

CORRIGENDUM - 4 DATED 07-09-2021 TO TENDER SPECIFICATION - BHEL:PSSR:SCT:1978

Civil (Balance Works), Architectural, Mechanical, Electrical, C&I, works of Natural Draught Cooling Tower NDCT-1 (of Unit 1) of 5X800 MW Yadadri Super Critical Thermal Power Project site including supply of materials for civil (excluding Cement, Structural steel & Reinforcement steel for civil works) Mechanical, Electrical & C&I Works, Labour, Tools & Plants

PRE BID QUERIES / REPLIES (SI.1-29) & REVISIONS (SI.30-34)

SI No	Reference	Description	Queries	BHEL Reply
	Section / Cl.No.			
1	TECHNICAL CONDITIONS OF CONTRACT (TCC) / 1.2.1	The scope of works all Civil (balance works), architectural.....	1) Please provide the details of site establishment available for NDCT construction 2) Kindly confirm whether the bidder can use the existing site establishments available for NDCT-1.	Bidder to arrange his own site establishment. With respect to site establishment, bidder may refer VOLUME-IA PART – I, Chapter 3
2	TECHNICAL CONDITIONS OF CONTRACT (TCC) / 1.2.4	Modifications to the thermos-hydraulic components (listed at S. Nos. 24 and 25 in the price bid) ... Also, the NDCT contractor shall guarantee the NDCT performance considering the constraints that are inviolable.. Basin & internal structure column-beam grid dimensions and elevations Water distribution ducts	We request BHEL to give us free hand to do the necessary modification in the following area to ensure smooth execution of the contract: 1. Providing lesser number of beams for supporting the 'V' bar splash type fill 2. Number of holes in the hot water duct shall be as per our standard Kindly confirm the above.	Bidder to note that the thermal design is already approved by the owner/ TSGENCO. All detailed design/ analysis/ calculations/ drawings/ documents are approved by customer, moreover all Cooling Towers have to be identical as per customer's requirement. Hence no change in design is permitted.
3	TECHNICAL CONDITIONS OF CONTRACT (TCC) / 1.2.4	The complete design and engineering of NDCT shall remain in the scope of BHEL's consultant.	Please furnish all the construction drawings for our review and planning.	The approved construction drawings shall be furnished during detailed Engineering.
4	TECHNICAL CONDITIONS OF CONTRACT (TCC) / 1.3.5	Construction Water at single point will be provided by BHEL...	We propose to use the existing construction water network developed for NDCT-1 construction. Kindly confirm.	Bidder to develop his own water network. Bidder may refer VOLUME-IA PART – I, Chapter 3
5	TECHNICAL CONDITIONS OF CONTRACT (TCC) /1.3.4	Construction power will be provided to the contractor at one single point...	We propose to use the existing construction power network developed for NDCT-1 construction. Kindly confirm	Bidder to develop his own power network. Bidder may refer VOLUME-IA PART – I, Chapter 3
6	TECHNICAL CONDITIONS OF CONTRACT (TCC) /1.4 / NOTES	T&Ps To Be Deployed By Contractor	Clause indicates equipments shall be supplied by BHEL and charges shall be recovered. But we are unable to find the rental charges. Please provide the same.	Bidder may refer, VOLUME-IA PART – II, Chapter 10

CORRIGENDUM - 4 DATED 07-09-2021 TO TENDER SPECIFICATION - BHEL:PSSR:SCT:1978

Civil (Balance Works), Architectural, Mechanical, Electrical, C&I, works of Natural Draught Cooling Tower NDCT-1 (of Unit 1) of 5X800 MW Yadadri Super Critical Thermal Power Project site including supply of materials for civil (excluding Cement, Structural steel & Reinforcement steel for civil works) Mechanical, Electrical & C&I Works, Labour, Tools & Plants

PRE BID QUERIES / REPLIES (SI.1-29) & REVISIONS (SI.30-34)

