TD-201 Rev No. 00	Form No.	बीएचईएन HYDERABAD	Se PRO	ervices of Pou	tion for Engineerin wer Plant projects ERING DEPARTMENT YDERABAD-502 032	g	Doc No-PED/ES Rev No. 00 Page 1 of 7	SC/PQC
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Ref. Doc		Refer to re of revision		S Mallick	P Sudheer Babu		B I Babu	15.03.10

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PRODUCT STANDARD PROJECT ENGINEERING HYDERABAD

Doc No-PED/ESC/PQC

Rev No. 00

Page 2 of 7

A. INTENT::

- Project Engineering Dept, BHEL Hyderabad [PED] executes System engineering and BOP engineering and Procurement for Gas Turbine and Steam Turbine based Power Projects for Industrial and Utility business sectors for domestic and international customers. These power stations are built around equipment and packages [Turbines, Generators, Compressors, Boilers, High capacity Transformers, HT switchgear, Control System, etc] manufactured by BHEL.
- 2. Civil engineering and detail engg of noncore areas of other disciplines [Mechanical, Process, Electricals and Instrumentation] are being offloaded to reputed establishments which have a long standing and experience of successfully handling such jobs.
- 3. It is expected that 4 to 5 projects [of varying scope of work] would be offloaded per year, the duration of each being typically 24-28 months, with an engg cycle time of 18-22 months.
- **4.** Offloading for Cogeneration Project for M/s Oil India Ltd [OIL], Duliajan is an immediate firm requirement. For scope of work for this project, please refer doc no. HY-PED-Duliajan-01.
- 5. This enquiry is also being used for registration of vendors [who fulfill the pre qualification criteria [PQC] described below] for a period of one year [from the date of ordering of OlL-Duliajan project], after which there would be a review or updation, as decided by BHEL from time to time. Therefore, Engg agencies who are not interested to quote for the OlL-Duliajan project, but wants to be registered with BHEL for similar types of projects in future, should mention that in their offer.
- **6.** During this validity period, enquiries for engg offloading would be floated only to vendors who are registered through this process [except where a vendor is customer's PMC or review consultant for the given project].
- **B. Quotations:** Submission of bids would be in two parts, to be simultaneously submitted on the due date in two separate sealed covers. These two sealed covers shall be together enclosed in another sealed cover. ::
- 1. **Technical-cum-Commercial & Un-priced Bid** :: consisting of response to PQC & technical unpriced offer for OIL job, to be segregated in two sections as given below.
 - a. **Section 1::** Response to BHEL's PQC requirements consisting of complete technical details, catalogues, drawings and all commercial terms. Money value must not be indicated. i.e. un-priced bid. These are to be submitted in a sealed cover.
 - b. **Section 2 ::** (i) Filled up technical specification (formats enclosed). (ii) Filled in Standard Terms and Conditions (iii) Un-priced Bid in the format of Technical Specifications / scope and typical annexures (enclosed), confirming that prices are quoted in the price bid. Bidder to sign all pages of the tender spec and return to owner as a token of acceptance. In case of any deviation, it may be brought out explicitly in a separate page.
- 2. Price Bid :: Prices are to be indicated as per the Un-priced bid as per details as well as in conformity with terms as submitted in Part-I. Bidders are required to quote as per the enclosed format. All taxes and duties are to be clearly indicated in the offer. Offer with any preconditions for Price is liable for rejection.

C. GUIDELINES:

1. The sealed tender super-scribing Tender Number, Due date, bidder's details etc. on each cover shall be marked submitted to Addl. Gen. Manager / PED, BHEL, Ramachandrapuram, Hyderabad- 502032 before the due date. The first cover containing DD super-scribing "Tender fee" along with Tender Number, Due date, bidder's details. The second cover containing technical part, including all terms conditions(except price) and unpriced bid, super-scribed as "Technical-cum-Commercial and Un-priced bid" along with Tender Number, Due date, bidder's details and the third cover containing only prices super-scribed as "Price-Bid" along with Tender Number, Due date, bidder's details. These three covers shall be sealed individually and all three covers should be kept in another sealed cover super-scribed with Tender Number, Due date, bidder's details,

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Rom No. Hyderabad

PRODUCT STANDARD PROJECT ENGINEERING HYDERABAD

Doc No-PED/ESC/PQC

Rev No. 00

Page 3 of 7

2.Technical-cum-Commercial and Un-priced bid will be opened [in the presence of bidders], scrutinized, discussed and finalised first. Only then the **price bids** of the technically acceptable offers will be opened.

