

Corrigendum 4 dated Sep 15, 2015 to Tender Specification BHEL PSSR SCT 1594

Some of the bidders had raised queries in the published tender specification. The Clarifications issued by BHEL are furnished below:

No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
1)	Price bid Ref. No. A1	Material handling and Management work involving Receipt, Unloading & Material Handling from Trucks / Trailers / Transport carriers / wagons etc.,..... etc., for CPCL, Manali (including ODCs)	The location of materials unloading and handling except CPCL Refinery premises is not mentioned and also, the approximate distance is not given. - Please clarify	Exact location (within and outside premises shall be indicated as and when CPCL indicates), however, distance is very clearly stated in tender document. (refer clause 1.12.2 of Chapter XII - MATERIAL HANDLING, STORAGE AND OTHER RESPONSIBILITIES AT BHEL STORES of Technical Conditions of Contract (TCC) (Volume- I Book-I)

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2)	Price bid Ref. No. A3 and Technical Conditions of Contract (TCC) Volume IA, Part-I, Chapter – XII MATERIAL HANDLING, STORAGE AND OTHER RESPONSIBILITIES AT BHEL STORES Clause No. 1.12.42.1 & 1.12.42.2	RESHIFTING AND RESTACKING OF MATERIALS / COMPONENTS : 1.12.42.1 Re-shifting and restacking of the materials / components from one location to another location upto a distance of maximum 6 km within / outside plant boundary shall be carried out by the contractor as per the instruction of BHEL engineer without any delay. 1.12.42.2 In case it is necessary to shift and re-stack the materials kept at work area / site to enable other agencies to carry out their work, same shall be done by the contractor and shall be considered as Reshifting and restacking of materials / components.	The location of materials / components which are to be reshifted and restacked except CPCL Refinery premises is not mentioned and also, the approximate distance is not given. - Please clarify	Exact location (within and outside premises shall be indicated as and when CPCL indicates), however, distance is very clearly stated in tender document.

No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
3)	Price bid Ref. No. B	Erection, Testing and Commissioning and Completion of trial operations of 1 x 150 TPH Boiler & Aux., Rotating Equipments, Insulation of CPCL, Manali, as per the detailed description and nature of work enumerated in the Tender specification including supply of consumables, tools & tackles, equipments, all handling and transportation from which is incidental to normal erection works.	Fabrications of the piping activities are not mentioned in the SOR item nos. B. - Please clarify whether fabrication activities are to be carried out for pressure piping / Non pressure piping or not. - Also, please clarify whether the pressure piping parts will be supplied in pre-fabricated spools or not.	Fabrication of pressure piping is not in the scope of the bidder. In case of non-pressure piping edge preparation and stub fixing are in scope of bidder.
4)	Price bid Ref. No. C	Erection, Testing, Commissioning and completion of trial operations of HRSG and its auxiliaries and piping as per the detailed description and nature of work enumerated in the Tender Specification including as detailed in the tender specification. This shall include all types of handling and transportation of materials from the site components and application of insulation	Fabrications of the piping activities are not mentioned in the SOR item nos. C - Please clarify whether fabrication activities are to be carried out for pressure piping / Non pressure piping or not. - Also, please clarify whether the pressure piping parts will be supplied in pre-fabricated spools or not.	Fabrication of pressure piping is not in the scope of the bidder. In case of non-pressure piping edge preparation and stub fixing are in scope of bidder.

