
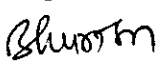







NOTES


TD-201 Rev No. 00 Form No.		PRODUCT STANDARD PROJECT ENGINEERING DEPARTMENT		PEMC-1701 Rev No. 00 Page 1 of 7	
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED, It must not be used directly or indirectly in any way detrimental to the interest of the company.		<p style="text-align: center;"> SPECIFICATION FOR ENGINEERING AND DOCUMENTATION SUPPORT </p> <p> Projects: PTIBR at Indonesia 1 x 15 MW STG Sets RINL- at Vizag 1x40 MW STG </p>			
Ref. Doc	Revisions : Refer to record of revisions :		Prepared : 	Approved : 	Date : 28.12.07


Ref. Doc	<p style="text-align: center;">COPYRIGHT AND CONFIDENTIAL</p> <p>The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED . It must not be used directly or indirectly in any way detrimental to the interest of the company.</p>		<p style="text-align: center;">PRODUCT STANDARD</p> <p style="text-align: center;">PROJECT ENGINEERING DEPARTMENT</p>		PEMC-1701
					Rev No. 00
					Page 2 of 7
<p>CONTENTS:</p> <ol style="list-style-type: none"> 1. INTRODUCTION 2. SCOPE OF WORK 3. GENERAL INSTRUCTIONS TO BIDDER 					

Form No.	 HYDERABAD	PRODUCT STANDARD PROJECT ENGINEERING DEPARTMENT	PEMC-1701
			Rev No. 00
			Page 3 of 7
Ref. Doc	Copyright and Confidential The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.	<p>1.0 INTRODUCTION: The purpose of this specification is to specify requirements of 3D Modeling/deliverables being offloaded to external agencies by Project engineering Division of BHEL.</p> <p>2.0 SCOPE OF WORK: The Engineering consultant shall use only PDMS software packages to develop the plant layout module to generate deliverables like Equipment layouts, Piping layouts, isometrics, stress analysis and supports detailing from 3D modeling.</p> <p>2.1 Engineering support required for execution of following projects: a) PTIBR at Indonesia -- Steam Turbine based Power Plant Piping for 1x15 MW STG b) RINLat Vizag -- Steam Turbine based Power Plant Piping for 1 x 30 MW STG</p> <p>2.2 Project Schedule: Job duration – 3 months from the date of L.O.I.</p> <p>2.3 Documents to be generated:</p> <p>2.3.1 PTIBR-- Steam Turbine based Power Plant Piping :-</p> <p>a) Equipment layout drawings (approximately 3 nos A0 drawings) showing detailed plan and sectional views of different power plant areas of the Plot plan. b) Piping layout drawings (approximately 20 nos A1 drawings) showing routing for Main Steam Piping from B/L to Steam Turbine inlet, Extraction to Deaerator, extraction to LP heater, Auxiliary steam distribution (to GSC, ejector, deaerator etc), spray piping, feed water from condenser to deaerator through heat exchangers, condenser level control station, condenser and ejector interconnection, turbine bypass piping with PRDS, heater drains, service air & water distribution, auxiliary cooling water, DM makeup to condenser and drains & vent piping. b) Support embedment drawings b) Isometrics with BOM for the line 2" and above (Approximately 25 nos) c) Supports detailing with BOM</p> <p>The following drawings are enclosed for consultants reference</p> <ol style="list-style-type: none"> 1) 1 - 38101-02815 Eqmpt layout 2) 1 - 38101-02816 Steam Flow scheme 3) 1 - 38101-02817 Feed Water scheme 4) 2 - 38101-02817 LP Heater scheme 5) 3 - 38101-02730 IA distribution scheme 6) 3 - 38101-02730 Drain Flow scheme <p>2.3.3 RINL -- Steam Turbine based Power Plant Piping :-</p> <p>a) Equipment layout drawings (approximately 3 nos A0 drawings) showing detailed plan and sectional views of different power plant areas of the Plot plan. b) Piping layout drawings (approximately 10 nos A1 drawings) showing routing for Main Steam Piping from B/L to Steam Turbine inlet, Extraction to Deaerator, extraction to LP heater, Auxiliary steam distribution (to GSC, ejector, deaerator etc), spray piping, feed water from condenser to deaerator through heat exchangers, condenser level control station, condenser and ejector interconnection, turbine bypass piping with PRDS, heater drains, service air & water distribution, auxiliary cooling water, DM makeup to condenser and drains & vent piping. b) Support embedment drawings b) Isometrics with BOM for the line 2" and above (Approximately 12 nos) c) Supports detailing with BOM</p>	

