



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TENDER CHANGE NOTE 03 (TCN – 03) DT:23-06-2008

WITH REFERENCE TO THE NIT, PUBLISHED IN THE WEB SITES FOR ERECTION, TESTING AND COMMISSIONING ETC OF TURBINE, GENERATOR & AUXILIARIES FOR 1X250 MW STG PACKAGE FOLLOWING CHANGES MAY PLEASE BE NOTED AND COMPLIED WHILE SUBMITTING THE OFFER FOR THE SUBJECT JOB.

REF: TENDER DOCUMENT NO-PSER:SCT:SND-T875:08

FOLLOWING MAY PLEASE BE NOTED BY ALL THE BIDDERS:

- a) The revised price Variation clause shall be as per Annexure-AA enclosed. The price variation clause as per clause no 3.14, page 68 of Volume-II of the tender stands deleted.
- b) As per provision of the contract vide clause no. 3.17.0, (Overrun / rate Revision) page 71 of Volume-II of the tender, Overrun is not applicable. The same has now made applicable as per Annexure-BB enclosed.
- c) The Tax clause no. 1.33, page 38 of VOL-II of tender document shall stand replaced by the clauses as per Annexure-CC enclosed.
- d) The revised percentage schedule of payment for work completed is enclosed as Annexure-DD. The payment of work completed detailed under clause no. 18.2 stands deleted.

e) Bidders Query & Clarification

Bidders query: The clause of Provision of supply of Engineers for Erection and commissioning activities at Site may please be modified.

Clarification: The bidders to note that the responsibility of Erection & commissioning activities by providing skilled manpower like Engineers/ Diploma holders etc as per Site requirement lies with them.

Bidders to note that thisTCN-03 will form part of tender document. The due date of submission of the tender is extended by 10 days i.e up to 04/07/2008.

All other terms & conditions of the tender shall remain unchanged. Bidders are requested to submit their quotation by the above revised due date.

DGM (SCT)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

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TENDER NO-PSER:SCT:SND-T875::08 (TCN-03)

The Price Variation clause as elaborated vide clause no.3.14, page no 68 of VOL-II of tender document shall stand replaced by the following Price Variation clause.