No	Reference clause	Existing provision	Bidder's query	BHEL's clarification
5)	Price bid Ref. No. D	<p>Erection, Testing, Commissioning and completion of trial operations of GTG and its auxiliaries and piping as per the detailed description and nature of work enumerated in the as detailed in the tender specification.</p> <p>This shall include all types of handling and transportation of materials from the site stores / sheds / storage yard to place of erection including any extra work ofand application of insulation.</p>	<p>Fabrications of the piping activities are not mentioned in the SOR item nos. D.</p> <ul style="list-style-type: none"> - Please clarify whether fabrication activities are to be carried out for pressure piping / Non pressure piping or not. - Also, please clarify whether the pressure piping parts will be supplied in pre-fabricated spools or not. 	<p>Fabrication of pressure piping is not in the scope of the bidder. In case of non-pressure piping edge preparation and stub fixing are in scope of bidder.</p>
6)	Price bid Ref. No F.1. Tender Clause No. 1.9.2.1 of Bill of quantity- Volume-IA, Part-I, Chapter-IX	<p><u>Insulation works:</u> Application of insulation, including Fixing components, cladding sheets, Mineral wool, Refracting etc. for Boiler, HRSG and pipings, tanks, vessels, steel stack etc. These rates shall include preparation of mattresses with specified density and proper shape to suit ducts, vessels, pipes, valves and other similar works</p>	<p>In weight schedule Refractory & Insulation with approximate weight of 89 MT is given</p> <ul style="list-style-type: none"> - Please provide the details for weight of only Refractory materials. 	<p>50% of total shall be taken as tentative quantity of refractory i.e. 44MT</p>

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7)	Technical Conditions of Contract (TCC) Volume IA, Part-I, Chapter – II SCOPE OF WORKS Clause No. 1.2.2.4	Fire Barricade protection is to be done for the purpose of fire safety in the erection area (temporary but with steel structures and GI sheets covering for the fire protection for the existing unit under operation) as required / insisted by CPCL.	There is no specific SOR item for providing temporary Fire barricading protection. Hence please confirm the following a) Approximate area to be fire barricaded (Length with & height and number of locations). b) Please provide the separate item for Temporary Fire barricading protection and accordingly revise the Schedule of quantity.	Fire barricading is to be provided as per existing rules / procedures followed within CPCL premises. Fire barricading is within the scope of bidder. No separate item rate shall be provided for fire barricading. No extra / separate payment shall be made for this.
8)	TCC Volume IA, Part-I, Chapter – II SCOPE OF WORKS Clause No. 1.2.2.14.1 e)	Obtaining statutory approvals as required at site connected with the equipment erected and commissioned.	Please furnish the list of applicable Statutory approvals & Government authorities if any.	Statutory approvals as per CPCL norms, BHEL GCC and tender documents to be followed
9)	TCC Volume IA, Part-I, Chapter – III FACILITIES IN THE SCOPE OF BIDDER / BHEL Clause No. 1.3.7	ONLINE SITE CONSTRUCTION MANAGEMENT SYSTEM [SCMS]: Contractor has to provide minimum 5 computers shall have Windows 7 OS, 4GB RAM and Internet Explorer 8 or above.	Please confirm any specific software for Site Construction Management System is to be installed in 5 nos. computers except Windows 7 OS, 4GB RAM and Internet Explorer 8 or above.	Windows 7 OS and internet explorer 8 is sufficient

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10)	TCC Volume IA, Part-I, Chapter – III FACILITIES IN THE SCOPE OF BIDDER / BHEL Clause No. 1.3.11.1	BHEL will supply the materials / equipments indicated in the weight schedule from their respective manufacturing units which are to be executed / incorporated in the permanent system. In addition the material such as lube oil, grease required for commissioning the erected equipments and chemicals required for chemical cleaning of equipments will be supplied free of cost by BHEL.	We understand the all the chemicals required for Chemical cleaning, & pumps, pipes, tanks required for chemical cleaning shall be provided BHEL on free of cost. Contractor scope is to lay the temporary piping & carryout the chemical cleaning. - Please confirm	Fabrication, laying of temporary piping and chemical cleaning is within bidder's scope. Also refer clause 1.18.29, 1.18.49.7, 1.18.50.10, 1.18.52.5 in chapter XVIII of TCC
11)	TCC Volume IA, Part-I Chapter - IV T&Ps and MMEs TO BE DEPLOYED BY CONTRACTOR Clause 1.4.1.2.1	60T tyre mounted crane: 1 No. To be deployed from start of Utility Boiler erection up to safety valve floating of Utility boiler. In case, more than 60T crane is required for few items to be erected in UB, the same shall be arranged by the contractor on requirement basis	- If more than 60 MT capacity crane is required, please confirm the Capacity of crane with required boom length and duration of crane to be deployed at site for erection of few items in UB to submit our competent offer.	Bidder is expected to visit site, location of erection, refer to GA drawings provided and decide the requirement of higher capacity crane.

