

ANNEXURE-1

Tender Specification BHEL PSSR SCT 1474

Some of the bidders sought clarifications vide letters or in Pre Bid discussion held on 20.9.2011 at BHEL PSSR Regarding Yermarus 2x800MW Civil and Structural Works and clarifications are furnished below for your information

S.No	Bidder's Query	BHEL Reply	Revised Description
1	Item 209-unit to concrete-package 1		
	Extra over St. No. 205 to 208 for controlling of temperature of fresh concrete to less than 23 degree centigrade using ice, including all related arrangements for providing, storing and mixing of ice with water, cooling of aggregates etc. All complete as per specification, drawing and instruction of engineer in charge.	Unit of the item is "CUM"	
2	Item 219-Kindly Change the unitfor this item from SQM to KG		
	Providing and applying curing compound of approved make where ever required as per manufacturer's specification.	The BOQ item is clear, bidder to quote Accordingly	
3	Item 401-Kindly confirm whether supply of steel is included in this items		
	Providing, straightening, cutting, bending, placing in position at any level, binding of mild steel reinforcements conforming to grade 1 of IS:432 part 1 in concrete including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per specifications & drawings.	Supply is in the Bidders scope as specified in the BOQ	
4	Item 406-Kindly confirm whether supply of steel is included in this items		
	Providing, straightening cutting, bending, placing in position at any level, binding of mild steel reinforcements in brickwork including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	Supply is in the Bidders scope as specified in the BOQ	
5	Item 407 :- We presume reinforcement steel will be will be issued us free of cost as per the CL 1.3.13 of TCC .Please clarify	Description is changed	
	Straightening, cutting, bending, placing in position at any level, binding in position high yield strength steel reinforcements in brickwork including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	Reinforcement steel Supply is in BHEL scope	Straightening, cutting, bending, placing in position at any level, binding in position high yield strength steel reinforcements in brickwork including cost of binding wire, labour, scaffolding etc. complete all as per specifications & drawings.
6	Item No A705-Kindly provide rebar size /technical details requested. Concrete to be paid seperately-		
	Providing and fixing Rebar (reinforcement bar) with Hilti or equivalent Resin bonded epoxy fixing method including anchor fastener, materials, equipment, labour, scaffolding complete as per direction of Engineer. Cost of reinforcement bar is not to be included in this item. Rebar has to be designed for full strength in M30 grade of concrete and the depth of embedment is to be provided accordingly.	Bidder to quote as per item specification-Rebar is to be designed by the bidder	

S.No	Bidder's Query	BHEL Reply	Revised Description
7	Item no 1001 a, 1002, 1003, 1005-Kindly clarify whether BHEL/KPCL issuing Fly ash at free of cost for making Bricks .Please clarify whether BHEL will provide the required reinforcement as free supply.		
	Providing brick work in cement mortar 1:6 (1 part cement 6 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting.	Supply of fly ash is in bidders scope for making bricks and supply of MS bar is in the Bidders scope as specified in the BOQ	
8	Item no 1416 b)-clarify what ype of tiles to be used for this item		
	Providing and laying vitrified ceramic tiles of polished variety of size 600x600 from reputed / approved manufacturer, complete including underbed of cement mortar 1:3 with neat cement slurry etc. all complete for following-b)10mm thick tiles In flooring & skirting	The BOQ item is clear, bidder to quote Accordingly	
9	Item no 1810-Kindly indicate the Rail type and Strength		
	Providing, laying and fixing rails and guide rails in concrete for transformer, rail track including cutting of rails, joining of rails, anchoring lugs etc all complete.	90lb or 105lb rails will be used.	
10	Item 2300-Kindly change the word reinforcement.It should be structural steel		
	Structural steel works including all labour, material, equipments, transportation, handling etc. at any level as per specification, drawings and as directed by engineer - in - charge. BHEL will supply Structural Steel as a free issue. Loading, transporting and unloading from BHEL stores at location described in specification shall be done by bidder.	The BOQ item is clear, bidder to quote Accordingly	
11	Item 2309-Galvanising of grating is incuded in 2307.Pleas delete this item		
	Extra over above ST NO. 2301/2307 for finishing the grating units with hot dipped galvanisation @ 610 gm/sqm over blast cleaned steel surfaces instead of painting with two coats of red oxide zinc-chromate primer all complete.	Description is changed for item 2309	Extra over above ST NO. 2301 for finishing the grating units with hot dipped galvanisation @ 610 gm/sqm over blast cleaned steel surfaces instead of painting with two coats of red oxide zinc-chromate primer all complete.
12	Item no. 2426-grade of concrete requested	The grade of concrete will be M25 as per technical specifications, Section D 4.6,vol V, PART-C,page 5-8	
13	Item no. 1819.Provide technical specification and drawings for the stop log gates		
	Design, supply, fabrication, erection of stoplog gates in CW Pumps with embedments required, lifting beams, special tools & plants, spare parts for three years, machining, casting, all materials such as structural steel, cast steel, stainless steel, brass used for seals, rubber seals, gears, ball and roller bearing, branch bushings, greasing, bolts, nuts, lugs, threaded fastners etc., cleaning, sand blasting, hot double dip galvanised with minimum coating of zinc 750 gms/sqm., following by an application of etching primer and dipping in black bitumen as per B.S. 3416, erection along with a second stage concreting to true plumb and levels, submission of drawings / fabrication drawings for engineers approval etc all complete. The leakage through rubber seal shall not be more than 5 lit/min/metre length of seal under maximum head.(only weight of structural steel including embedments shall be considered for payment purpose) (SS componate shall be measured separately for payment)	The BOQ item is clear, bidder to quote Accordingly-Stop log gates drawing to be designed by the bidder	

