diesel Engines, valves, hose/pipe, starter panel, control panel, handling accessories etc.

	<p>(vi) Motive (Diesel fuel / Petrol fuel / Electric power) power charges shall not be considered for arriving at the executed value of work as specified under clause B of technical criteria. Where PO value is composite (i.e., including Hiring charges, motive power charges, taxes etc.), the applicant has to give break up of composite PO value mentioning hiring charges, motive power charges, taxes etc.</p>
C	<p>Documents to be submitted as proof of meeting the stipulated Qualifying Requirements as stated at B) above:</p> <p>Relevant PO copy and client's completion certificate/RA bill/Final deviation statement.</p>
D	<p>Other Documents to be uploaded: In addition to the documents required in support of Qualifying Requirements as stated at C) above, following documents are also required to be uploaded by the applicants applying for enlistment: -</p> <ol style="list-style-type: none"> 1. Three POs of the highest executed values of similar works. Copy of completion certificate/RA bill from the concerned client in support of successful execution of works against each of the POs to be submitted. 2. Audited balance sheet including Profit & Loss statement for the previous three completed financial years reckoned as on the last date of submission of application. In case the audited result for the preceding financial year is not available, certification of financial statements from a practicing-chartered accountant is to be uploaded. In case, applicant is not able to submit the certificate from practicing chartered accountant certifying its financial parameters, the audited results of the three consecutive financial years preceding the last financial years shall be considered for evaluating the financial parameters. Further, a certificate would be required from the CEO/CFO stating that the financial results are under audit as on the last date of submission application and certificate from the practicing Chartered Accountant certifying the financial parameters are not available. 3. In case the applicant is not able to furnish its audited financial statements on stand-alone entity basis, the unaudited unconsolidated financial statements of the applicant can be considered acceptable provided the applicant further furnishes the following documents for substantiation of its qualification.

	<p>(a) Copies of the unaudited unconsolidated financial statements of the applicant along with copies of the Audited consolidated financial statements of its Holding Company.</p> <p>(b) A Certificate from the CEO/CFO of the Holding Company, as per the format enclosed in the bidding documents, stating that the unaudited unconsolidated financial statements form part of the Consolidated Annual Report of the company.</p> <p>Note:</p> <p>(i) Maximum Three Credential Order(s) / Similar Work(s) shall be considered for calculation of the EC.</p> <p>(ii) “All other terms & conditions of enlistment are as per the STC available at VDC portal https://vdc.ntpc.co.in’.</p> <p>NTPC may ask for more / shortfall documents, if any.</p>	
E	Note-1	<p>Similar works means: Criterion mentioned at Sl. No. B above</p> <p>(a) Motive (Diesel fuel / Petrol fuel / Electric power) power charges shall not be considered for arriving at the executed value of work as specified under clause B of technical criteria. Where PO value is composite (i.e., including Hiring charges, motive power charges, taxes etc.), the applicant has to give break up of composite PO value mentioning hiring charges, motive power charges, taxes etc.</p> <p>(b) Value means executed value of the PO excluding taxes. Where PO value is composite (i.e., including taxes etc.), the applicant has to give break up of composite PO value mentioning executed value, taxes etc.</p>
F	QUALITY PLAN (IF APPLICABLE)	Not Applicable
G	Category of Enlistment	CATEGORY-1

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INDICATIVE TECHNICAL SPECIFICATIONS, SCOPE OF WORK AND SPECIAL TERMS & CONDITIONS OF CONTRACT FOR HIRING OF HIGH-CAPACITY PUMPS

NTPC Stations will select the PUMPING SCHEME out of the following options and accordingly provide the technical specification in PR:

1.0) ELECTRIC POWER-DRIVEN MOTORIZED PUMPS (DG SETS, IF REQUIRED)

2.0) DIESEL ENGINE DRIVEN PUMPS

Specifications are indicative only. Site specific changes can be done by indenter. Technical specification for above types of pumping systems is as follows:

1.0) ELECTRIC POWER-DRIVEN MOTORIZED PUMPS (DG SETS, IF REQUIRED)

1.1) Pumping system (select as per requirement) - Onshore/offshore (barge mounted) pumps (Horizontal /vertical/submerged) connected in parallel and/or in series manner, with the necessary pipes, valves, and fittings on monthly hire basis.