SI No	Reference Section / Cl.No.	Description	Queries	BHEL Reply
7	TECHNICAL CONDITIONS OF CONTRACT (TCC) /1.6	Time Schedule	Completion schedule of 22 months is difficult looking at the scope and specification mentioned in the tender. Hence please confirm if the bidders could offer 28 to 30 months as the completion schedule.	Tender conditions prevail
8	TECHNICAL CONDITIONS OF CONTRACT (TCC) /1.6.8	Intermediate Milestone for Penalty	This clause may kindly be deleted since overall mutually accepted completion schedule will be adhered to by the contractor. Please confirm.	Tender conditions prevail
9	TECHNICAL CONDITIONS OF CONTRACT (TCC) /1.7 (& Cl. No. 8.00.00)	Payment terms	For the last 10% payment against each of Supply and Erection & Commissioning including Civil Work, there should be a cut-off time of 180 days after tower mechanical completion. If PG test is delayed beyond this cut-off period for the reasons not attributable to the contractor, the last 10% payment should be released against submission of Performance Bank Guarantee for equivalent amount valid till the end of the guarantee period. If the PG test is not conducted within 12 months of structural completion of the cooling tower for reasons not attributable to the contractor, then it will be deemed to have been completed. Please confirm.	Tender conditions prevail. PG test to be conducted within 12 months of commissioning, however, if it exceed 12 months period for any reason, bidder has to necessarily complete the PG test without any commercial implication.
10	TECHNICAL CONDITIONS OF CONTRACT (TCC) /1.7.2.1	Mobilization advance payment	Please confirm if the Mobilization advance payment could be interest free.	Tender conditions prevail
11	TECHNICAL CONDITIONS OF CONTRACT (TCC) /1.9.3	Weightage	Since BOQ weightage is extremely important from the contract execution point of view, please confirm if the same shall be decided by the contractor only.	Tender conditions prevail
12	TECHNICAL CONDITIONS OF CONTRACT (TCC) /1.13.9.1	Reinforcement And Earthing Rod MS Round Steel Consumption And Wastage.	Allowable wastage is 3%. To maintain this, cut-to- length steel to be supplied by BHEL. Please confirm.	Tender conditions prevail

CORRIGENDUM - 4 DATED 07-09-2021 TO TENDER SPECIFICATION - BHEL:PSSR:SCT:1978

Civil (Balance Works), Architectural, Mechanical, Electrical, C&I, works of Natural Draught Cooling Tower NDCT-1 (of Unit 1) of 5X800 MW Yadadri Super Critical Thermal Power Project site including supply of materials for civil (excluding Cement, Structural steel & Reinforcement steel for civil works) Mechanical, Electrical & C&I Works, Labour, Tools & Plants

PRE BID QUERIES / REPLIES (SI.1-29) & REVISIONS (SI.30-34)