- 3.If a bidder submits only one cover containing either techno-commercial bid or price bid or one combined bid, i.e. techno-commercial bid & price-bid together, the offer is liable to be rejected. Non-receipt of D.D., for tender documents will lead to rejection of offer. The cover-1 will be opened first.
- **4.**If a supplier is not interested in participating in a tender for which enquiry was either forwarded or purchased by him, he has to submit a "**Regret Letter**" before opening date. If not complied with the supplier may not be considered for future requirements.
- **5.**BHEL reserves its right to reject an offer due to unsatisfactory past performance during tender finalization / execution of a contract at any stage of BHEL projects / units..
- 6. Income tax which is to be deducted at source from its invoices are to be borne by the ESC.

D. PREQUALIFYING CRITERIA OF ENGG OFFLOADING AGENCY [VENDOR, BIDDER] ::

Pre qualification criteria [PQC] include following aspects::

a. Verification of vendor's capabilities to execute jobs of this nature, based on the expertise, infrastructure, etc, and actual experience.

Data provided by the bidder shall be supported by relevant documents. In addition, BHEL team would visit the offices of the bidder for assessment and clarifications.

b. Vendor's confirmation of acceptance of BHEL's techno commercial terms and conditions for executing the job throughout the validity of registration period.

I. Organization ::

The bidder can be an Indian organization or an Indian office/group company of a multinational organization. In the latter case, the Indian office shall be a full fledged engineering establishment regularly undertaking such jobs. If experience and expertise are drawn from the Principals for satisfying the PQC requirements, proof of commitment from the Principals shall be attached.

Multiple establishments of the same organization in India will be registered as a single agency, and hence can apply only once. Multiple applications from the same organization will be rejected. In case such organisations propose to execute individual orders based on their policy, the same is to be brought out in their application. BHEL reserves the right to accept or reject their proposal, and insist for registration and execution by a particular establishment.

II. Experience and infrastructure

Engg offloading agency [vendor, bidder] shall have

- Successfully executed [as EPC contractor's detail engg. agency or as owner's review agency]
 detailed engineering and issue of BOQs & "Released for Construction" [RFC] documents for
 minimum two Thermal Power projects in the Utility or Captive Sectors. Typical scope of the
 Power station would include
 - a. Power block [Turbines, Generators, Boilers, etc, along with their dedicated auxiliary systems]
 - b. Utilities and Balance of Plant Packages [Natural Gas or Liquid Fuel systems, Water Systems, Cooling Towers, Tankages, De-aerators, Air Systems, Fire Protection, HVAC, Effluent Treatment, Emergency power sources, utility and steam piping, cabling, earthing, illumination, Communication system, Environment monitoring, etc]
 - c. Electricals [Generation, evacuation, in plant distribution, Energy Management, Numerical Relays, SCADA interfaces, etc]
 - Instrumentation [Plant and package control systems, Flow elements, Control valves, field instruments, etc]

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PRODUCT STANDARD PROJECT ENGINEERING HYDERABAD

Doc No-PED/ESC/PQC

Rev No. 00

Page 4 of 7

e. Civil Engg [piling, machine/equipment foundations, RCC chimneys, plant and non plant buildings/sheds, structures for De-aerators, Pipe/cable racks etc, roads, drains, landscaping, fabrication drawings etc]

- f. Integration and interfacing with Terminal Points.
- g. Layouts of abovementioned systems and their interconnectivities

If all the features described above are not available in a single project executed by the bidder, it is acceptable if the bidder has undertaken these jobs in different power projects, provided each reference job substantially covers activities of other categories mentioned above.