14.0	PRICE VARIATION FORMULA : FOR TURBINE GENERATOR PORTION OF WORK :		
14.1	If after the 'Base Date' ie date of LOI by BHEL, and/ or during the progress of work (upto normal completion period), the indices/ prices of following components get increased, then the contractor shall be entitled for such increase (provided delay is not attributable to the contractor). Likewise, if there is any decrease in the indices/ prices of following components, BHEL shall be entitled for refund.		
14.2	The basis for calculation of price variation under each category, their component and base index/ price will be as under:		
	Category	Component	Base index/ price
14.2.1	Labour of all categories	40 %	Minimum wages of unskilled adult male worker as per Minimum Wages Act and notification there under applicable to the project site.
14.2.2	Diesel oil	5 %	Prices of HSD oil at pump of IOC/ BPCL/ HPCL nearest to the project site.
14.2.3	Electrodes	15 %	As per printed price list for 4 mm thick low hydrogen electrode of ADOR Ltd Irrespective of the fact that electrodes used may be of other grades and from other source duly approved by Engineer.
14.2.4	Oxygen gas	3 %	The price of these gases as per Indian Oxygen Ltd/ BOC Ltd, or their authorized agent at their depot, nearest to the project site, irrespective of the fact, that, gas being used is from other source duly approved by the Engineer.
14.2.5	Acetylene gas	5 %	The price of these gases as per Indian Oxygen Ltd/ BOC Ltd, or their authorized agent at their depot, nearest to the project site, irrespective of the fact, that, gas being used is from other source duly approved by the Engineer.
14.2.6	Paints	2 %	The price as per the printed price list for synthetic enamel paint of Berger Paints Ltd at their dealers shop, nearest to the project site, irrespective of the fact that the paint used is from other sources duly approved by the Engineer
14.2.8	Fixed component	30 %	Not Escalable.
14.3	<p>Payment/ refund due to variation in Index/ Prices shall be determined on the basis of the following notional formula in respect of the identified components viz. labour, materials (other than those issued by BHEL), diesel oil, oxygen gas, acetylene gas, paints, electrodes.,</p> $K \times R \times (X_n - X_o)$ <p>A = ----- , Where,</p> X_o <p>A = Amount to be paid/ refunded due to variation in the index for labour, materials (other than those issued by the BHEL), oxygen gas, acetylene gas, paints, electrodes and prices of diesel oil.</p> <p>K= Component of labour, materials (other than those issued by BHEL), diesel oil, oxygen gas, acetylene gas, paints, electrodes, as indicated in above table.</p> <p>R = Gross value of work done for the billing month.</p> <p>X_n = Revised index no/ price for labour, materials (other than those issued by BHEL), dieseloil,oxygen gas, acetylene gas, paints, electrodes, for the month of work done.</p> <p>X_o = Index no/ price for labour, materials (other than those issued by BHEL), diesel oil, oxygen gas, acetylene gas, paints, electrodes as on the 'BASE DATE' indicated, ie date of LOI by BHEL.</p>		
14.4	Total PVC payable against the contract shall have an overall ceiling of 10% of contract value.		
14.5	The quantum of such price variation amount per month shall be restricted to 10 % of each RA bill value (gross) ie 'R'. The difference if any w.r.t overall ceiling of 10% of the executed value will be paid in the final bill only.		
14.6	The contractor shall produce necessary price list for diesel oil, electrodes, oxygen & acetylene gas, paints and notification issued by the Govt. for min wages and RBI Bulletins for receiving payment from BHEL/ refund to be made to BHEL as required in the notional formula mentioned above.		
14.7	The contractor will be required to raise bills for price variation payments on a monthly basis along with the running bills irrespective of the fact whether, any increase/ decrease in price/index has taken place or not.		
58.8	Escalation shall not be admissible for the portion of delay, attributable to the contractor.		
58.9	PVC shall be admissible up to the original completion period of tender.		

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The Over Run clause as elaborated vide clause no.3.17.0, page no.71 of VOL-II of tender document shall stand replaced by the following clauses.

3.17.0 OVER RUN COMPENSATION

3.17.1 In case, due to reasons not attributable to the contractor, the work gets extended beyond the prescribed contractual completion period, the contractor shall be entitled for over run compensation (ORC).

3.17.2 ORC shall be applicable as per following.

3.17.3 The rate/ price of balance part of job beyond contractual completion period shall be revised by 10 %. This revised rate shall remain valid for one year.

3.17.4 The above revised rate shall be further revised by 10 % per year in the subsequent years and this re-revised rate shall remain valid for one year and so on till completion of contract.

3.17.5 During the extended period, contractor shall maintain their resources as per mutually agreed program. However, this will not absolve the contractor to deploy additional resources, if required, to complete the job within the completion period.