S.No	Bidder's Query	BHEL Reply	Revised Description
14	Item no 2301-Structural steel provided by whom?	Description is changed for item 2301	
	<p>Supply, fabrication and erection of structural steel with mild steel rolled section / built up section / combination of both conforming to Grade E250/E300 IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052, mild steel rounds, monorails, stays, safety chains, ladders, MS grating etc. in columns, beams, gantry girders, bunkers, silos, hoppers, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, hand-rails etc including 2 coats of redoxide zinc-chromate primer as per IS:1477 (one coat at shop and one coat after erection), connection design & preparation of fabrication drgs, collection of steel from stores, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, compatible electrodes and other consumables, alignment, erection bolts & nuts (weight of erection bolts, nuts and welds not payable),</p>	<p>Supply of structural steel is in BHEL scope, Refer the revised description</p>	<p>Fabrication and erection of structural steel with mild steel rolled section / built up section / combination of both conforming to Grade E250/E300 IS:2062, pipes conforming to IS:1161/ IS:1239, chequered plate conforming to IS: 3052, mild steel rounds, monorails, stays, safety chains, ladders, MS grating etc. in columns, beams, gantry girders, bunkers, silos, hoppers, roof trusses, portals, laced purlins, space frames, hangers, struts, monorails, galleries, stiffeners, wall beams, sheeting runners, brackets, stub columns, bracings, cleats, trestles, base plates, splice plates, chequered plate flooring, decking and seal plates, steel frame grid over false ceiling, walkway platforms, ladders, stairs, stringers, treads, landings, hand-rails etc including 2 coats of redoxide zinc-chromate primer as per IS:1477 (one coat at shop and one coat after erection), connection design & preparation of fabrication drgs, collection of steel from stores, fabrication, straightening, cutting, bending, rolling, grinding, machining, drilling, welding, compatible electrodes and other consumables, alignment, erection bolts & nuts (weight of erection bolts, nuts and welds not payable),</p>
	<p>assembly, edge preparation, preheating (min preheat and interpass temperature of 20o C for welding over 20 mm and upto 40 mm & 66o C for welding over 40 mm and upto 63 mm & 110o C for thickness over 63 mm & use of low hydrogen/ radiogenic electrodes), post heating, testing of welders, inspection of welds, visual inspection, non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1 and ST-2 as per SIS05-5900, touch-up painting, rectification, dismantling and removal of all temporary structures (weight of temporary structures not payable), return of surplus / waste steel materials to store etc all complete. Including appointment of a seperate agency, approved by BHEL, for review and approval of fabrication drgs, in consultation with BHEL.</p>		<p>assembly, edge preparation, preheating (min preheat and interpass temperature of 20o C for welding over 20 mm and upto 40 mm & 66o C for welding over 40 mm and upto 63 mm & 110o C for thickness over 63 mm & use of low hydrogen/ radiogenic electrodes), post heating, testing of welders, inspection of welds, visual inspection, non destructive and special testing, rectification and correction of defective welding works, production test plate, inspection and testing, erection scheme, protection against damage in transit, stability of structures, installation of temporary structures, setting column bases, surface preparation by means of manual or mechanical power tools as per IS:1477 part 1 and ST-2 as per SIS05-5900, touch-up painting, rectification, dismantling and removal of all temporary structures (weight of temporary structures not payable), return of surplus / waste steel materials to store etc all complete. Including appointment of a seperate agency, approved by BHEL, for review and approval of fabrication drgs, in consultation with BHEL.</p>