SI No	Reference	Description	Queries	BHEL Reply
	Section / Cl.No.			
13	TECHNICAL CONDITIONS OF CONTRACT (TCC) /3.3	Maximum diametrical tolerance of (+) 1 mm is allowed for the holes.....	Please note that the PVC lateral pipes will be as per IS 4985 Class 3 and as per the tolerance mentioned in IS 4985. Kindly elaborate this requirement of tolerance allowed in holes as it's not clear from the specification.	All tolerance shall be as per IS4958.
14	TECHNICAL CONDITIONS OF CONTRACT (TCC) /8.03.00	Conductance of test Performance testing of cooling tower shall be done to demonstrate....	Performance testing shall be done within 12 months of structural completion as per the Clause No 2.1 of CTI test code ATC 105.	It is our endeavour to complete the PG testing within 12 months of commissioning, however, due to non availability of design test condition at site, the PG test time may exceed 12 months period. In such case also bidder has to complete the PG test without any commercial implication.
15	TECHNICAL CONDITIONS OF CONTRACT (TCC) /(Page 553 of 867)	Geotechnical Investigation Report	Boreholes Nos 113, 115, 116, 117, 119, 121, 123, 124, 128, 129, 130, 131, 143, 144, 145, 146, 147, 148, 149, 151 are mentioned in the report. Please confirm which Boreholes represent the Cooling Tower area.	Boreholes Nos. 113, 115, 116 and 117 represents the cooling tower area for NDCT-1 (of Unit 1).
16	TECHNICAL CONDITIONS OF CONTRACT (TCC) /Section C / Specific Technical Requirement (C&I)	Removable type pitot tube at each hot water inlet- piping header to measure the flow (during performance guarantee test only). The pitot tube shall be left with customer after the completion of the test.	Test instruments required by us during performance testing of cooling tower shall be loaned by us for the duration of the test, but shall remain Paharpur's property. However, as per tender requirement, we will supply new removal type pitot tube (for each hot water inlet) as loose supply. Kindly provide detailed technical specification of Pitot tube with manometer, approved sub vendor list and ITP for our review and consideration.	BHEL noted. Pl refer cl no - d of Instrumentation in the price bid/ Bill of Quantity and sub vendor detail.
17	PRICE BID / BILL OF QUANTITIES /500	Roof treatment works	The requirement of roof treatment is not very clear from the specification. Please clarify.	The item no. 511 provided pertains to bitumen paint over concrete surfaces in contact with soil, therefore does not relate to roof treatment.
18	PRICE BID / BILL OF QUANTITIES /Ae I to iv	Anchor fasteners	Only one make has been mentioned for this item. However, to encourage competitive bidding, names of other equivalent makes shall also be approved. Please confirm.	The term "or equivalent" is mentioned in the item description, therefore, equivalent makes can be used.
19	PRICE BID / BILL OF QUANTITIES /1800	Miscellaneous items	Please clarify on these items.	Misc items covers all other items as required for completing the packages apart from items as mentioned in the BOQ's.

CORRIGENDUM - 4 DATED 07-09-2021 TO TENDER SPECIFICATION - BHEL:PSSR:SCT:1978

Civil (Balance Works), Architectural, Mechanical, Electrical, C&I, works of Natural Draught Cooling Tower NDCT-1 (of Unit 1) of 5X800 MW Yadadri Super Critical Thermal Power Project site including supply of materials for civil (excluding Cement, Structural steel & Reinforcement steel for civil works) Mechanical, Electrical & C&I Works, Labour, Tools & Plants

PRE BID QUERIES / REPLIES (SI.1-29) & REVISIONS (SI.30-34)

SI No	Reference	Description	Queries	BHEL Reply
	Section / Cl.No.			
20	PRICE BID / BILL OF QUANTITIES /b	Conducting tests on circuit as per specifications, drawings and as directed by engineer	Please provide detailed specification as stated herein.	Circuit test shall be applicable at the time of commissioning depending upon the workmanship of bidder and if found necessary during commissioning of HW water header.
21	PRICE BID / BILL OF QUANTITIES /	Electrical & Instrumentation items	<p>1. Please provide the detailed technical specification for electrical and Instrumentation items in the BOQ along with their approved sub vendor list.</p> <p>2. Please review and confirm whether it is really required to consider expected life for aviation warning light system to be more than 10 years. We request for the same to be waived off.</p> <p>3. In case of any conflict between Tender BOM and Tender specifications, we understand that the BOQ shall supersede the other. Please confirm.</p>	<p>1. Pl refer the cl no. IA, IB and IC of technical specification - PE- TS- 417-165-N002 including BOQ requirements in Vol - II - Price Bid for Electrical and C&I requirements and shall be inclusive of all approved drawings/ documents of Customer. Bidder to provide the drawings/ documents of their sub vendor items related to mechanical, Electrical and C&I items. Pl refer cl. 10 of specification no - PE-V1-417-TS-101. however, vendor list is tentative and shall be subject to CUSTOMER approval during detailed engineering.</p> <p>2. Please follow specification requirement.</p> <p>3. In case of conflict between BOM and tender specification, BOQ shall supersede.</p> <p>Bidder to submit/ provide the drawings/ documents, data sheets & QAP of their sub vendor items required in BOQ related to Mechanical, Electrical and C&I items.</p>
22	DATASHEET A /Doc-P-TS-417-165-N002 Clause-4	-	The Basin invert level and Cold water channel invert level mentioned are different from that mentioned in the Cooling Tower GA drawings. Please clarify.	Kindly refer the Approved GA OF NDCT (PE- V1 - 417-165- N001) attached in technical specification for details of Invert level of basin and Channel.
23	PE-TS-417-165-N002 SECTION: I SUB SECTION: IA REV. NO. 00 DATE 03.01.2020 SHEET 2 OF 6 /2.01.03 Scope (C&I):	Actuator for Motorised BFV at inlet of hot water pipes, Local Control Panel for Sump/Sludge Pumps (Submersible type)	<p>1. Please provide Valve datasheet and approved sub vendor list of MOV actuator.</p> <p>2. This MOV is not available in the Tender BOM. Please clarify.</p> <p>3. Please provide sludge sump detailed drawing for mounting the Float type Level switches.</p>	Please refer cl no- 22.4 of BOQ for MOV. The sludge pump detail drawing to be submitted by bidder during detail engineering and shall be subject to BHEL/ customer's approval.

