



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN – 02

Ref: PSER:SCT:SDG-M1295:TCN-02

Date: 27-01-2012

Sub	Tender change notice (TCN) 02.	
Job	Design, engineering, manufacturing, supply of material, fabrication, testing at manufacturer's/ sub-vendor's works, painting, inspection, forwarding, delivery, complete erection and commissioning of Compressed Air System for 2x500 MW Unit-3&4 at Sagardighi STPP, West Bengal.	
Ref	1.0	Tender no PSER:SCT:SDG-M1295:11
	2.0	BHEL's NIT, vide reference no PSER:SCT:SDG-M1295:2650, dated 02-01-2012.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:SDG-M1295:TCN-01, dated 19-01-2012
	4.0	All other pertinent issues till date.

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

- 1.0 Amendment No-02 to the Technical Specification No. PE-TS-373- 555- A001 (Volume-II).
- 2.0 Revised 'No deviation certificate' as per enclosed Annexure-2. Bidder shall submit no deviation certificate as per enclosed format only.
- 3.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

Engineer (SCT)

Encl

- 1.0 As above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

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

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 23211691, 23211798, 23211796

WB POWER DEVELOPMENT CORPORATION LTD.

**SAGARDIGHI THERMAL POWER PLANT
PHASE - II (2X500 MW)**

AMENDMENT NO – 02

COMPRESSED AIR SYSTEM

SPECIFICATION NO.: PE- TS- 373- 555- A001



BHARAT HEAVY ELECTRICALS LTD

POWER SECTOR

PROJECT ENGINEERING MANAGEMENT

NOIDA



**SAGARDIGHI EXTENSION TPP
(2 X 500 MW)**

COMPRESSED AIR SYSTEM

SPEC. No: PE-TS-373-555-A001

AMENDMENT NO. - 2

DATE 27.01.2012

SHEET 1 OF 5

AMENDMENT TO EXISTING CLAUSES OF CAS TECHNICAL SPECIFICATION.

S.NO.	CLAUSE	EXISTING DISCRPTION	AMENDMENT (TO BE READ AS)
1.0	GENERAL		<p>FOR THIS PROJECT, BIDDER TO NOTE THAT BHEL RESERVE THE RIGHT FOR DRG / DOC SUBMISSION THROUGH WEB BASED DOCUMENT MANAGEMENT SYSTEM. BIDDER WOULD BE PROVIDED ACCESS TO THE DMS FOR DRG / DOC APPROVAL AND ADEQUATE TRAINING FOR THE SAME. BIDDER TO ENSURE PROPER NET CONNECTIVITY AT THEIR END.</p> <p>FOLLOWING ARE THE PRE- REQUIREMENT AT VENDOR END FOR ACCESSING PEM'S DMS:</p> <ol style="list-style-type: none">1. INTERNET EXPLORER VERSION – MINIMUM INTERNET EXPLORER 72.3. INTERNET SPEED – 2 MBPS (MINIMUM PREFERRED)4. POP UPS FROM OUR EXTERNAL DMS IP (124.124.36.198) SHOULD NOT BE BLOCKED5. VENDOR'S INTERNAL PROXY SETTING SHOULD NOT BLOCK DMS APPLICATION'S LINK http://124.124.36.198/wrenchwebaccess/login.aspx <p>IN ORDER TO PROVIDE ACCESS TO PEM'S DMS (LOGGING ID AND PASSWORD) TO A BHEL VENDOR, NO ADDITIONAL ACTIVITY IS REQUIRED TO BE DONE AT PEM'S IT ENDS. ON RECEIVING PROJECT SPECIFIC VENDOR DETAILS, IT CAN PROVIDE LOGIN ID AND PASSWORD FOR THE VENDOR.</p>
2.0	1.1.9.1 SECTION C-1, PAGE NO 6.	INDIVIDUAL COMPRESSOR CONTROL SHALL BE THROUGH PLC / MICROPROCESSOR BASED CONTROL SYSTEM AND OVERALL CONTROL OF COMPRESSED AIR SYSTEM SHALL BE THROUGH BOP C&I PART OF DDCMIS.	INDIVIDUAL COMPRESSOR AND ADP CONTROL SHALL BE THROUGH PLC / MICROPROCESSOR BASED CONTROL SYSTEM AS PER MANUFACTURER'S STANDARD.
3.0	7.04.02 SECTION C-2, PAGE NO 26.	TYPE TEST / ROUTINE TESTS FOR ALL THE AIR COMPRESSORS AS PER IS-5456.	TESTING OF COMPRESOR SHALL BE AS PER ISO 1217.
4.0	ANNEXURE I SECTION C-2, PAGE NO 29.	C. MATERIAL OF CONSTRUCTION.	MOC OF COMPONENTS OF SCREW COMPRESSOR SHALL BE AS PER MANUFACTURER STANDARD AND SUBJECTED TO APPROVAL OF COMPRESSOR DATA SHEET DURING DELAILED ENGINEERING.
5.0	GENERAL – SUBVENDOR LIST	NOT ATTACHED.	SUB-VENDOR LIST / LIST OF MAKES IS ATTACHED FOR REFERENCE ONLY, SAME SHALL BE SUBJECTED TO CUSTOMER APPROVAL DURING DETAILED ENGINEERING.