Details of pumping scheme with technical parameters, data sheets, characteristic curves of equipment (both mechanical and electrical) and work plan are to be submitted by contractor for information of NTPC. The variation of pump performance should be within +/-10%.

1.2) Flow Rate- m³/h

1.3) Discharge head – mwc

1.4) Particle Size: 10-20mm or as per site condition

1.5) Running Hours (tentative) – As per site requirement (Indenter to specify)

1.6) Intake Location & distance from plant (Specify variations in water level, as applicable)-

Water shall be taken from which is at a distance of from plant end. The water level of river/reservoir will vary with time/season/flood water in monsoon. Specific location of installation, sizing of pumps and motors to be evaluated/finalized by the bidder as per site condition to enable specified discharge. Requirement of shifting of system during operation due to seasonal variations shall be taken care by agency as per site condition and direction of EIC (if required)

1.7) Discharge location & distance from Intake location- Water shall be discharged towhich is at a distance of from the intake point.

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- 1.8) Pipeline details and terminal points- Bidder has to discharge water innos xdia xlength pipelines OR Bidder has to provide piping arrangement up to NTPC pipeline/discharge point which is at a distance of
- 1.9) Pump discharge will be connected to one/two/three..... water pipelines (as applicable). Operation of isolation valves to allow the pump discharge in either one line or all lines simultaneously, as per NTPC instructions, is in the scope of the bidder.
- 1.10) Electric Power Supply (in NTPC scope)- HT / LT power supply (Specify Voltage rating, KVA rating for DG set(s) etc.)
- 1.11) Equipment Application- All the equipment provided by the bidder must be suitable for outdoor application subject to sun/rain/storm/dust exposure. Hence suitable IP class of equipment to be selected.
- 1.12) Standby pumps and motor (should be same capacity, model & rating) should be minimum one no. of the population deployed and should always be connected to the piping header (both suction & discharge) along with necessary isolation valves, NRV, ARV etc. for taking into service immediately, if required. Bidders are advised to visit the site for assessment of site conditions prior to submission of bid.

OR

Spares for Pumps, motors and valves etc. shall be supplied for maintenance of system and taking into service immediately, in case of breakdown. Bidders are advised to visit the site for assessment of site conditions prior to submission of bid.

- 1.13) Handover of worksite and approach: NTPC will hand over the worksite to the Contractor free of encumbrance. The Bidder shall make his arrangement for approach to the work site and for movement of men, machinery, and other equipment etc. required for carrying out the work included under this Contract. The Bidder shall plan his work within that area as per available roads at Site. The placement of the pumping system & other related facilities should be such that it will not obstruct the other construction activities in that location. Any modification or shifting of the pumping system & facilities, if required, at that time to meet the above site requirement will be done by the agency without any cost implication to NTPC.

1.14) SCOPE OF WORK:

NTPC SCOPE:

- a) Transformers, cables, pipelines, as applicable (specify ratings of transformers & cables, length & diameter of pipeline etc.)
- b) One no flowmeter (as applicable). This flowmeter will be in addition to the contractor's flowmeter. However, installation & commissioning of NTPC flowmeter will be in agency's scope.

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BIDDER SCOPE:

