



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN - 07

Ref: PSER:SCT: NKP-M1657:TCN-07

Date: 12-05-2015

Sub	Tender Change Notice (TCN) - 07.	
Job	Design, engineering, manufacturing, supply, erection, testing, commissioning, etc including O&M of Air Conditioning System for 3x660 MW North Karanpura Super Thermal Power project, Jharkhand.	
Ref	1.0	Tender No. PSER:SCT:NKP-M1657:15.
	2.0	BHEL's NIT, vide reference no PSER:SCT:NKP-M1657:4365 , Dated 10-03-2015.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT: NKP-M1657:TCN-01, Date: 30-03-2015
	4.0	BHEL's TCN-02, vide reference no PSER:SCT: NKP-M1657:TCN-02, Date: 02-04-2015
	5.0	BHEL's TCN-03, vide reference no PSER:SCT: NKP-M1657:TCN-03, Date: 15-04-2015
	6.0	BHEL's TCN-04, vide reference no PSER:SCT: NKP-M1657:TCN-04, Date: 17-04-2015
	7.0	BHEL's TCN-05, vide reference no PSER:SCT: NKP-M1657:TCN-05, Date: 24-04-2015
	8.0	BHEL's TCN-06, vide reference no PSER:SCT: NKP-M1657:TCN-06, Date: 07-05-2015
	9.0	Other References, if any.

With reference to above, following points, relevant to tender, may please be noted and complied with while submitting the offer.

1. Clarification is attached vide **Annexure-A to TCN-07**.
2. Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached format only.
3. All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

Sr.Engineer (SCT)

Encl: As Above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211798/ 1691

ANNEXURE-A TO TCN-07

TENDER NO : PSER:SCT: NKP-M1657:15.

JOB: DESIGN, ENGINEERING, MANUFACTURING, SUPPLY, ERECTION, TESTING, COMMISSIONING, ETC INCLUDING O&M OF AIR CONDITIONING SYSTEM FOR 3X660 MW NORTH KARANPURA SUPER THERMAL POWER PROJECT, JHARKHAND.

CLARIFICATION OF BIDDERS' QUERY

SL NO	REFERENCE CLAUSE OF TENDER DOCUMENT	EXISTING PROVISION	BIDDER'S QUERY	BHEL'S CLARIFICATION
1.0	VOL. III LIST OF DRAWING ENCLOSED		<p>We would once again request you to kindly provide us the Chilled Water Schematic drawing for calculating the Valves & Instrument required for chilled water system Main CR Areas, Service Building Areas & Administrative Building. From the specification it is not clear that type of valves/instrument and how many numbers are required for the system. We are not able to calculate the valves/instrument without the Chilled Water Schematic drawing.</p> <p>P&ID is required at tendering stage to estimate the qty. & type of valves, pressure & temperature transmitters, and other instruments as required.</p>	<p>PID IS TO BE DEVELOPED BY SUCCESSFUL BIDDER IN LINE WITH SPECIFICATION REQUIREMENT DURING DETAIL ENGINEERING STAGE WHICH SHALL BE SUBJECT TO APPROVAL BY CUSTOMER WITHOUT ANY COMMERCIAL IMPLICATION. SLD DRAWING IS NOT REQUIRED FOR THE SAME. COMPLETE JOB OF DESIGN, ENGINEERING, MANUFACTURING, SUPPLY, ERECTION, TESTING, COMMISSIONING, ETC INCLUDING O&M OF AIR CONDITIONING SYSTEM IS IN BIDDER'S SCOPE. BIDDERS ARE REQUESTED TO QUOTE ACCORDINGLY.</p>