SUB-VENDOR LIST FOR COMPRESSED AIR SYSTEM

S.NO.	DESCRIPTION OF EQUIPMENTS	APPROVED SUB-VENDORS
1.	OIL FREE SCREW COMPRESSOR	ATLAS COPCO - PUNE KOBELCO (KPC) – PUNE ELGI – COIMBTORE Ingersoll Rand - Ahmadabad
	Centrifugal COMPRESSOR	ATLAS COPCO - PUNE KOBELCO (KPC) – PUNE ELGI – COIMBTORE Ingersoll Rand - Ahmadabad
2.	AIR DRYING PLANT (HOC TYPE -ROTARY DRUM)	ATLAS COPCO – PUNE KOBELCO – JAPAN
3.	AIR DRYING PLANT (HOC TYPE – CONVENTIONAL TWIN TOWER)	MELLCON – DELHI DELAIR – GURGAON SUMMITS – COIMBTORE AIROX-NIGEN - AHMEDABAD
4.	AIR DRYING PLANT (REFRIGERANT TYPE)	ATLAS COPCO – PUNE SUMMITS – COIMBTORE DELAIR - GURGAON SAVROE – GERMANY MTA – ITALY DOMNIC HUNTER - UK
5.	AIR RECEIVER	PARKAIRE – DELHI ARC WELD – BARODA HEAT TRANSFER – PUNE UNITED ENGG. WORKS – NASIK AIROX-NIGEN - AHMEDABAD. TEMASME VESSELEX – NOIDA.
6.	AIR FILTERS	IAEC - FINE FILTERS -
7.	INSULATION MATERIAL	FGP - LLOYDS - BASF - METTUR BEARDSHELL - U.P.TWIGA -
8.	PIPES (MS/GI)	TATA TUBE - JAMSHEDPUR JINDAL - GHAZIABAB SAIL - ROURKELA SURYA ROSHNI – BAHADUR GARH
9.	PIPES (STAINLESS STEEL)	REMI - MUMBAI RATNAMANI - AHMEDABAD CHOKSI - AHMEDABAD
10.	PIPE FITTINGS	MS FITTINGS – KOLKATTA METAL LLOYDS – MUMBAI BHARAT FORGE – PUNE TUBE PRODUCTS – BARODA NITIN PROFILE - BARODA
11.	BEARINGS	SKF -

SUB-VENDOR LIST FOR COMPRESSED AIR SYSTEM

		NORMA - FAG - NBC -
12.	AUTO DRAN TRAPS (INVERTED BUCKET/ BALL FLOAT TYPES)	DRAYTON - GREAVES - JN MARSHALL (SPIRAX) - PUNE
13.	ELECTRONIC DEW POINT METER	SHAW - GE SENSING -
14.	CAST STEEL GATE/GLOBE/NON-RETURN VALVES	FLUIDLINE VALVES - MUMBAI CRESCENT – NAVI MUMBAI LEADER – JALANDHAR AV VALVES – AGRA FOURESS VALVES – MUMBAI KBL – PUNE NITON INDUSTRIES – MUMBAI STEEL STRONG – NAVI MUMBAI VENUS – KOLKATTA BDK ENGG. – HUBLI (KARNATAKA)
15.	GUN METAL GATE/GLOBE/NON RETURN VALVES	LEADER – JALANDHAR AV VALVES – AGRA SANT VALVES - JALANDHAR
16.	BALL VALVES	CRESCENT – NAVI MUMBAI BDK – HUBLI (KARNATAKA) MICROFINISH – HUBLI (KARNATAKA) FISHER SANMAR – CHENNAI- CLASS 150/300,SIZE 15-200 NB, CCS,SH A216 Gr.WCB & CSS AV VALVES – AGRAKBL – PUNE FOR CARBON STEEL BALL VALVES ONLY. FLUIDLINE VALVES - MUMBAI FLOW CHEM - AHMEDABAD M/S AKAY INDUSTRIES PVT.LTD M/S BELGAUM AQUA VALVES PVT.LTD. M/S ASIAN INDUSTRIAL VALVES & INSTRUMENTS, CHENNAI M/S CHEMTECH INDUSTRIAL VALVES PVT. LTD. M/S DEMBLA VALVES LTD. M/S LEADER VALVES LTD.
17.	SAFETY RELIEF VALVES	BLISS ANAND – LEADER – JALANDHAR JN Marshall (SPIRAX) – PUNE KEYTONE - BARODA
18	PLC	M/S ABB LIMITED M/S FORBES MARSHALL PVT. LTD. M/S GE Intelligent Platforms Private Limited M/S LARSEN & TOUBRO LTD. M/S ROCKWELL AUTOMATION INDIA LTD. (ALLENBRADLEY) M/S SIEMENS LTD M/S SCHNEIDER ELECTRIC INDIA PVT.LTD.,NEW DELHI
19	Pressure Gauge & DPS	M/S DRESSER INDUSTRIES INC., USA M/S GENERAL INSTRUMENTS CONSORTIUM

