



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TENDER CHANGE NOTE 01 (TCN – 01) DT: 04-10-2010

WITH REFERENCE TO THE NIT, PUBLISHED IN THE WEB SITES FOR RECEIPT OF MATERIALS FROM STORES/YARD, ERECTION, TESTING, COMMISSIONING, HANDING OVER ETC. OF STEAM TURBINE & AUXILIARIES, GENERATOR & AUXILIARIES, PUMPS, PIPING, MISCELLANEOUS EQUIPMENTS, INSULATION, PAINTING ETC FOR 2X270 MW THERMAL POWER STATION (COAL BASED) BEING SET UP BY APNRL, NEAR JAMSHEDPUR, DISTRICT- SAREIKELA - KHARASAWAN, JHARKHAND., FOLLOWING CHANGES MAY PLEASE BE NOTED AND COMPLIED WHILE SUBMITTING THE OFFER FOR THE SUBJECT JOB.

REF: TENDER DOCUMENT NO-PSER:SCT:ADK-T1125:10

1. Due to typographical error, the following in NIT is wrongly entered. The modification shall be as follows:

Sl. No. (i) of NIT- TENDER NUMBER-

PSER:SCT:ADK-B1119:10 shall be read as PSER:SCT:ADK-T1125:10

2. The payment terms as detailed in the GCC for turbo-set & auxiliary portion of work has been revised and enclosed herewith. As such the payment terms detailed in GCC under the Head "RATE SCHEDULES & TERMS OF PAYMENTS against sl. No. 2.3 Steam Turbine Generator with Integral piping and Piping" stands deleted. The revised payment terms enclosed herewith as per Annexure-I need to be considered only for payment terms for TG & Aux..

All the bidders are requested to download the above details and consider the same prior to submission of bid. BIDDERS TO NOTE THAT ALL TCNS WILL FORM PART OF TENDER DOCUMENT. ALL THE BIDDERS ARE REQUESTED TO SUBMIT REVISED NO DEVIATION CERIFICATE AS PER ENCLOSED ANNEXURE-Y.

ALL OTHER TERMS & CONDITIONS OF THE TENDER SHALL REMAIN UNCHANGED.

ENGR (SCT)

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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 : 23211691 / 1684

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	RECEIPT OF MATERIALS FROM STORES/YARD, ERECTION, TESTING, COMMISSIONING, HANDING OVER ETC. OF STEAM TURBINE & AUXILIARIES, GENERATOR & AUXILIARIES, PUMPS, PIPING, MISCELLANEOUS EQUIPMENTS , INSULATION, PAINTING ETC FOR 2X270 MW THERMAL POWER STATION (COAL BASED) BEING SET UP BY APNRL, NEAR JAMSHEDPUR, DISTRICT- SAREIKELA - KHARASAWAN, JHARKHAND.	
Ref	1.0	Tender no PSER:SCT:ADK-T1125:10
	2.0	BHEL's NIT, vide reference no.PSER:SCT:ADK-T1125:10 dated 17/09/2010
	3.0	BHEL's TCN-01 vide ref. no.TENDER CHANGE NOTE 01 (TCN – 01) DATED 04/10/10
	4.0	Other references (if any).

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 along with various TCNs 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 and TCNs. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact 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)

Annexure-I

32.7	Description of activity	Percent allocated
32.7.1	CONDENSER	
32.7.1.1	Foundation preparation	1.00%
32.7.1.2	Assembly of condenser parts.	
32.7.1.2.1	Completion of box assly including welding.	1.00%
32.7.1.2.2	Erection & welding of tube support plates.	1.50%
32.7.1.2.3	Erection & welding of dome walls.	0.50%
32.7.1.2.4	Erection of stiffeners/ bracing pipes of dome walls.	0.75%
32.7.1.2.5	Welding of stiffeners/ bracing pipes.	0.75%
32.7.1.2.6	Erection and welding of stiffeners etc of condenser.	0.50%
32.7.1.3	Insertion of tube & tube expansion.	
32.7.1.3.1	Insertion of tubes.	2.00%
32.7.1.3.2	Trimming, expansion & bell mouthing, cutting of tubes.	0.50%
32.7.1.3.3	Water fill test.	0.50%
32.7.1.3.4	Assembly of water boxes.	1.00%
32.7.1.4	Hyd test of condenser spring adjustment & final setting.	
32.7.1.4.1	Hydraulic test of condenser tubes & water box.	0.50%
32.7.1.4.2	Spring adjustment & final setting and condenser neck erection & welding.	0.50%
32.7.1.4.3	Erection of water box handling arrangement.	0.50%
32.7.1.4.4	Condenser vacuum leak test.	0.50%
32.7.1.5	Inside painting of condenser.	0.50%
32.7.2	TURBINE	
32.7.2.1	Placement, centering, leveling & grouting of brg pedestal & base plates.	1.25%
32.7.2.2	Erection of LP turbine.	
32.7.2.2.1	Installation of LPT outer casing B/H.	0.50%
32.7.2.2.2	Installation of LPT inner outer casing B/H.	0.50%
32.7.2.2.3	Placement of LP rotor, radial & axial clearance setting in LPT top & bottom casing.	0.50%
32.7.2.2.4	Roll check and fitting of final axial & radial keys.	0.50%
32.7.2.2.5	Erection & welding of LP inlet bellows and bracing pipes.	0.50%
32.7.2.2.6	Erection & welding of LP top cover.	0.50%
32.7.2.2.7	Boxing up of turbine & erection of CAP.	1.00%
32.7.2.3	Placement & positioning of HP & IP turbine.	
32.7.2.3.1	Placement, positioning of HPT & IPT.	0.75%
32.7.2.3.2	Taking HP & IP rotor load on bearing and preliminary alignment of HP - IP & IP - LP coupling.	0.50%
32.7.2.3.3	Assly of elbows & breech nut in HPT & in IPT.	0.50%
32.7.2.3.4	Horn drop & roll check of HPT & IPT.	0.50%
32.7.2.3.5	Fitting of axial & radial key in HPT & IPT.	0.50%
32.7.2.4	Alignment.	
32.7.2.4.1	Alignment of HP-IP & IP-LP coupling.	0.75%
32.7.2.4.2	Reaming, honing & coupling bolt fitting.	0.75%
32.7.2.4.3	Coupling bolt stretching & swing check.	0.50%
32.7.2.5	Erection of stop & control valves and governing control system.	
32.7.2.5.1	Erection of MS & RH stop cum control valves.	0.80%
32.7.2.5.2	Erection of Gov Control rack & LPBP rack.	0.40%
32.7.2.5.3	Erection of LP bypass valves.	0.40%
32.7.2.6	Boxing up of bearing pedestal.	1.50%