CORRIGENDUM - 4 DATED 07-09-2021 TO TENDER SPECIFICATION - BHEL:PSSR:SCT:1978

Civil (Balance Works), Architectural, Mechanical, Electrical, C&I, works of Natural Draught Cooling Tower NDCT-1 (of Unit 1) of 5X800 MW Yadadri Super Critical Thermal Power Project site including supply of materials for civil (excluding Cement, Structural steel & Reinforcement steel for civil works) Mechanical, Electrical & C&I Works, Labour, Tools & Plants

PRE BID QUERIES / REPLIES (SI.1-29) & REVISIONS (SI.30-34)

SI No	Reference	Description	Queries	BHEL Reply
	Section / Cl.No.			
24	DEVELOPMENT CONSULTANTS V.V-A/S-III: 3 (e-PCT/TS/K/02/2014-15/V-A/SEC-XIII) Cl./6.05.00 Position Indicator/ Transmitter	One (1) position transmitter, 4-20 mA current signal as position feedback, for remote indicator.	1. As the riser MOVs are regulatory control type with position feedback , 1 no. Pressure transmitter for each riser would be required to control the MOV operation. Please review and confirm. 2. In VOLUME – IA Part I & II [TECHNICAL CONDITIONS OF CONTRACT (TCC)] / ITP, there is no technical specification of Pressure transmitters. Hence we request you to provide these specifications as applicable.	Please note that position transmitter to be provided by bidder as per specification. Pressure Transmitter is not applicable.
25	NIT /Cl. No. 2.0	Submission of signed / stamped copy	We request for deleting the tender stipulation of submission of signed / stamped copy of all the tender documents as it's voluminous data to be uploaded in the portal. Kindly confirm.	Digital Signature may be used.
26	GENERAL /	Providing & fixing Thermowells complete with all the necessary fixtures, hardware, etc. required for installation as per specifications, drawings and as directed by engineer	Please provide detailed specification , line size , Pipeline MOC, Nozzle size and end connections to be considered.	The requirement shall be met by bidder as per approved drawings/ GA of respective layout of piping/ equipment to be provided during detail engineering.
27	GENERAL	Tower crane foundation, foundation for passenger hoist etc.	These structures will also become a part of permanent structures. Hence the measurements for these structures and payment to be considered.	Refer item head no. 200 description. These are not a part of NDCT structure but comes under enabling works. No separate payment for these shall be considered.
28	GENERAL /	-	Please clarify and confirm whether BHEL shall close the contract with the existing contractor before the successful bidder for the subject tender signs contracts with BHEL and initiates site mobilization to start the construction activities.	In the event of ordering, BHEL will issue withdrawal notice to existing vendor before finalising the contract with new vendor.