SUB-VENDOR LIST FOR COMPRESSED AIR SYSTEM

		M/S INDFOS INDUSTRIES LIMITED,GHAZIABAD M/S SWITZER INSTRUMENT LTD. M/S SOR INC., USA M/S VASU TECH LIMITED
20	Transmitters	M/S BRISTOL BABCOCK LTD.,U.K M/S BIRLA KENT-TAYLOR LTD. M/S BLISS ANAND PVT.LTD. M/S EMERSON PROCESS MANAGEMENT (INDIA) PVT.LTD. M/S SIEMENS LTD M/S SBEM PVT.LTD.,PUNE M/S SMART INSTRUMENTS LTD, BRAZIL M/S TATA HONEYWELL LTD M/S V. AUTOMAT & INSTRUMENTS (P) LTD.
21	Temperature gauge	M/S A.N.INSTRUMENTS PVT.LTD M/S BUDENBERG GAUGE CO.LTD, UK M/S DRESSER INDUSTRIES INC., USA M/S FORBES MARSHALL (HYD) LTD. M/S GOA INSTRUMENTS INDUSTRIES PVT.LTD M/S GOA THERMOSTATIC INSTRUMENTS PVT.LTD.,GOA M/S H. GURU INSTRUMENTS (N. I.) PVT. LTD. M/S WAAREE INSTRUMENTS LIMITED,MUMBAI
22	Temperature Switch	M/S INDFOSS (INDIA) LTD. M/S DRESSER INDUSTRIES INC., USA M/S SWITZER INSTRUMENT LTD. M/S SOR INC., USA M/S TOSHNIWAL BROTHERS (P) LTD. M/S VASU TECH LIMITED
23	Control valve	M/S DeZURIK - COPEL VULCAN LTD., U.K M/S CONTINENTAL VALVES LTD. M/S CONTROL COMPONENT INC., USA M/S DRESSER VALVE INDIA PVT.LTD M/S FOURESS ENGG.INDIA LTD. M/S FISHER SANMAR LIMITED M/S FORBES MARSHALL ARCA PVT.LTD. ,PUNE - ENLISTED FOR CONTROL VLAVES UPTO 12" SIZE AND ANSI RATING UPTO CLASS 1500 ONLY. M/S WEIR VALVES & CONTROLS M.E M/S INSTRUMENTATION LTD M/S KOSO FLUID CONTROLS (PVT.) LTD. M/S LESLIE CONTROLS, INC. M/S MIL CONTROLS LTD. M/S R.K.CONTROL INSTRUMENTS PVT.LTD
24	220V DC Ni-Cd BATTERIES	M/S HOPPECKE BATTERIEN GMBH & CO .KG , GERMANY M/S AMCO SAFT INDIA LTD M/S HBL POWER SYSTEMS LTD
25	220V DC LEAD ACID BATTERIES (TUBULAR AND PLANTE	M/S HOPPECKE BATTERIEN GMBH & CO .KG , GERMANY M/S EXIDE INDUSTRIES LTD M/S HBL POWER SYSTEMS LTD
26	Battery & Battery Charger	M/S AFCO INDUSTRIAL AND CHEMICALS LTD. M/S AMCO SAFT INDIA LTD M/S AMARA RAJA POWER SYSTEMS PVT. LTD- 220V/ 24V & UPTO 1000Amps M/S BCH ELECTRIC LIMITED. UPTO 250A HOUR CAPACITY ONLY M/S EXIDE INDUSTRIES LTD- LEAD ACID BATTERIES ONLY.

SUB-VENDOR LIST FOR COMPRESSED AIR SYSTEM

		M/S HBL POWER SYSTEMS LTD
27	LOCAL CONTROL PANELS	M/S CONTROL & SWITCHGEAR CO. LTD. M/S INDUSTRIAL CONTROLS & APPLIANCES P.LTD M/S PYROTECH ELECTRONICS PVT.LTD M/S PROCON INSTRUMENTATION PVT LTD
28	JUNCTION BOX	M/S AJMERA INDUSTRIAL & ENGINEERING WORKS- APPROVED FOR GALVANIZED AND FRP JUNCTION BOXES M/S BALIGA LIGHTING EQUIPMENTS PRIVATE LIMITED , CHENNAI M/S DEVI POLYMERS,CHENNAI M/S ELECTROMAC INDUSTRIES,MUMBAI M/S K.S.INTRUMENTS PVT.LTD.,BANGALORE M/S MANISHA ENTERPRISE , PUNE M/S SHRENIK & COMPANY M/S SUCHITRA INDUSTRIES , BANGALORE

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 of material, fabrication, testing at manufacturer's/ sub-vendor's works, painting, inspection, forwarding, delivery, complete erection and commissioning of Compressed Air System for 2x500 MW Unit-3&4 at Sagardighi STPP, West Bengal.	
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	3.0	BHEL's TCN-01, vide reference no PSER:SCT:SDG-M1295:TCN-01, dated 19-01-2012
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:SDG-M1295:TCN-02, dated 27-01-2012
	5.0	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)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

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

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