- 2) Executed above mentioned projects having minimum capacity of 25MW Gas Turbine and matching HRSG, 80TPH Utility Boiler, 12 MW steam Turbine, 80 meters RCC chimney.
- 3) Adequate qualified and experienced manpower of minimum 100. Out of the total strength (min. 40% with Graduation, 10% with Post-Graduation). At least 10% in each field shall be having more than 10 years experience in the field of Power plant detailed design.
- 4) Adequate infrastructure with minimum 2 nos each latest licensed version of state of the art Engineering and Project Monitoring software like
- a. Civil Structural analysis [STAAD PRO / GT STRUD]
- b. Drawing [AutoCAD-2008 onwards]
- c. Piping [CAESAR or CAEPIPE]
- d. Electrical System Studies [ETAP/CYME/SKM]
- e. Computer aided Process & Instrumentation Design [PDS/PDMS]
- f. 3D modeling [PDMS & PDS]
- g. Project Monitoring and MIR generation [MS Projects/Primavera]
- 5) No subcontracting of activities is permitted. In case bidder draws expertise from other organizations for special activities [items 4(d, f or g)], approval shall be obtained for the agency proposed by the bidder as part of registration, and utilized for execution thereafter.
- 6) At least 2 nos of qualified Architects for conceptual design and detailing of Architectural works for power plants.
- 7) Experience in participating in technical audits like HAZOP, SAFOP, IPF
- 8) Experience in providing engineering support during Erection & Commissioning. Agency should ensure deputation of their engineers for Erection Commissioning activities for attending to any problem solving arising out of incorrect engineering / execution at site within a period of 7 days of intimation. In case of delay, BHEL reserves the right to get the job completed at the risk and cost of the agency.
- 9) **Infrastructure:** Well established design office facility having separate sections for civil, mechanical, layout & piping, Electrical & Instrumentation.
- 10) **Experience:** Normally 4-5 projects are expected to be offloaded in a financial year amounting to total value of 10 crores . Bidder should have executed at least any one of the following:
 - a) 30 % of value for 3 nos of works
 - b) 50 % of value for 2 nos of works
 - c) 80 % of value for one work

in a financial year in the last 7 years.

11) **Financial Soundness**: Organisation shall be financially sound having at least an average turnover of 30 % of the total value of work to be offloaded in a financial year, for the last 3 years (i.e. 2006-07,2007-08 & 2008-09). This shall be supported with documents like audited balance sheets, IT returns, Service tax, PF, Sales tax / VAT registration, PAN No etc.



PRODUCT STANDARD PROJECT ENGINEERING HYDERABAD

Doc No-PED/ESC/PQC
Rev No. 00
Page 5 of 7

E. TECHNO-COMMERCIAL TERMS AND CONDITIONS ::

S.No	Terms and Conditions					
1.	Earnest Money Deposit as specified in NIT [x]					
2.						
3.	Security Deposit [SD] as specified in NIT (Refer Note - d) [x] Finalising order on Reverse Auction Basis [Refer note c]					
4.	Schedule of Document release as per NIT [x]					
5.	Weightage of each document as per NIT [x]					
6.	Separate Penalty on account of delays @ 0.5% per week subject to max of 10% of					
	contract value					
7.	Separate Penalty on incorrect engg / rework accruable to Vendor @ actual, subject to max					
	of 10% of order value. However, total penalty on account of Item No-6 & 7 shall be					
	limited to 10 % of the contract value.					
8.	Milestone based payment [as %age of order value] for release of documents [taking into					
	account its weightage] :: [x]					
	a. First submission by BHEL to customer : 50%					
	b. Approval code 2 by customer : 30%					
	c. Approval Code 1 by customer : 10%					
	d. As Built Drawings : 10 %					
9.	Payment will be released within 90 days of submission of invoices with requisite					
10.	supporting information. (Refer Note-b). Offer validity:: at least 60 days from tender opening date. Price variation clause within					
10.	this date will not be entertained. [x]					
11.	Prices :: [x]					
	a. Price offered to be firm during the contract period (Refer Note-e)					
	b. Lump-sum price to be quoted for the job, inclusive of total no. of visits as specified					
	from time to time.					
	c. Unit rates to be indicated for post order changes like:-					
	i. additional work					
	ii. additional visits					
	d. Income tax to be deducted at source from the Invoices are to be borne by the bidder.					
	Item [b] will be the basis for evaluation of the lowest bid					
12.	Contract validity period of 36 months from date of order placement [x]					
13.	Refund of SD :: After submission of :: [x]					
	a. As built documents					
	b. Other Project completion documents					
14.	Contract termination: Due to unforeseen circumstances or due to customer's instructions					
1	it may be required to terminate/ suspend the project engineering work. ESC shall be asked					
	to stop the work and Payment will be limited to work completed as on date of termination /					
	notice as per rules asserted by BHEL. No other damages / cancellation charges					
	whatsoever, arising out of such suspensions / cancellation shall be payable by BHEL. [x]					