- a) All the equipment (including barge, as applicable) for successful installation/ commissioning/ operation of the system is in the scope of bidder.
- b) Mechanical- Pumping system with associated pipes, headers, required pressure rating gate valves/NRVs/ARVs, flanges, fittings and hardware etc. required to connect with NTPC piping system/up to discharge location. A flow transmitter or flowmeter for measuring water flow (m³/hr) is to be provided & installed by the bidder.
- c) Electrical- Motors for pumping system with suitable rated associated field power cable, control cable, breaker panel with suitable protection, junction boxes, distribution board, soft starter, instrumentation, earthing materials, termination kits, clamps, cable glands and lugs both source side and load end etc.
- d) Supply of nos. KVA DG sets (If required).
- e) Suitable flowmeter along with latest calibration certificate from NABL accredited Lab or NTPC approved labs to be provided. Flowmeter to be installed at technically suitable location or as per the instruction of NTPC. Calibration validity of the flow meter to be ensured throughout the contract period.
- f) Power supply shall be provided at one point by NTPC Ltd without any charge to agency. Further distribution and connection to panels, switches and pumps will be in scope of the bidder.
- g) Civil foundation / pedestals, if required, for transformers / electrical panels is included in bidder's scope.
- h) In case of water level variation (if applicable), any additional pipeline laying / removal (if required) between already existing location and bidder pumping system to meet the required flow will be in the scope of the bidder without any additional cost implication to NTPC.
- i) Pipes (specify dia of pipes, as applicable) for additional laying will be issued by NTPC free of cost. However, loading, unloading, transportation from plant (specify any other location, as applicable), fit up, welding etc. will be entirely in bidder's scope. Also, any fittings and valves required for laying pipeline is entirely in bidder's scope.
- j) Any additional cable laying / removal (if required) and shifting of transformer between already existing location and bidder pumping system will be in the scope of the bidder without any additional cost implication to NTPC.
- k) In the case of water level variation, all the work involved in relocating the pumping system, associated pipes, electrical panels, cables, etc. (if any), including NTPC issued material, due to change in water level. Protection of transformers / panels during rise in water level is also included in scope of the bidder.

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- l) The scope of the work also includes the establishment of maintenance facilities at site.
- m) Dismantling of complete system and returning of NTPC supplied pipes, transformers, and cables at (Specify handover location) is in the scope of Bidder. This includes previously laid pipes, transformers, cables also.
- n) To provide suitable skilled manpower for 24 hrs. uninterrupted operation of the system. Maintenance of the equipment/system including NTPC supplied pipes/cables is in the scope of bidder.
- o) Any other work involved for successful commissioning/operation of pumping system.

1.15) BILL OF QUANTITY & PAYMENT TERMS (As applicable)

Agency shall submit its running bills along with all requisite documents once in a month or as fixed by the Engineer-in-charge for the works executed.

- a) **Mobilization & demobilization charges:** It shall include to & fro transportation cost, loading & unloading cost of Pumping Set along with all required accessories. 0.5xBOQ shall be payable only after 30 days of rated Operation of the System. 0.5xBOQ will be paid after completion and site Clearance.
- b) **Hiring Charges per month-** These charges include manpower cost including boarding lodging, pumping system hiring/rental charges, fuel handling charges (in case of DG sets/Diesel engines), cost of making platforms (barge if required) and making ready the complete pumping system ready for operation. Foundations for transformer, dismantling of NTPC issued / already existing material & transportation from work site to station and returning to NTPC as per EIC instruction, as applicable, is also included.

Trial Run: Before acceptance of the system by NTPC, the agency has to demonstrate the capacity of pumps. Demonstration of capacity means showing full guaranteed flow (i.e.,m³/day) for 24 hours of continuous operation measured through installed flowmeters. This includes a demonstration of the standby pumping system also (as applicable).

If the agency fails to demonstrate the full guaranteed flow, accepting the negative variation shall be at the discretion of NTPC. If accepted with negative variation, payment shall be paid on pro rata basis of the awarded cost for O&M charges for such negative variation. Fuel consumption (Liters/hour) shall also be proportionally reduced for negative variation (for diesel engine/DG set operated pumps). Acceptance of positive variation shall be without any extra payment. If demonstration could not run continuously for 24 hours due to a power cut, line leakage etc. then the time loss has to be compensated for by extending the demonstration beyond the initial 24 hours so that 24 hours demonstration is done. After successful demonstration & NTPC acceptance, the agency is not allowed to change / replace the equipment which is part of the pumping system without the permission of NTPC.

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If negative variation is due to NTPC, then the system shall be accepted without any deduction of O & M charges.