S.No	Bidder's Query	BHEL Reply	Revised Description
15	Item 2301 :Weight of erection bolts,nuts and welds not payable.We requesting you to provide the payment for weight of erection bolts and nuts under separate item.	As per item specification only.Refer the revised description as above	
16	Item no. 214 a) M25-quantity is given as NA.Please clarify		
	Providing and laying Design Mix cement concrete as per IS:456, IS 3370 & IS 10262-2009 for reinforced concrete works using graded aggregate for Concrete in water retaining/conveying structures including addition of suitable plastisizer cum waterproofing cement additives confirming to IS 9103 latest to achieve a slump more than 125 mm in concrete as per manufacturers recommendation and conforming to limits of permeability as per IS 2545 and specification with 20 mm nominal size graded aggregate for following grades.	Item Deleted	
17	Item no 1003 b) quantity is given as '0.Please clarify'		
	Using clay ash bricks as per IS 13757 with crushing strength of 75 kg/cm2 and minimum percentage of fly ash 25%	Item Deleted	
18	Item no 1003 c) quantity is given as '0.Please clarify' '0'		
	Using burnt clay bricks of class designation 7.5 of nominal dimension	Item Deleted	
19	Request for providing steel in standard lengths	8mm,10mm &12mm will be supplied in coil form	
20	Requestyou to provide space for Residential accomodation/labour hutment at inside the plant	As per tender Conditions	
21	T & P to be provided by bidder.the minimum T&P mentioned in the document is on higher side.The contractor shall be allowed to deploy the T&P as per the site requirement	As per tender Conditions	
22	The contract period provided for project is impractical.kindly Change contract period atleast up to 34 Months	As per tender Conditions	
23	Request for Mentioning number of cranes and capacity.We are requesting you to provide all the cranes required for erection at free of cost	As per tender Conditions	
24	Consortium Agreement, Integrity pact, Technical bid and document fee share to be submitted seperately for Package 1 and 2-Please Clarify	Consortium agreement ,integrity Pact is applicable as per tender conditions. Technical bid:Part-1A &1B will be common for both packages and envelope-III of part II will contain two PRICE BID envelopes of Package-1&2	
25	The format provided is not sufficient to write in words. Kindly accept rate and amount in figures or accept submission in computerised printed format	As per tender Conditions	

S.No	Bidder's Query	BHEL Reply	Revised Description
26	Clause no 5.0 & 6.0 of NT		
	We presume that Part I-A & Part I-B will be common for both packages and envelope III of part II will contain two envelopes i.e. price bid for package 1 and Price bid for Package 2	Tech bid is common, price bid is separate	
27	Item 201-Mention the type of mix used		
	Concrete of grade M10 (1 part cement, 4 part sand, 8 parts of 40 mm graded aggregate by volume) as filling course at any depth below finished floor level, under and around foundations/floors, mass fill etc.	The M-10 Concrete will be of Nominal mix	
28	Guarantee period of 12 months shall commence from the date of completion of the whole of the work certified by the engineer		
	Is this same as defect liability period? Is guarantee period will be applicable structurewise from the handing over date of that particular structure to client or on completion of whole work	As per tender Conditions	
29	SCC Vol-1, Book 2, Chapter 7, CL7.1 Provide preliminary drawings to arrive at most competitive rates. Please provide	Drawings have been provided in the tender, further drawings will be issued during execution	
30	Terms of payment for 2301	AS per tender Specification	
31	Security advance is requested for non perishable items-for steel items(embedments,bolts,gratings,SS component,stop log gate,etc)	As per tender Conditions	
32	With reference to the tender notification, we are fulfilling the Pre-Qualification criteria as a Prime bidder + consortium bidder for the conditions 2a, 2b and 2c stipulated. As a prime bidder we are satisfying the conditions of 2a, 2c and part of 2b. i.e. erection of mill bunker completed in a thermal Power plant of minimum capacity of 500MW. Through consortium partner we are fulfilling the remaining part of 2b i.e. structural steel fabrication and erection minimum capacity of 500MW in a single year. With above arrangement, we are fulfilling the Pre Qualification criteria as below. "Prime bidder + consortium partner should fulfil all the three conditions 2a, 2b and 2c stipulated above. Prime bidder and consortium partner shall enter into the consortium Agreement" We request you to kindly provide us a confirmation in this regard so that we can sign the consortium agreement with our consortium partner.	As per tender Conditions, In case of consortium bid the Prime bidder + consortium partner should fulfil all the three conditions 2a, 2b and 2c stipulated. Hence this consortium arrangement is acceptable	
33	Material Supply	Any material that is not supplied by BHEL (owing that the material is necessary for the work) shall be procured by the agency and BHEL shall reimburse the required material amount (max of SAIL rate)	