Notes ::

- a. Items marked '[x]' are not negotiable, and non compliance will automatically lead to rejection of offer without further correspondence.
- b. Bidders are advised not to deviate from other terms and conditions. In case of non compliance, for the purpose of evaluation, loading would be applied @
 - b1. For Penalties [items 6 & 7] :: Difference between BHEL's terms and bidder's offer.
 - b2. For release of payment earlier than that stipulated in item-9, bidders offer will be loaded with 1.5 % per month [of 30 days] for evaluation of lowest bid.
- c. As a Company initiative, BHEL might decide to finalize orders on Reverse Auction basis from time to time and as mentioned in the NIT. However, due certain reasons, it may be required to forego the reverse auction procedure and resort to normal tendering procedures. In that case, price bids of the bidders will be opened with due intimation to them and evaluation of bids will follow to select the L1-bidder. Therefore, bidders are requested to quote their most competitive prices in the original bid itself.

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PRODUCT STANDARD PROJECT ENGINEERING **HYDERABAD**

Doc No-PED/ESC/PQC	
Rev No. 00	

Page 6 of 7

- d. Successful bidder shall be required to deposit, within two weeks of the acceptance of the tender, security deposit of 5% of the contact value in favour of BHEL either in form of cash / demand draft or produce bank guarantee (to be valid for the entire contact period) in prescribed format from any of the nationalised banks. Security deposit will not carry any interest.
- In the event of project extending beyond the contract period for reasons not e. attributable to ESC, the charges payable to ESC for the left out portion of the work will be mutually discussed and settled, subject to a maximum of 5% of the total contract value.

F. DATA REQUIRED TO BE FURNISHED BY VENDORS FOR VERIFICATION OF PQC

[Compliance confirmation shall be given in the table, duly attaching supporting documents, and referring the relevant annexure of his bid document]

Pre Qualifying Criteria	Vendor's reply
I. Organisation	
a. Indian Company or Indian unit of Multinational Company or Limited	
company or Proprietary firm	
b. Experience proposed to be drawn from Principals	
c. Establishment proposed to be registered [for Multiple units]	
d. Undertaking similar jobs since minimum 10 years	
II. Expertise & Infrastructure	
a. Manpower strength more than 100, with at least 10% with >10 yrs	
experience	
b. Separate disciplines for Mech, Elec, Civil, Instru, site support	
c. Availability of software	
d. Participation in Technical Audits	
e. Special Activities envisaged to be outsourced	
III. Projects executed	
[Details for each project to be furnished separately]	
a. Name	
b. Owner	
c. Owner's consultant	
d. Scope of overall project of owner	
e. Project configuration [no. of GTGs, STG, Boilers] f. Work ordered on bidder	
ii. Work offloaded by bidder to others g. Whether scope executed matches PQC requirement	
g. Whether scope executed matches FQC requirement	
IV. Response to BHEL's Techno commercial terms &	
Conditions	
a. Compliance to Non negotiable items	
b. Compliance to other items	
i. Penalties	
ii. Period for release of payments	
c. Compliance to BHEL's loading factors	
d. Order finalization on Reverse Auction basis	

TD-106-3 Rev No. 5 Form No.



PRODUCT STANDARD PROJECT ENGINEERING HYDERABAD-32

Doc No.: PED/ESC/PQC

Rev No. 00

Page 7 of 7

RECORD OF REVISIONS

		RECORD OF REVISIONS					
		Rev. No.	Date	Revision Details	Revised By	Approved By	
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