If in a month this full guaranteed/accepted quantity (Rated flow/accepted flow in m³/hr x 24 x No. of days in a month) is not met due to reasons attributable to the bidder, these charges will be paid on pro-rata basis as per actual quantity of water pumped measured in m³. An amount 1.5 times the charges (calculated on pro rata basis) for the shortfall in minimum full guaranteed/accepted flow will be deducted from the monthly RA Bill.

However, if the pumping system is not operated due to reasons attributable to NTPC, total charges, (pro-rata reduction if accepted with -ve variation) for that month will be paid.

Non-availability of stand by pumps or motors, beyond 72 hours, will attract penalty per day of 5% of flow capacity of the stand-by pump (which was not available) calculated pro rata to monthly charges. For example, the penalty per day for non-availability of standby pump or motor of 500m³/hr flow capacity will be $\{(X/1500) * (500*5\%)\}$ where 'X' is O&M charges per month and 1500 m³/hr is total flow.

Maintenance of supplied pump motor system/DG set and associated equipment is in the scope of the agency. Required spares for the pumps/valves/panels/motors etc. to be maintained at site by the agency throughout the contract period.

- c) **Relocation charges of Pumping System-** Lump sum amount for work involved in relocating the pumping system, associated pipes, electrical panels, transformers, cables etc., including NTPC issued material due to change in river/ reservoir water level. The amount involved for foundations /pedestals etc. or any other civil works at the relocated area is also included in the relocation charges. This amount will be paid once in every 06 months of operation or part thereof (even if no. of relocations is more) excluding the first six months of initial installation/ operation. Thus, if the contract is operated for more than 06months, the BOQ quantity will be 01 Operation, for more than 12 months quantity will be 02 Operations and for more than 18months quantity will be 03 Operations (i.e., for extended period of contract, if reqd.). This amount will be paid on consecutive month after every six months. If no relocation is required as per the Bidder's Scheme nothing is payable.

2.0) DIESEL ENGINE DRIVEN PUMPS

In addition to above details, following shall also be added:

Supply of Diesel engine driven pumps/DG sets is in the agency's scope. Fuel charges shall be on reimbursement basis (Liters/hour should be fixed by Indenter) or fuel may be issued by NTPC, as applicable.

- a) Fuel charges (on production of fuel invoice) shall be paid as per rate prevalent at the retail Outlet of Indian Oil Corp (IOCL) (or of any other Oil Marketing company, where retail outlet of IOCL is not available), nearest to the NTPC Project/ Station - applicable as on 7th day of the calendar month of execution.

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- b) This Amount can be billed every-time the Value crosses INR lakhs with a minimum Billing Period of 1 Week.

3.0) Tentative BOQs and UoM:

Description	Unit of measurement	Unit rate	Value
Mobilization & demobilization charges	Nos		
Hiring charges for DG set(s)/Diesel Engines	Machine month		
Relocation Charges (if required)	Operation		
Fuel charges (Diesel charges shall be on reimbursement basis) This line item shall not be created. Limit charges may be specified based on running charges.	L/Hr		

Bidders have to quote the amount in price bid for all line items excluding GST.

4.0) SPECIAL INSTRUCTIONS/TERMS & CONDITIONS:

- 4.1) The bidder is advised to visit the site, its surroundings and assess and satisfy himself about the local conditions such as approach roads to the site, water and power supply, accommodation arrangement, local terrain, details of taxes, royalties, duties and levies as applicable, any other relevant information as to risk, also this will facilitate in finalizing the pumping scheme (sizing of pumps/motors/pipes/cables etc.) contingencies and other circumstances which may influence or affect their bid.
- 4.2) Time is the essence of contract. The Bidder has to mobilize and make the system ready for operation within days from the date of intimation by Engineer-in-charge (EIC).
- 4.3) The operation of the pumping system shall be strictly as per the requirement of NTPC and instructions of EIC from time to time.
- 4.4) The contract is on firm price basis throughout the contract period.
- 4.5) Duration of Contract: 12/24 months

OR

Contract is for running of pumping sets (Total flow: m³/hr through 2 nos. of pumps) two times during 24 months from the date of start of work, as per tentative schedule given below:

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First year: 01.07.2023 - 28.09.2023 - Approx. 90 working days including Sundays & holidays.