Annexure-I

32.7.2.7	Erection of turbine integral piping with oil pump etc.	3.50%
32.7.3	GENERATOR.	
32.7.3.1	Preparation of foundation and matching of base plates and percentage should be 2% together.	1.00%
32.7.3.2	Unloading and Placement of Stator on its foundation	3.50%
32.7.3.3	Levelling, positioning and alignment of stator.	2.00%
32.7.3.4	Rotor insertion.	1.00%
32.7.3.5	Alignment of generator rotor with turbine rotor and coupling.	1.00%
32.7.3.6	Generator box up.	1.00%
32.7.3.7	Erection of excitation system.	1.00%
32.7.3.8	Erection of hydrogen filling system.	1.00%
32.7.3.9	Erection of misc integral piping.	1.5.00%
32.7.4	ROTATING AUXILIARIES ALONGWITH INTEGRAL PIPING & ACCESSORIES	
32.7.4.1	Erection of BFP (3 nos).	4.50%
32.7.4.2	Erection of CEP (2 nos).	2.00%
32.7.4.3	Erection of Misc Pump (1 LOT).	2.00%
32.7.4.4	Erection of other rotating aux with associated auxiliaries.	3.00%
32.7.5	STATIC AUXILIARIES	
32.7.5.1	Erection of LP Heaters 1, 2 & 3.	1.00%
32.7.5.2	Erection of HP heaters 1&2.	1.00%
32.7.5.3	Erection of ejectors/ vacuum pumps, drain coolers & gland steam condenser.	0.75%
32.7.5.4	Erection of deaerator and feed storage tanks.	2.50%
32.7.5.5	Erection of flash tanks, flash boxes, other tanks and other static aux.	1.75%
32.7.6	MISC EQUIPMENT	
32.7.6.1	Erection of HP & LP dosing system.	0.25%
32.7.6.2	Erection of self cleaning strainers/ debris filters.	1.00%
32.7.6.3	Erection of plate heat exchanger, BF valves etc.	0.75%
32.7.7	ERECTION, WELDING, TESTING, NDT ETC OF TG PIPINGS WITH H&S, VALVES ETC	12.00%
32.7.8	INSULATION OF PIPE & EQUIPMENT	6.00%
32.7.9	COMMON SYSTEM EQUIPMENT & AUXILIARIES	
32.7.9.1	Erection of Misc. Hoist etc.	1.00%
32.7.10	FINISH PAINTING (TO BE RELEASED ON PRO-RATA BASIS)	2.00%
32.7.11	PRE-COMMISSIONING & COMMISSIONING	
32.7.11.1	Starting of TG oil flushing.	0.80%
32.7.11.2	Completion of TG oil flushing & TG on barring gear.	1.00%
32.7.11.3	Generator air leakage test & dry out.	1.00%
32.7.11.4	Commissioning of 3 nos.BFPs.	1.00%
32.7.11.5	Commissioning of cooling water pumps.	1.50%
32.7.11.6	Commissioning of CEPs.	0.60%
32.7.11.7	Commissioning of misc pumps packages.	1.00%
32.7.11.8	Rolling & synchronisation.	1.00%
32.7.11.9	Full loading.	1.00%
32.7.11.10	Trial run.	1.50%
32.7.11.11	PG test.	0.50%
32.7.11.12	Attending to punch points	5.00%
32.7.12	Handing over of the unit to customer.	0.50%
32.7.13	TOTAL.	100.00%