

EXPRESSION OF INTEREST

FOR

PROVIDING CONSULTANCY SERVICES IN RESPECT OF REVIVAL OF THREE MINI HYDEL PROJECTS

Orissa Power Generation Corporation Ltd. (OPGC), a Joint Venture of Government of Orissa and AES Corporation, USA invites expression of interest from reputed consultants / consulting firms for providing consultancy services in respect of revival of three mini hydel projects namely, (1) Harabhangi (2x1000 KW), (2) Barboria (2x325 KW) & (3) Banapur (2x150 KW) as per the scope of work given at clause no. 3. The bid documents can be obtained from the Office of the undersigned from **10.08.2009 to 25.08.2009** during office hours (**10 AM to 5PM**) and from OPGC website (www.opgc.co.in).

Interested firms may submit their offer super scribing as EOI for providing consultancy services for revival of three mini hydel projects to the undersigned on or before **09.09.2009** by **1.00 PM** and will be opened on the same day at **3.00 PM**. The project details are given below:-

1) **Introduction-**

OPGC have earlier prepared Detailed Project Reports for the following power stations. Power Plant equipments for most of the stations have been procured. Partial civil works for some of the Stations have already completed and the project wise present status & work to be carried out as follows-

i) **Barboria (2x325 KW)**

Present status

Construction was taken up long back, foundation raft has been partly cast, and then work was abandoned. The site is over-flooded with mud and water. E&M equipment are stored in open air & store house.

Work required to be carried out-

- (a) Fixing up alignment for the intake canal to the proposed power house including suitable location for intake structure on the existing canal of Water Resource Department of Govt. of Orissa (GoO). (Route Survey is required for finalization of the alignment and topographic & hydrographic survey at intake location.
- (b) Geotechnical investigation at the project location (intake point, power house location), if not available with OPGC.
- (c) Temporary Cofferdam during construction of the Power House.
- (d) Existing Gates on the irrigation canal, on approach road, need to be mechanically (with chain pulley blocks) or electrically operated (motorized).
- (e) Construction of entire civil work and installation of E&M equipment and commissioning of the same.

ii) **Harabhangi (2x1000 KW)**

Present status

Civil works for the dam on Harabhangi Irrigation Canal with bypass barrel (for irrigation water) is complete. Gate guides have been installed. E&M plants and equipment are stored either in open air or in covered store nearby, along with those for Banpur MHP.

Work required to be carried out-

- (a) Civil work for the power station, control room, switch yard,
- (b) Supply and installation of water intake gates and trash racks,
- (c) Cofferdam during off-shore construction,
- (d) Bank / Bed Protection work,
- (e) Installation and commissioning of E&M plants & equipments.

iii) **Banapur (2x150 KW)**

Present status

Located at main canal of Salia Irrigation project, Civil work as also the installation & commissioning of E&M plants & equipment are incomplete. D/S side is filled up with sediments, slips of deep excavated pit also noticed, resulting in obstruction to the drainage / flow of D/S water.

Work required to be carried out-

- (a) Proper Approach Road,
- (b) Downstream side river training work (removal of sediment /deposits, and boulder pitching or similar),
- (c) Construction of Weir, Switch yard,
- (d) Installation & commissioning of intake water gates & trash racks,
- (e) Repair and renovation of existing single storeyed permanent building.

iv) **E&M Plants and Equipment**

In addition to the above-mentioned works, a major work component for revamping of the MHP(s) would be to make a scissors list for each station regarding inventory of plants and equipment stored or installed, their present conditions, utility value, testing & overhauling requirements, and additional items to be procured and / or replacements to be made.

2) **Terms & Conditions:-**

- i) The consultant / consulting firm must have adequate experience in preparation, scrutiny and appraisal of DPRs on hydropower projects.
- ii) The consultant must be well conversant with detailed technical and commercial aspects of hydropower projects.
- iii) The consultants must be well conversant with all legal and regulatory aspects of similar projects.
- iv) The consultant must have a high organizational profile. A list of similar works carried out / experience in SHP may be enclosed.
- v) The consultant must have experience in renovation / re-commissioning of similar hydropower projects.

- vi) The firms are requested to quote their rate inclusive of all taxes & duties along with terms & conditions which shall be firm and valid up to 90 days from the date of opening of tender.
- vii) The firms are requested to submit the attested photocopy of the valid Registration Certificate, PF Code, IT PAN, Service Tax along with the offer.
- viii) The firms are also requested to visit project site at their own cost before submission of offer.
- ix) The time schedule for the given scope of works may also be indicated through a bar chart.
- x) Please indicate total mandays for visit of each site separately under the categories. The expenses against all travels including boarding and lodging etc. taking headquarter as Bhubaneswar shall be indicated in the offer.
- xi) Please indicate the supervision charge during construction beyond six visits to site.