3.17.6 Payment of ORC shall be subject to compliance to following condition.

3.17.7 Contractor to maintain minimum resources as per program and certified by BHEL.

3.17.8 Contractor to achieve the target as per program.

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TENDER NO -PSER:SCT:SND-T875:08 (TCN-03)		ANNEXURE-DD
PAYMENT FOR WORK COMPLETED		
BILLING SCHEDULE FOR 1x250 MW UNI-VI STG PACKAGE		AT STPS
SL.NO	ACTIVITY DESCRIPTION	PERCENTAGE OF BILLING
A	CONDENSER	13.00%
1	Foundation preparation	1.00%
2	Assembly of Condenser Parts	
2.1	Completion of box assly incl. Welding	1.00%
2.2	Erection & welding of tube support plates	1.00%
2.3	Erection & welding of dome walls	0.50%
2.4	Erection of stiffeners/bracing pipes of dome walls	0.75%
2.5	Welding of stiffeners/bracing pipes	0.75%
2.6	Erection and welding of stiffeners etc of condenser	0.50%
3	Insertion of Tube & Tube expansion	
3.1	Insertion of Tubes	1.50%
3.2	Trimming, expansion & Bell mouthing, cutting of tubes	1.50%
3.3	Water fill test	0.50%
3.4	Assembly of water boxes	1.00%
4	Hyd. test of condenser spring adjustment & final setting	
4.1	Hydraulic test of condenser tubes & water box	1.00%
4.2	Spring adjustment & final setting and condenser neck erection & welding	0.50%
4.3	Erection of water box handling arrangement	0.50%
4.4	Condenser vacuum leak test	0.50%
5	Inside painting of condenser	0.50%
B	TURBINE	18.10%
1	Placement, Centering, leveling & grouting of brg pedestal & base Plates	1.25%
2	Erection of LP Turbine	
2.1	Installation of LPT outer casing B/H	1.00%
2.2	Installation of LPT inner outer casing B/H	1.00%
2.3	Placement of LP Rotor, Radial & Axial clearance setting in LPT top & bottom casing	1.00%
2.4	Roll check and fitting of final axial & radial keys	0.50%
2.5	Erection & welding of LP inlet bellows and bracing pipes	0.50%
2.6	Erection & welding of LP top cover	0.50%
2.7	Boxing up of Turbine & erection of CAP	1.00%
3	Placement & positioning of HP & IP turbine	
3.1	Placement, positioning of HPT & IPT	0.75%
3.2	Taking HP & IP rotor load on bearing and preliminary alignment of HP - IP & IP - LP coupling	0.50%
3.4	Assly of Elbows & Breech nut in HPT & in IPT	0.50%
3.3	Horn drop & roll check of HPT & IPT	0.50%
3.4	Fitting of Axial & Radial key in HPT & IPT	0.50%

PAYMENT FOR WORK COMPLETED		
BILLING SCHEDULE FOR 1x250 MW UNI-VI STG PACKAGE AT STPS		
SL.NO	ACTIVITY DESCRIPTION	PERCENTAGE OF BILLING
4	Alignment	
4.1	Alignment of HP-IP & IP-LP coupling	0.75%
4.2	Reaming, Honing & coupling bolt fitting	0.75%
4.3	Coupling bolt stretching & swing check	0.50%
5	Erection of Stop & Control valves and governing control system	
5.1	Erection of M.S. & R.H. Stop cum control valves	0.80%
5.2	Erection of Gov. Control rack & LPBP rack	0.40%
5.3	Erection of LP Bypass valves	0.40%
6	Boxing up of Bearing Pedestal	1.50%
7	Erection of Turbine Integral piping with Oil pump etc.	3.50%
C	GENERATOR	10.00%
1	Preparation of foundation and matching of base plates and percentage should be 2% together	2.00%
2	Levelling, Positioning and Alignment of Stator	1.00%
3	Rotor insertion	1.00%
4	Alignment of Generator Rotor with Turbine rotor and coupling	1.00%
5	Generator Box up	1.00%
6	Erection of excitation system	1.00%
7	Erection of Hydrogen filling system	1.00%
8	Erection of misc. integral piping	2.00%
D	AUXILIARIES	
D.1	ROTATING AUXILIARIES ALONGWITH INTEGRAL PIPING & ACCESSORIES	14.50%
1	Erection of BFP (3 nos.)	4.50%
2	Erection of CEP ()	2.00%
3	Erection of CW pump (1 LOT).	5.00%
4	Erection of Miscl. pumps including Raw Water Pumps and other Rotating Aux. with associated auxiliaries.	3.00%
D.2	STATIC AUXILIARIES	7.00%
1	Erection of LP Heaters 1, 2 &3	1.00%
2	Erection of HP Heaters 5&6	1.00%
3	Erection of Ejectors/ <i>Vacuum Pumps</i> , Drain coolers & Gland steam condenser	0.75%
4	Erection of Deaerator and Feed Storage Tanks	2.50%
5	Erection of Flash tanks, Flash Boxes , other tanks and other Static Aux.	1.75%
E	MISC. EQUIPMENT	2.00%
1	Erection of HP& LP dosing system	0.25%
2	Erection of condenser on-line tube cleaning system	0.50%
3	Erection of self cleaning strainers/ <i>Debris Filters</i>	0.50%