Second year: 01.07.2024 - 28.09.2024 - Approx. 90 working days including Sundays & holidays.

30 days advance intimation regarding start of work shall be given. Total effective working days during total contract period will be 180 days (approx.) in 24 months contract period as per above tentative schedule. No payment shall be made for idle period during contract. Contractor may mobilize/demobilize the equipment and manpower accordingly.

- 4.6) Extension of contract: Nil
- 4.7) Boarding & lodging, office/maintenance shed, transportation of men and materials for the successful operation of the system is the responsibility of the bidder.
- 4.8) Agency has to make arrangements for construction & drinking water required for the work at his own cost. Any power supply required prior to charging of system through NTPC supplied cable will be in agency's scope.
- 4.9) Agency has to take Construction plant and material insurance policy required for Pumping System and other equipment at his own cost. NTPC shall not be responsible for any damage/theft of the pumping system or other equipment.
- 4.10) For the free issue materials (including already existing materials like pipes, cables, transformers etc.), the agency has to submit suitable indemnity bond covering all the owner issued materials against theft/damage of the material. In the case of extension of contract, the validity of the indemnity bond has to be extended by the agency at no cost to NTPC.
- 4.11) Any maintenance/breakdown of the system supplied will be in Bidder's scope and the system shall be restored to normalcy within the minimum possible lapse of time. Changeover of running and standby equipment to be done at frequent schedule, as per NTPC EIC instructions, to ensure healthiness / availability of all the equipment.
- 4.12) Safety:
Successful bidder has to strictly follow all the safety norms/ safety policy of NTPC. The bidder has to provide all personal safety equipment's to its staff and is responsible for the safety and security of men and material deployed. Any violation of safe practices will attract penalty of Rs.1000/- per incident/occurrence and the same shall be recovered from RA bills.

5% portion of the payment of the value of RA bills for service portion of contract is linked to safety aspects / compliance to safety rules on continuous basis during the execution of work. No interest shall be payable on the amounts linked to safety aspects / compliance with safety rules. The amounts linked to safety aspects / compliance to safety rules shall be payable in part or full based on safety compliance duly certified by EIC.

All the requisite safety precautions and electrical protections of the equipment and related accessories (exclusively power source provided by NTPC) required at site during

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installation, commissioning and operation of the system has to be insured by the successful bidder.

- 4.13) Security deposit, Third party liability and workman compensation policy: As per GCC.
- 4.14) GST will be dealt with as per the then Acts /Rules /Circulars, read with latest amendments/Notifications.
- 4.15) The contractor has to ensure inclusion of all the workers engaged, in Pradhan Mantri Jeevan Jyoti Yojna (PMJJBY) and Pradhan Mantri Suraksha Bima Yojna (PMSBY) without any extra cost to NTPC.
- 4.16) The quantities indicated against various items of the BOQ are subject to variation as per GCC.
- 4.17) The agency shall provide Hourly and Daily report including:
- i. Flow quantity
 - ii. Availability of standby pumps, if available
 - iii. Energy Consumed
 - iv. Reservoir level
 - v. Reasons of poor flow
 - vi. Any other data as required by the EIC
- 4.18) If any failure of the NTPC water pipeline occurs due to improper operation of the pumping system by the agency, a penalty of Rs. 50000.00 per line per day will be charged to the agency (subject to maximum of 2,00,000 per month)
- 4.19) The bidder should demobilize by removing all the equipment from the work site within 15 days on closure/termination of the contract.
- 4.20) NTPC has the right to terminate the contract with a notice period of one month without assigning any reason thereto.
- 4.21) To achieve the required rate of progress to complete the works within the time for completion, the Contractor may carry on the work, round the clock, in multiple shifts per day, as may be necessary. The Contractor shall however be responsible for complying with all applicable laws in this regard. No additional payment will be made on account of round the clock working in multiple shifts. Wherever the work is carried out at night adequate lighting of working areas and access routes for pedestrians or vehicles shall be provided by the Contractor at his cost.
- 4.22) All other Terms and Conditions shall be as per Tender documents for the subject work.