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2.0			<p>We would once again request you to kindly confirm the capacity of the Water Softening Plant required for Main CR Areas, Service Building Areas & Administrative Building Areas. We will design the water softening plant based on the water quality requirement of AC plant.</p> <p>Regarding this, earlier clarification Noted. However, make up water tank capacity indicated 2m³ indicated (Ref. Price Bid- A, item 12) and were as in "SCHEMATIC DIAGRAM FOR HVAC MAKE UP" (Doc. No. PE-DC-404-569-A001) shown as 12 m³. Please clarify.</p>	<p>PLEASE NOTE THAT 12 CMH IS CONTINUOUS CONSUMPTION OF MAKEUP WATER CONSIDERED DUE TO EVAPORATIVE LOSS AND TANK OF 2 M³ IS CONSIDERED FOR BUFFER CAPACITY OF MAKEUP WATER.</p>
3.0			<p>We would once again request you to kindly provide us the control philosophy for the PLC system for calculating the I/O summary for the system.</p> <p>The number of I/Os shall be prepared based on Instruments provided as per P&I Diagram. The number of I/Os shall be provided by BHEL in DCS and hence requested BHEL to provide P & I Diagram of AC Plants.</p>	<p>PREPARATION OF I/O SUMMARY / CONTROL PHILOSOPHY IS IN BIDDER'S SCOPE. COMPLETE JOB OF DESIGN, ENGINEERING, MANUFACTURING, SUPPLY, ERECTION, TESTING, COMMISSIONING, ETC INCLUDING O&M OF AIR CONDITIONING SYSTEM IS IN BIDDER'S SCOPE. BIDDERS ARE REQUESTED TO QUOTE ACCORDINGLY.</p>

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4.0			BHEL to confirm which all buildings shall be designed for LEED ratings (green building). Also the required instrumentation e.g co2 sensor, light sensor etc. to be clearly specified in bid.	CLARIFICATION ALREDY PROVIDED THAT SERVICE BUILDING, ADMIN. BUILDING AND AUDITORIUM SHALL BE DESIGNED AS PER GRIHA RATING. REQUIREMENT OF INSTRUMENT ARE MENTIONED IN TECHNICAL SPECIFICATION.
5.0			Kindly provide us the detail layout drawing along with elevation detail of the following:-	
5.1			a) Service Building- We would once again request you to kindly provide us the layout and elevation drawing for calculating the Chilled Water & condenser water piping required for Service Building Areas. Total floor area clarified as 5500 sq mtr Area specify is inclusive of Corridors, Stairs and Toilets etc. The drawing is required at tender stage to estimate the quantities.	SERVICE BUILDING IS G+4, GRIHA 3 STAR RATED BUILDING WITH TOTAL FLOOR AREA OF 5500 SQM.LAYOUT & ELEVATION SHALL BE FURNISHED TO SUCCESSFUL BIDDER DURING DETAIL ENGINEERING STAGE. COMPLETE JOB OF DESIGN, ENGINEERING, MANUFACTURING, SUPPLY, ERECTION, TESTING, COMMISSIONING, ETC INCLUDING O&M OF AIR CONDITIONING SYSTEM IS IN BIDDER'S SCOPE. BIDDERS ARE REQUESTED TO QUOTE ACCORDINGLY.

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TENDER NO : PSER:SCT: NKP-M1657:15.

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CLARIFICATION OF BIDDERS' QUERY

SL NO	REFERENCE CLAUSE OF TENDER DOCUMENT	EXISTING PROVISION	BIDDER'S QUERY	BHEL'S CLARIFICATION
5.2			<p>b) Administrative Building- We would once again request you to kindly provide us the layout and elevation drawing for calculating the Chilled Water & condenser water piping required for Administrative Building Areas.</p> <p>-- As above --</p> <p>Area to be identified even in the form of a sketch please.</p>	<p>ADMIN BUILDING IS G+6 BUILDING GRIHA 3 STAR RATED, WITH TOTAL FLOOR AREA OF 5500 SQM.LAYOUT & ELEVATION SHALL BE FURNISHED TO SUCCESSFUL BIDDER DURING DETAIL ENGINEERING STAGE. COMPLETE JOB OF DESIGN, ENGINEERING, MANUFACTURING, SUPPLY, ERECTION, TESTING, COMMISSIONING, ETC INCLUDING O&M OF AIR CONDITIONING SYSTEM IS IN BIDDER'S SCOPE. BIDDERS ARE REQUESTED TO QUOTE ACCORDINGLY.</p>
5.3			<p>c) Water System control room building- We would once again request you to kindly provide us the layout and elevation drawing for calculating the condenser water piping required for water cooled packaged unit for Water System control room building.</p> <p>-- As above 5.1 & 5.2 --</p>	<p>LAYOUT & ELEVATION SHALL BE FURNISHED TO SUCCESSFUL BIDDER DURING DETAIL ENGINEERING STAGE. COMPLETE JOB OF DESIGN, ENGINEERING, MANUFACTURING, SUPPLY, ERECTION, TESTING, COMMISSIONING, ETC INCLUDING O&M OF AIR CONDITIONING SYSTEM IS IN BIDDER'S SCOPE. BIDDERS ARE REQUESTED TO QUOTE ACCORDINGLY.</p>