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12)	TCC Volume IA, Part-I Chapter - IV T&Ps and MMEs TO BE DEPLOYED BY CONTRACTOR Clause 1.4.1.3	Contractor has to deploy <u>For Material Handling</u> 1) 18T Mobile crane tyre mounted :1 No. 2) 12T Mobile crane tyre mounted :1 No. <u>For Utility Boiler</u> 1) 60T tyre mounted crane: 1 No.	No crane is mentioned for HRSG- Boiler drum erection. Please confirm whether BHEL will provide higher capacity crane suitable for boiler drum erection and module lifting.	Please refer clause 1.12.16 of chapter XII- MATERIAL HANDLING, STORAGE AND OTHER RESPONSIBILITIES AT BHEL STORES of TCC (volume-I Book-I) regarding ODC and heavy consignments. On requirement basis, contractor has to arrange higher capacity crane for drum erection of HRSG and Utility Boiler. Refer sl. No. 16 of this corrigendum regarding crane for module erection
13)	TCC Volume IA, Part-I Chapter - V T&Ps & MMEs TO BE DEPLOYED BY BHEL ON SHARING BASIS	List of T & Ps made available by BHEL to contractor free of cost are 1) 75 / 80 T capacity crane for HRSG and auxiliaries of GTG	Only 75 / 80 T crane is mentioned. This crane is not enough for erection of boiler drum and modules. Please confirm that BHEL will provide higher capacity crane for this purpose.	BHEL will provide 75 / 80T crane for HRSG erection work. On requirement basis, contractor has to arrange higher capacity crane for drum erection of HRSG and Utility Boiler.

14)	<p>TCC VOLUME-IA PART-I Chapter-IX BILL OF QUANTITY clause no. 1.12.43.1.& 1.12.43.2 (wrongly published as 1.12.1.1 & 1.12.1.2)</p> <p>and</p> <p>TCC VOLUME-IA PART-I Chapter-IX SURFACE PREPARATION AND PAINTING clause no. 1.19.3.5</p>	<p>1.12.43.1 : Contractor shall carryout cleaning and preservation by the contractor with in the quoted rate. Supply of primer / paint (synthetic enamel) will be in BHEL's scope</p> <p>1.12.43.2 : All the preservative consumables like paint, grease etc. shall be issued by BHEL free of cost and application of preservatives with their own T&P consumables like brush, emery sheet, etc.shall be carried out by the contractor. BHEL will supply preservative consumables only till the materials are in BHEL stores under BHEL custody. The scope of supply of preservative consumables shall be in the scope of the contractor if the material are under the custody of contractor.</p> <p>1.19.3.5 : Required paints, thinner other consumable such as wire brush, brush etc shall have to be arranged by the contractor at their own cost. The required manpower, other required consumables, T & P etc shall be provided by the contractor within the quoted rate. The arrangement of primer / paint will be in contractor's scope.</p>	<p>Please confirm the Supply for paints, thinner other consumable such as wire brush, brush etc. in BHEL's Scope or Contractor's scope</p>	<p>Part of tender clause 1.12.43.2 is reproduced again below: BHEL will supply preservative consumables only till the materials are in BHEL stores under BHEL custody. The scope of supply of preservative consumables shall be in the scope of the contractor if the material are under the custody of contractor.</p> <p>The clauses 1.12.43.1, 1.12.43.2 and 1.19.3.5 shall be read in conjunction</p>
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15)	TCC VOLUME-IA PART-I Chapter - XVIII TESTING AND COMMISSIONING Clause No. 1.18.49.7	The pumps, pipes, tanks required for chemical cleaning shall be spared at BHEL stores on "as is where is basis" condition. All necessary repairs / overhauls alone are in the scope of the contractor at no extra cost. All the materials shall be returned to stores after use in good condition. Necessary spares will be given by BHEL.	We understand the all the chemicals required for Chemical cleaning & pumps, pipes, tanks required for chemical cleaning shall be provided BHEL on free of cost. Contractor scope is to lay the temporary piping & carryout the chemical cleaning. - Please confirm	All the chemicals required for Chemical cleaning & pumps, pipes, tanks required for chemical cleaning shall be provided BHEL on free of cost. For rest of the works tender condition prevails.
16)			The major items to be erected in the entire package are a. UB Boiler drum - 44MT b. HRSG Boiler drum - 45MT c. Evaporator Module- Front - 69.6MT d. HP Eco-II Module - 54.9MT e. HP Eco-I Module-Front - 86.26MT f. HP Eco-I Modules- Middle - 86.26MT g. HP Eco-I Modules – Rear - 82.34MT It is mentioned that BHEL will provide the 75 T / 80 T for erection purpose. As per the above weights erection of some of the modules is not possible with the 75T / 80 T Crane. We request BHEL please look into the issue and do needful.	The SI. Nos c,d,e,f,g will be supplied as individual modules (approx. weight of 4 - 5 MT each) and need to be erected one by one. The 75 / 80 MT crane provided by BHEL will be sufficient to Carryout modules erection. On requirement basis, contractor has to arrange higher capacity crane for drum erection of Utility Boiler.