PAYMENT FOR WORK COMPLETED		
BILLING SCHEDULE FOR 1x250 MW UNI-VI STG PACKAGE AT STPS		
SL.NO	ACTIVITY DESCRIPTION	PERCENTAGE OF BILLING
4	Erection of Plate heat Exchanger, B. F. Valves and CW Piping with RE Joints etc.	0.75%
F	ERECTION, WELDING, TESTING, NDT etc. OF TG PIPINGS WITH H&S, VALVES ETC.	12.00%
G	INSULATION OF PIPE & EQUIPMENT	6.00%
H	COMMON SYSTEM EQUIPMENT & AUXILIARIES	
1	Erection of Misc. Hoist and Chain pulley block and other misc.packages	1.00%
I	FINISH PAINTING (to be released on pro-rata basis)	2.00%
J	PRE-COMMISSIONING & COMMISSIONING	14.40%
1	Starting of TG Oil flushing	0.80%
2	Completion of TG Oil Flushing & TG on Barring Gear	2.00%
3	Generator Air leakage Test & Dry out	1.00%
4	Commissioning of 3 nos.BFP	1.50%
5	Commissioning of Cooling water Pumps	2.00%
6	Commissioning of CEPs	0.60%
7	Commissioning of Misc.Pumps packages	1.00%
8	Rolling & Synchronisation	1.00%
9	Full loading	1.00%
10	Trial run	1.50%
11	PG test	0.50%
12	Attending to Punch Points	1.00%
13	Handing over of the 250 MW Unit to customer	0.50%

100.00%

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TAXES & DUTIES

- A) TDS under Income Tax, V.A.T etc, if any, shall be deducted at Prevailing rates on Gross Invoice Value from the Running Bills unless Exemption Certificate from the Appropriate Authority/Authorities is furnished.

All taxes (except Service Tax including Educational Cess and other Cess , if any) , charges, royalties, duties, Octroi , any State or Central Levy and other Taxes for materials obtained for the work and for the Execution of the Contract shall be borne by the Contractor and shall not be payable extra during the tenure of the Contract . Contractor may please note that “ Charges towards Labour ,services and other like charges u/s. 18(2)(b)” is exempt under the “ The West Bengal Value Added Tax Rules -2005 “and hence the Taxable Contractual Transfer Price is NIL. However, submission of Tax Invoice is a must along with the RA Bills .

The Contractor has to make his own arrangement at his cost for completing the formalities, if required, with State V.A.T. Act Authorities, for bringing their materials, plants and machinery at Site. Road Permit / Way Bill , if required, shall be arranged by the Contractor and BHEL-P.S.E.R will not supply any Road Permit/Way Bill for this purpose. The Contractor must be a Registered Dealer with the State VAT Act , if not Registered yet and a copy of the said Registration Certificate along with TIN Number must be provided to Site R.A.O.

- B) **Service Tax**

Service Tax as legally leviable & payable by the Contractor under “Erection, Commissioning and Installation Services “of Service Tax law/Act vide Sec 65 (105) (zzd) , shall be paid by BHEL-P.S.E.R on Contractor’s Gross Bill. However, Contractor shall have to submit proof of Service Tax deposited by them immediately after the deposit but not later than the next Bill submitted after the due date of deposit. The Contractor shall furnish proof of Service Tax registration with Central Excise Division covering the Services under this Contract. Registration should also bear endorsement for the premises from where the billing shall be done by the Contractor on B.H.E.L-P.S.E.R for this Project. The Contractor shall obtain prior approval of BHEL-P.S.E.R if there is any change in the above provision. B.H.E.L-P.S.E.R will not be held to be responsible for non-compliance of various Service Tax Rules, being framed from time to time