CORRIGENDUM - 4 DATED 07-09-2021 TO TENDER SPECIFICATION - BHEL:PSSR:SCT:1978

Civil (Balance Works), Architectural, Mechanical, Electrical, C&I, works of Natural Draught Cooling Tower NDCT-1 (of Unit 1) of 5X800 MW Yadadri Super Critical Thermal Power Project site including supply of materials for civil (excluding Cement, Structural steel & Reinforcement steel for civil works) Mechanical, Electrical & C&I Works, Labour, Tools & Plants

PRE BID QUERIES / REPLIES (SI.1-29) & REVISIONS (SI.30-34)

SI No	Reference	Description	Queries	BHEL Reply
	Section / Cl.No.			
29	NIT Cl. 1.0. vii /	EMD Amount - Rs. 1,05,00,000/- (Rupees One Crore and Five Lakhs only)	<p>Request1. As per Office Memorandum No. F.9/4/2020-PPD dated 12.11.2020 of Ministry of Finance Department of Expenditure Procurement Policy Division, the EMD/Bid Security is waived off and in place of that a Bid Security Declaration is to be signed by Bidder. The Office Memorandum No. F.9/4/2020-PPD dated 12.11.2020 of Ministry of Finance Department of Expenditure Procurement Policy Division is attached herewith for your ready reference.</p> <p>In view of above, we request you to waive off the EMD for this work.</p> <p>Please consider & confirm.</p> <p>Request2. Contract Specify EMD of Rs. 1,05,00,000/-. Kindly note that as per office memorandum No. F.9/4/2020-PPD, dated 12th November, 2020 Govt of India – Ministry of Finance, Department of Expenditure, Procurement Policy division has waived off provision of Earnest Money deposit. As you are kindly aware due to Covid-19, all contractors are facing acute financial problems. We request you to waive off EMD of Rs. 1,05,00,000/-. (Rupees One Crore Five Lakhs only)</p>	refer Revision

CORRIGENDUM - 4 DATED 07-09-2021 TO TENDER SPECIFICATION - BHEL:PSSR:SCT:1978
REVISIONS

Sl. No.	Section / Clause	Existing Clause Description	Revised Clause Description
30	Volume II Price Bid, Part C, BOQ, s. no. 4	<p>Mandatory spares as per Annexure 5 of Technical Specifications N.B.:</p> <ol style="list-style-type: none"> 2 sets of mandatory spares (as per annexure 5 of TCC) are to be supplied for all 5 nos of cooling towers for the entire YADADRI 5x800MW thermal power project. It is envisaged 1 set of mandatory spares will be supplied by Package1(NDCT- 1,3&5) bidder and another set of mandatory spares will be supplied by Package2(NDCT- 2&4) bidder. Philosophy for working out item rate for the supply of mandatory spares: Cost of 1 set of mandatory spares = A Total cost of mandatory spares for the project = 2A Weightage in the BOQ has been allocated for sub-set (i.e. cost may be considered B) 2A = 5B, hence, A = 2.5B Thus, rate derived for the B shall be multiplied by 2.5 to arrive at rate of A for payment purpose. Payment shall be made as (for each package) : Item rate for the sub-set x 2.5 	<p>Mandatory spares as per Annexure 5 of Technical Specifications:</p> <ol style="list-style-type: none"> Totally 5 cooling towers are to be supplied for 5x800 MW Yadadri TPS for which 2 sets of mandatory spares (as per Annexure 5 of Technical Specifications) are to be supplied to TSGENCO. 1 set of mandatory spares is to be supplied by bidder as per Annexure 5 of Technical Specifications. Philosophy for working out item rate for the supply of mandatory spares: Cost of 1 set of mandatory spares = A Total cost of mandatory spares for the project = 2A Weightage in the BOQ has been allocated for this item (i.e. item rate may be considered as B) 2A = 5B, hence, A = 2.5B Thus, the item rate B shall be multiplied by 2.5 to arrive at rate of A for payment purpose. Payment shall be made as: Item rate x 2.5 <p>Please note that the above item is optional for BHEL to operate at its own discretion. Hence, bidder shall obtain written clearance from BHEL/Site, before initiating any kind of procurement activities for the mandatory spare items during the course of execution.</p>
31	Volume II Price Bid, Part C, BOQ, INSTRUMENTATION, s. no.d	Providing & fixing of 3-hole type Pitot Tube procured from IIT Delhi, complete with all the necessary fixtures, hardware, etc. required for installation as per specifications, drawings and as directed by engineer.	<p>Providing & fixing of 3-hole type Pitot Tube procured from IIT Delhi, complete with all the necessary fixtures, hardware, etc. required for installation as per specifications, drawings and as directed by engineer.</p> <p>Please note that the above item is optional for BHEL to operate at its own discretion. Hence, bidder shall obtain written clearance from BHEL/Site, before initiating any kind of procurement activities for the item during the course of execution.</p>
32	Volume II Price Bid, Part C, BOQ, INSTRUMENTATION, s. no.f	Providing & fixing rotating type Anemometer for wind speed measurement as per specifications, drawings and as directed by engineer.	<p>Providing & fixing rotating type Anemometer for wind speed measurement as per specifications, drawings and as directed by engineer.</p> <p>Please note that the above item is optional for BHEL to operate at its own discretion. Hence, bidder shall obtain written clearance from BHEL/Site, before initiating any kind of procurement activities for the item during the course of execution.</p>