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17)			There is no mention about any cranes for HRSG Erection. In HRSG higher capacity crane will be required for boiler drum erection and modules erection. Please confirm whether BHEL will provide the crane free of cost to the contractor.	BHEL will provide 75 / 80T crane for HRSG erection work. On requirement basis, contractor has to arrange higher capacity crane for drum erection of HRSG and Utility Boiler.
18)			Please confirm that whether we have to consider the strand and jack system for the erection of GT / GTG or boiler drums in our scope or not?	BHEL Shall be providing the 75 / 80 MT crane which shall be utilised for Erection of Equipments coming as part of GTG / HRSG package. The GT / GTG and boiler drums shall be erected by crane or strand jack method. For this The higher capacity crane or strand jack arrangement shall be made by the sub- contractor on requirement basis.
19)			Please confirm that whether erection of steel chimney can be done with 75 T/80 T or not?	BHEL Shall provide crane of 75 / 80 MT capacity which will be suitable for Steel chimney erection.

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20)			Please provide the weld joint details pertain to UB, HRSG, Piping packages	Refer Volume 1A ,part II, chapter - 2 (Welding Schedule) of TCC (Volume-I Book-I)
21)		Construction Drawings	<p>We understand that, all the approved construction drawings including required for IBR approvals will be issued by BHEL for all erection & piping works connected to Utility Boiler, GTG, HRSG, Balance of Plant works, Fire detection & Protection system and Insulation works.</p> <p>Contractor scope is only to get the approval from IBR Authorities for the IBR related Equipments erection & IBR piping works.</p> <p>Also, there is no specific item for "Preparation of drawings" in contractor's scope except As Built Drawings.</p> <p>- Please confirm</p>	Yes, construction drawing for IBR works will be issued by BHEL. It is bidder's responsibility to get approval.

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22)			<p>Schedule of Rates - SOR 747:</p> <p>Hydro testing of equipment on foundation: Supply of all accessories such as hydro testing pumps, instruments, blind.</p> <p>We request CPCL / Jacobs to provide the necessary blind flanges, fasteners & gaskets for hydro testing of equipments on foundation and other items will be in contractor's scope.</p>	<p>The SOR 747 is not appearing in the price bid and hence this query is irrelevant to this tender.</p>

Bidders are requested to consider this corrigendum as part of tender specification and quote accordingly.

All other conditions of the tender specification remain unchanged.

-Sd-
Manager / Subcontracts