Form No.	 HYDERABAD	PRODUCT STANDARD PROJECT ENGINEERING DEPARTMENT	PEMC-1701
			Rev No. 00
			Page 4 of 7
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.	<p>The following drawings are enclosed for consultants reference</p> <ol style="list-style-type: none"> 1) 0 - 38101-2821 Eqmpt layout 2) 0 - 38101-0873 Steam Flow scheme 3) 0 - 38101-0855 Feed Water scheme 4) 1 - 38101-02859 LP Heater scheme 5) 2 - 38101-00795 Legend <p>3.0 Documentation requirements for this project are as follows after finalization of order.</p> <ul style="list-style-type: none"> • Initial submission as check print for BHEL (Rev-A,B etc): Through email • Submission to BHEL final revision 00 : Through email (Rev.0 & Subsequent revisions till finalization) • As-Built corrections.: Through email • As built drawings in suitable bound form A3 size. 1 sets hard copy • Soft copy of final documentation on CD's. : Two CD <p>Notes :</p> <ol style="list-style-type: none"> 1. Engineering charges shall include charges for the above documents 2. During detail engineering stage, BHEL may like to exchange technical documents and drawings through electronic media (Internet), E-mail. Bidder should ensure that he has compatible workstation at his engineering office for this purpose. 3. EC may have to be furnish the files of the drawings of the project by E-Mail or in the form of a floppy/CD, as and when requested by BHEL during the engineering work. 4. A3 size 'AS BUILT' drawings shall be supplied in spiral bound form, with transparent plastic sheet covers. <p>4.0 GENERAL INSTRUCTIONS</p> <ol style="list-style-type: none"> 1. All documents and drawings shall be prepared in the formats as directed by BHEL. 2. BHEL shall have the right to remove from work any of the employees of successful bidder who in the opinion of BHEL is not suitable to perform work assigned to him or on account of improper conduct or negligence in duty. 3. If the quality of engineering deliverables of the supplier is not up to the satisfaction of BHEL. BHEL has right to reject the work done and extended the project duration without any commercial implication. 4. BHEL shall not pay any amount, other than the PO amount, towards any cost incurred by party by way of salaries to his employees (income and taxes) insurance of any nature, benefits/bonus to the employees, etc. BHEL's liability is limited to the amount contracted for the services to be rendered under the scope of work defined. 		
	Ref. Doc		

Form No.	 HYDERABAD	PRODUCT STANDARD PROJECT ENGINEERING DEPARTMENT	PEMC-1701
			Rev No. 00
			Page 5 of 7
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.	<p>5. Party shall bear all expenses/fee penalties if it infringes on patents/licenses of any persons/organizations or in case of suits, court proceedings, damage claims etc., due to any reason whatsoever.</p> <p>6. Party shall maintain at their own cost the personal accidents policy, life insurance and / or any such insurance required in respect of their personnel deputed.</p> <p>7. BHEL reserves the right to terminate or suspend the contract at any stage of its execution, if it found that the Party has not met its obligation for the performance / progress is not up to the expected standards and overall work is likely to suffer. BHEL reserves the right to claim damages from bidder including the initiation of judicial proceedings.</p> <p>8. Party shall keep all information/data/drawings etc. related to the work as confidential information and shall not divulge or use the information indirectly or directly in any way detrimental to the interest of BHEL. All drawings, documents, manuals, design data including all originals prepared or obtained during the work shall remain the property of BHEL and shall be handed over to BHEL on demand.</p> <p>9. Party shall comply with the laws and regulations of the country, the state and territories concerned, during the progress of the work.</p> <p>10. In the event of any query, dispute, or differences arising out in connection with the contract, whether during the progress of work or after its completion, BHEL and Party shall nominate one arbitrator each. The arbitration shall be conducted in accordance with the latest provisions of the Indian arbitration act 1940.</p> <p>11. If due to some unforeseen circumstances or at the request of BHEL's customer, it becomes necessary to suspend / terminate the project engineering work, Party shall be asked to stop work; Party shall be paid only for the work portion completed till the date of such notification and as per rules asserted by BHEL. No other damages/cancellations charges whatsoever, arising out of such suspensions/ cancellation, shall be payable by BHEL.</p> <p>5.0 COMMERCIAL TERMS:</p> <p><u>Earnest Money Deposit:</u> Bidder to pay 'Earnest Money Deposit' (EMD) of Rs. 1,00,000 in the form of demand draft along with their technical offer. EMD given by all unsuccessful bidders shall be refunded normally within fifteen days of acceptance of award of work by the successful tenderer. EMD will not carry any interest. EMD of successful bidder shall be converted and adjusted against security deposit. Technical offers received without EMD are liable for rejection.</p> <p><u>Security Deposit:</u> Successful bidder to pay Security Deposit (SD) before start of the job. SD shall not carry any interest. SD shall be 1 lacs for 10 Lacs SD shall be 1 lacs for 10 Lacs +7.5% for of the amount exceeding 10 lakh . SD may be furnished by successful bidder in the form of</p> <ul style="list-style-type: none"> ◆ Demand draft in favour of BHEL- Ramachadrapuram ◆ Local cheques of scheduled banks subjected to realization, ◆ Bank guarantee from scheduled banks up to 50% and balance by DD ty 		
	Ref. Doc		