CORRIGENDUM - 4 DATED 07-09-2021 TO TENDER SPECIFICATION - BHEL:PSSR:SCT:1978
REVISIONS

Sl. No.	Section / Clause	Existing Clause Description	Revised Clause Description
33	NIT Annexure 1 A – Notes to PQR	—	<p>NIT Annexure 1 A – Additional Notes to PQR is as follows:</p> <p>“In case, where BHEL has awarded a particular work to Main Vendor and the Main Vendor has in turn has awarded, the work awarded by BHEL in part / full to a sub vendor (known as bidder); and the bidder has now quoted to BHEL for the said tender floated by BHEL citing the above work, as a pre-qualification experience.</p> <p>In such situation as above, the following documents shall be scrutinised by BHEL before qualifying the bidder.</p> <ul style="list-style-type: none"> i. Work Order from BHEL’s main vendor in the name of bidder, indicating scope of work, Order value & Completion period. ii. Completion certificate issued by BHEL’s main vendor, indicating the Scope, Duration of work & Quantum of work completed. iii. Copy of BHEL letter according permission by BHEL to sublet the work from BHEL’s Main vendor to bidder. iv. TDS certificate. v. Any one of the documents in the name of bidder for the plant, like Labour license / BOCW registration / Workmen compensation insurance / Gate Pass for material or for T&P and Gate Pass for labour / any other relevant documentary evidence. <p>The bidder shall be disqualified if any one of the above points (i to v) are not satisfied”.</p>
34	Vol.I Book-I-Notice for Inviting tender (NIT) Clause 1.0 Salient Features of NIT, SI No. vii) EMD Amount	Rs.1,05,00,000/- (Rupees One Crore and Five Lakh only)	Nil (Waived off) against declaration to be submitted by bidder with the offer in the prescribed format (Annexure-A) attached.

Note:-

All other Terms & Conditions remain unchanged. Bidders are requested to consider this Corrigendum as part of the Tender Specification and quote accordingly.

-sd-
 Anil Kumar
 DGM/SCT

Annexure A

BID SECURITY DECLARATION

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : **BID SECURITY DECLARATION**

Ref : 1) NIT/Tender Specification No
2) All other pertinent issues till date

We hereby accept that if we withdraw our offer /modify /change / alter / impair /derogate the offer on our own after Opening of Tender or within the subsistence of the validity period of offer or fail to accept the Letter of Intent/Award issued by BHEL or if we are awarded the contract and we fail to sign the contract, or to submit the Bid bond and/or Security Deposit before the deadline defined in the Tender Document or if we furnish forged/bogus certificates, we will be suspended from being eligible to submit Bids for Contracts with BHEL-PSSR/ BHEL, for a period as per extant BHEL guidelines.

We also agree that unilateral revision or withdrawal of offer by us as mentioned above shall also result in rejection of bid/our offer without Notice.

COMPANY SEAL

SIGNATURE

NAME

DESIGNATION

COMPANY NAME

DATE