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5.4			<p>d) Auditorium Building- We would once again request you to kindly provide us the layout and elevation drawing for calculating the condenser water piping required for water cooled packaged unit for Auditorium Building.</p> <p>-- As above -- 5.1 and 5.3--</p>	<p>AUDITORIUM IS GRIHA 3 STAR RATED BUILDING, WITH TOTAL FLOOR AREA OF 1000 SQM AND SEATING CAPACITY OF 150 PERSONS.LAYOUT & ELEVATION SHALL BE FURNISHED TO SUCCESSFUL BIDDER DURING DETAIL ENGINEERING STAGE.</p> <p>COMPLETE JOB OF DESIGN, ENGINEERING, MANUFACTURING, SUPPLY, ERECTION, TESTING, COMMISSIONING, ETC INCLUDING O&M OF AIR CONDITIONING SYSTEM IS IN BIDDER'S SCOPE.</p> <p>BIDDERS ARE REQUESTED TO QUOTE ACCORDINGLY.</p>
6.0			<p>Kindly confirm the static pressure of all the AHUs.</p> <p>Nothing is mentioned on the static pressure of the AHU in the BOQ & specification. Kindly confirm the same.</p> <p>'Static pressure' of AHU shall have bearing on selection criteria of Motor rating. In absence of layout drawing of building, it may not be possible to arrive paramters of AHU whereas BHEL to specify Pressure to be considered</p>	<p>PLEASE REFER BOQ/RATE SCHEDULE, BIDDER TO SELECT AS PER SYSTEM REQUIREMENT, WHEREEVER THE SAME IS NOT MENTIONED.</p> <p>COMPLETE JOB OF DESIGN, ENGINEERING, MANUFACTURING, SUPPLY, ERECTION, TESTING, COMMISSIONING, ETC INCLUDING O&M OF AIR CONDITIONING SYSTEM IS IN BIDDER'S SCOPE.</p> <p>BIDDERS ARE REQUESTED TO QUOTE ACCORDINGLY.</p>

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7.0			Make up water required for Pan Humidifiers for following AC area may be specified at AHU Room: (a) ESP Control Rooms for all three (3) units: Plant 2, 3 & 4 (b) Auditorium (c) Aux. Building AC System	PLEASE NOTE THAT WATER REQUIRED FOR PAN HUMIDIFIER IS NOT CONTINUOUS.
8.0	Voll-B Section C Data Sheet & MDL		The instruments like Flow switch, temperature switch, level switch, pressure switch, pressure indicator, gauge etc where as pressure transmitter are specified for signal exchange between instruments DCS / PLC. The system shall be operated for DCS / BHEL's scope. PLC shall be provided by bidder for Service, Admin & Auditorium Building only. Please clarify.	AS PER TECHNICAL SPECIFICATION, PLC IS APPLICABLE FOR ADMIN. BUILDING, SERVICE BUILDING AND AUDITORIUM. PLC IS IN BIDDER'S SCOPE. SAME IS CLEARLY MENTIONED IN TECHNICAL SPECIFICATION AND PRICE SCHEDULE.

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Design, engineering, manufacturing, supply, erection, testing, commissioning, etc including O&M of Air Conditioning System for 3x660 MW North Karanpura Super Thermal Power project, Jharkhand.	
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	08	BHEL's TCN-06, vide reference no PSER:SCT: NKP-M1657:TCN-06, Date: 07-05-2015.
	09	BHEL's TCN-07, vide reference no PSER:SCT: NKP-M1657:TCN-07, Date: 12-05-2015.
	10	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

<p>पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय) POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091 फैक्स/Fax : (033) 23211960 फोन/Phone : बोर्ड/EPABX : 23211798/ 1691</p>