Form No.	 HYDERABAD	PRODUCT STANDARD PROJECT ENGINEERING DEPARTMENT	PEMC-1701
			Rev No. 00
			Page 6 of 7
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the company.	<p>Security Deposit will be released on commissioning of the total plant and submission of 'As Built' drawings .</p> <p>6.0 Payments:</p> <p>Payments will be made to EC against EC's invoices. All payments will be made within 90 days after submission of original documents to BHEL for processing. Payment for engineering will be controlled based on mile stone mutually agreed after finalization of order.</p> <p>No payments will be paid towards visits to Hyderabad or elsewhere.</p> <p>95 % of order value will be paid during execution of job based on mutually agreed mile stone.</p> <p>5% Balance amount of order value will be paid after commissioning of the project.</p> <p>7.0 Validity of the offer.</p> <p>i. The offer by the bidder shall be kept valid for 6 months from bidding date.</p> <p>ii.If the job is awarded, the successful bidder's price shall be kept firm till 24 months from the date of LOI or till completion of project, whichever is later.</p> <p>8.0 Price Preferences:</p> <p>Price preferences as per Government of India guidelines will be applicable to Public Sector Bidders.</p> <p>9.0 Following are the basis for Offer scrutinizing during order finalization stage :-</p> <ol style="list-style-type: none"> 1) Vendor to clarify clearly any deviation if taken from the scope specified in the spec.. 2) Commercial terms confirmation. 3) Vendor should have PDMS license for 3D Modeling 4) Vendor should have Registration and Numbers for paying Gov. service Tax etc as per rules. 5) CAEPIPE or CAESER for flexibility analysis 6) Support design software 7) Ref list for STG Piping earlier completed at least 5 nos. 8) Vendor to submit the earnest money of 1lacks along with technical offer. 9) Vendor shall be preferably from Hyderabad city. <p>The applicable drawings basically equipment layout and P &I are enclosed with a two separate folder along with this spec.</p> <p>Vendor to submit hard copy of their technical offer and price bid offer addressing to BHEL Ramachandrapuram, separately in a sealed cover. Technical offer will be open first and after finding the offer technically suitable the price bid will be opened. Vendors will be informed by us the date of Technical opening and the price bid opening for their participation. Any vendor who is not qualified technically or price the earnest money will be returned back as it is without any interest. The earnest money of successful bidder will be converted in to the security deposit and will remain with BHEL and will be returned to the vendor after completion of the job without any interest.</p> <p>The Technical and price offer shall be submitted in a separate sealed cover to BHEL Ramachandrapuram office Tender Box located in 4th floor of Administrative Building before 13.45 Hrs on date of submission.</p> <p>The sealed cover envelop shall be addressed ,mentioning "Engineering services for 3D modeling" enquiry no HY/PEDM/BP/005 with due date for opening on 21-02-2008 .Offer shall not be submitted through email.</p> <p>Offer shall be submitted on or before 21-02-2008.</p>		
	Ref. Doc		

Form No.	 HYDERABAD	PRODUCT STANDARD PROJECT ENGINEERING DEPARTMENT	PEMC-1701
			Rev No. 00
			Page 7 of 7
COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED . It must not be used directly or indirectly in any way detrimental to the interest of the company.	<p>The offer shall be addressed to Mr. N. Vidya Sagar SDGM PED Purchase Dept.Adm.Bldg 4th Floor BHEL,Ramachandra Puram Hyderabad-502032 (A.p.) -----XX-----</p> <p>The contact person for any technical query etc for the above job shall be address to</p> <p>Mr.Bhuneshwar Prasad/Sr.Manager New Engineering Building BHEL ,RamachandraPuram Hyderabad Ph 040-23182840 Mobile 9441435885 Email bpraad@bhelhyd.o.in</p>		
	Ref. Doc		