3) **Scope of consultancy services-**

Design & Engineering Stage-

- i) Review technical features of the Pre-feasibility Report prepared in October, 2003, and DPR for each of the projects (incl. layout & GA drawings, survey drawings, topo sheets, hydrologic / hydrographic field data and sub-soil investigation reports, etc. for each MHP, as available with OPGC), and, review and comment on the same, identifying further data required to be collected; (Desk Study).
- ii) Prepare Project Inception Report, Project Implementation Master Schedule; and, submit the same along with Desk Study Report (in clause no- i) and tentative plan & program of site visits, to OPGC, for review and comments (if any).
- iii) On mutual agreement of plan & program for field visits-
 - (a) Visit OPGC Office at Bhubaneswar, discuss OPGC comments (if any) on the submitted documents (in clause no- ii), and firm up the same.
 - (b) Visit sites of the three mini hydel projects (MHPs), carry out high level detail field reconnaissance at the present location(s), and prepare / firm up lists of the works remain to be done, including components of civil work, installation of plant & equipment, approach roads, area lighting and other utilities.
 - (c) Inspect the plants & equipments stored for each station, jointly with OPGC Engineers / technicians, collect data on plants & machineries including ratings, technical features, name & address of the manufactures, prepare lists of available E&M equipments for each MHP.
 - (d) Carry out visual inspection and instrument testing of these E&M equipments, jointly with OPGC Engineers / Technicians, make records of the same, and assess their utility values.
 - (e) For each MHP, prepare list of E&M equipments that can fit the plant requirements with minor changes / replacements / additions, overhauling / servicing and requisite protective coats of paintings.

- (f) Compare and firm up the lists of the plants & machineries required for O&M of each MHP, showing the usable items from (e) above, and the remaining ones to be procured.
- iv) Discuss with the OPGC Officers (project, operation & maintenance), and firm up (a) the lists (in clause no – iii (f), above), (b) MHP locations & layouts, intake points, routing of intake channels, (c) gate operation, control panels, equipment handling, maintenance bay, inventory of spares & tools, power evacuation, O&M requirements and including security and surveillance.
- v) Prepare & submit proposal of executing works (by contractor), considering, “Construct only” package(s) or (Design + Construct) package(s) and relative advantages or disadvantages, discuss with OPGC, and finalise.
- vi) Prepare and submit tender documents including NIT, instruction to Tenderers, Technical specifications, Design parameters / criteria, Tender drawings, Approved lists of E&M plants & equipments (firmed up in clause no–iv), Proposal exhibit sheets and price tabulation sheets / BOQ (for civil work).
- vii) Evaluate bids received and recommend acceptability of the most suitable bid, including participation in clarification / negotiation meeting, along with OPGC.
- viii) Prepare & submit draft work order and contract agreement (between OPGC & Contractor).
- ix) Carry out detail design engineering, prepare and submit design drawings for civil work and electricals, however, detailed design and engineering work for modifications in civil & electrical works, in plant & machineries, and in station layouts, as required, as well as those required for switch yard (including equipment, gantries, grounding work, cabling & civil / structural work) will be done by the contractor, and drawings & technical documents reviewed / approved by the consultants).
- x) Any other services required in connection with the revival works.

4) **Implementation Stage**

- i) Provide periodic (monthly) supervision to review progress and conformity of works to the contract specifications and drawings.
- ii) Prepare and submit “Non-Conformance” Reports (if applicable), and monthly Progress Review Reports.
- iii) Review / Approve O&M Manuals for MHP (submitted by contractor / vendor).
- iv) Supervise / witness pre-commissioning tests, trial runs and plant commissioning, prepare & submit plant commissioning report to OPGC.

5) **Presentation-**

Short-listed consultants may be invited to make presentation in the office of the OPGC at Bhubaneswar. The date and venue of the presentation shall be intimated separately.

6) **Selection of consultant-**

The consultant will be selected on the basis of merit and fee quoted for the assignment.

Any query with regard to this notice can be clarified from Manager (Civil), Orissa Power Generation Corporation Ltd., Zone- A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar- 751023, Orissa, India. Tel- 0674-2303764, Fax- 0674- 2303755/66, Mobile no.-09338715429, Email- dpradhan_2008@hotmail.com. The undersigned reserves the right to reject any or all tenders without assigning any reasons thereof.

Manager (Civil)