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34	Request for extension of bid upto 3 weeks	As per tender Conditions	
35	Clause 1.3.13 states that Ms rods are in the scope of the contractor and BHEL will only provide reinforcement and structural Steel. However Clause 1.9.1 states that reinforcement steel and MS earthing rods will be issued as free supply	Refer CL 1.3.13 for material supply. Earthing MS rods, Reinforcement and Structural steel will be supplied by BHEL. CL 1.9.1 is for accounting of materials issue	
36	Mobilisation advance maybe increase to 10% of contract value	As per tender Conditions	
37	Request for interest free advance	As per tender Conditions	
38	Request for LD to be reduced to max of 5%	As per tender Conditions	
39	As per CL 1.7.4.0,new levies/taxes shall be to BHEL account after award of contract.Request for levy/tax to be applicable from date of submission of tender Any other tax is to be included.kindly confirm whether we need to include the labour cess for this project.	As per tender Conditions	
40	Item 211 (b)- indicate if it is design or nominal mix	M-25 Concrete is of Design Mix	
	Providing and encasing of structural steel member with concrete using nominal aggregate size of 12.5mm down. Encased member shall be wrapped with welded wire mesh/chicken wire mesh with proper lap etc. complete as per specification for the following grades. (Payment of welded wire mesh, chicken wire mesh shall be made separately b) M-25		
41	Item no 1005-thickness of the brick reqd		
	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item.)- Using flat bricks.	75mm is the thickness of the brick	
42	Item no 1007-type of masonry and mix proportions reqd		
	Providing and encasing of structural steel member with masonry work around flanges, webs etc. and filling the gap between steel and masonry by minimum 12mm thick mortar. Encased member shall be wrapped with chicken wire mesh with 50mm lap etc. complete as per specification. (Chicken wire mesh to paid separately)	The mix proportion is 1:6	
43	Item no 1819 and 1820- 1.whether SS component will be given free of cost by BHEL 2.Whether BHEL will provide the structural steel as free supply		
	Design, supply, fabrication, erection of stoplog gates in CW Pumps with embedments required, lifting beams, special tools & plants, spare parts for three years, machining, casting, all materials such as structural steel, cast steel, stainless steel, brass used for seals, rubber seals, gears, ball and roller bearing, branch bushings, greasing, bolts, nuts, lugs, threaded fastners etc., cleaning, sand blasting, hot double dip galvanised with minimum coating of zinc 750 gms/sqm., following by an application of etching primer and dipping in black bitumen as per B.S. 3416, erection along with a second stage concreting to true plumb and levels, submission of drawings / fabrication drawings for engineers approval etc all complete. The leakage through rubber seal shall not be more than 5 lit/min/metre length of seal under maximum head.(only weight of structural steel including embedments shall be considered for payment purpose) (SS component shall be measured separately for payment)	Structural Steel for 1819 and SS component for 1820 is in Bidders scope	

S.No	Bidder's Query	BHEL Reply	Revised Description
44	Item 2412-whether the mix is design or nominal mix		
	Supplying and laying 400mmx150mmx350mm deep precast concrete kerb stone of grade M-20 with 20 mm nominal size stone aggregate and of shape as per detailed drawing including fixing with cement mortar (1:2) in 13mm thick joints, finishing of joints with neat cement paste, making drainage opening where required etc all complete.	M-20 concrete is of design Mix	
45	Idling charges : If contractors resources gets idle due to non availability of drawings,work fronts,local problems,natural calamities,force majeure etc,then the contractor shall be suitably compensated on mutually agreed rate on every occurrence	As per tender Conditions	
46	Cl 5.0 & 6.0 of NIT:We presume that Part-1A &1B will be common for both packages and envelope-III of part II will contain two envelopes i.e. price bid for Package-1&2.Please clarify	Part-1A &1B will be common for both packages and envelope-III of part II will contain two PRICE BID envelopes of Package-1&2	
47	NIT,Annexure-3,It appears that package 1&2 are the part of 1 tender only.Please clarify if both the packages are trated as separate tender.Can a bidder bid for only one package	Package 1&2 are the part of 1 tender only.Bidder can participate for one package also	
48	As per the Pre Qualification criteria ,CL 2a,2b and 2c stipulated in tender notification, the experience of Mill bunker is mentioned in a thermal power plant of 500MW in 2b and unit capacity of 500MW in 2a and 2c.. We request you to kindly confirmation in this regard so that we can sign the consortium agreement with our consortium partner.	PQR in 2b about the experience of Mill Bunker is clarified as below "Also, erection of Mill Bunker should have been completed in a Thermal Power Plant of minimum one unit of capacity 500 MW"	
	ALL OTHER CONDITIONS REMAIN UNCHANGED		
			AGM/CONTRACTS