



Bharat Heavy Electricals Limited
Industry Sector, Transmission Business Group
Integrated Office Complex
Lodhi Road, New Delhi-110 003
Phones: 011-41793381, Fax: 011-24369509

AMENDMENT NO-1 TO NIT

DATE: 31.10.07

SUB : AMENDMENT - 01 To NIT 3391 For ETC Works

REF: TENDER SPECIFICATION. No. – TBSM/MRDNGR- RENG/ETC/TENDER,
DATED: 05.09.07

With reference to above tender for ETC works for substations at Muradnagar and Rengali, following amendments/Clarifications may be noted.

1. Qualifying requirements

Definition of similar work given in qualifying requirements shall be read as under.

Similar job shall mean successfully executed/executing erection, testing and commissioning of at least one bay of 400kV substation OR at least two bays of 220kV substation OR at least one Shunt capacitor/Series capacitor Project at 400kV/220kV/132kV station.

2. BOQ

BOQ provided with the tender specifications has been revised. Bidders are required to quote as per revised BOQ (annexure-l).

- All other terms & conditions of the tender specifications remain unchanged.
- Revised BOQ (Annexure-l) as mentioned above at Sl. No. 2 is enclosed. Bidders are required to quote accordingly in revised BOQ.
- Please enclose with your Technical Bid a copy of this amendment-01 duly signed by your authorized signatory and stamped.
- Vendors, who have already submitted their offer, may submit Revised Price offer in a sealed cover. This duly signed letter is to be submitted in a separate sealed cover. Both these cover shall be kept in a separate envelope superscribing "Revised price offer due to amendment in NIT" and also indicating tender specification No.

(R.Lodwal)
SDGM/TBSM

Project : Restoration of the Muradnagar & Rengali Series Capacitor schemes

Customer : Power Grid Corporation of India Limited

BILL OF QUANTITY FOR ETC WORKS AT RENGALI

S.No.	Description	Unit	Qty.	Rate	Amount
	PLATFORM MOUNTED EQUIPMENT				
1					
1.1	Series capacitor banks (Drawing enclosed), complete in all respect	nos.	1		
1.2	33kV Capacitor unbalance current Transformer	nos.	1		
2	Metal Oxide Varistors (multicolumn) along with support insulators (66kV), support GI plate for the full MOV bank, aluminum flat/pipe for terminal connections, etc. (Drawing enclosed)	Sets	1		
3	66 kV damping resistors along with support insulators, completer with terminal connectors (Drawing enclosed)	nos.	1		
4	66 kV damping reactors along with support insulators. Complete with terminal connectors (Drawing enclosed)	nos.	1		
5	400 kV spark gaps (complete in all respect i.e including forced triggering circuit mounted on 33 kV support insulators) (Drawing enclosed)	Sets	1		
	NOTE: All the above items Sr. No. 1 to 5 shall be dismantelled from MURADNAGAR substation, transported to Rengali site and then shall be re-erected at Rengali (item # 23, 24, 25, 26 & 27given under this BOQ) by the bidder.				
6	Remote data transmission panel (Drawing enclosed)	nos.	1		
7	Platform power supply panel (drawing enclosed)	nos.	1		
8	3.3 kV PItaform power supply current Transformers	nos.	1		
9	400 kV Optical signal column including LIU box (Drawing enclosed)	nos.	1		
10	33kV/66kV current transformers, 1-phase, complete with terminal connectors (Drawing enclosed).	nos.	7		
11	33/66 kV post insulators for Bus support complete with terminal connector and with/without out GS supporting Structure	nos.	3		
12	66 kV post insulators for Bus support complete with terminal connector and GS supporting Structure	nos.	12		
13	73-dia (Typical) Aluminum corona ring on platform (Perimeter 60 m) to be clamped to the GI angle (45X45X6) support on the platform. Aluminum pipe, GI angle, clamps for fixing the ring shall be provided by BHEL	nos.	1		
	BUS BAR MATERIALS				
14	4 " IPS Al tube including cutting , bending , Al welding with sleeves, Radiography testing & D.P.Test of 100%welded joints, fixing Corona end bells etc. to complete.	m	150		
15	400 kV post insulator (without corona ring) for platform support	nos.	15		

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S.No.	Description	Unit	Qty.	Rate	Amount
16	400 kV composite long rod insulators complete in all respect for tying platforms to the ground (Drawing enclosed)	nos.	16		
17	Aluminum flat/tube/ACSR moose conductor/copper conductor etc. for platform mounted equipment connection	m	100		
18	Cabling including laying, dressing and termination of cables. Cable glands will be supplied by BHEL and all other erection materials viz, ferrules, lugs, cable ties / straps, markers etc. is included in the quoted rates.				
18.1	5C, 2.5 sq.mm (Screen cable, through PVC/GI conduit) Supply of PVC/GI pipe is under BHEL scope.	m	200		
18.2	4C, 6 sq.mm (through PVC/GI conduit) Supply of PVC/GI pipe is under BHEL scope.	m	50		
	Cable trench material				
18.3	10C, 2.5 sq.mm (through PVC/GI conduit) Supply of PVC/GI pipe is under BHEL scope.	m	100		
18.4	19C, 2.5 sq.mm (through PVC/GI conduit) Supply of PVC/GI pipe is under BHEL scope.	m	100		
19	75 x 12 mm GS Flat*	m	200		
20	50 x 6 mm GS Flat*	m	200		
21	GI platform structure along with grating (The platform shall be erected on the 400kV post insulators i.e. item # 15 of BOQ and shall be tied with the long rod insulators i.e. item # 16 of BOQ)	MT	20		
22	Dismantling of 400KV post Insulator/400kV Signal column foundations **	Nos.	4		
BILL OF QUANTITY FOR ETC WORKS AT MURADNAGAR					
23	Series Capacitor bank (complete in all respect)	set	1		
24	33kV Capacitor unbalance current Transformer	nos.	1		
25	Metal Oxide Varistors (multicolumn) along with support insulators, support GI plate for the full MOV bank, aluminum flat for terminal connections, etc. (Drawing enclosed)	Set	1		
26	66kV Damping resistor complete in all respect	nos.	1		
27	66kV Damping reactor complete in all respect	nos.	1		
28	400 kV spark gaps (complete in all respect i.e including forced triggering circuit mounted on 33 kV support insulators) (Drawing enclosed)	Set	1		
BUS BAR MATERIALS					
29	4 " IPS Al tube including cutting , bending , Al welding with sleeves, Radiography testing & D.P.Test of 100%welded joints, fixing Corona end bells etc. to complete.	m	150		

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S.No.	Description	Unit	Qty.	Rate	Amount
30	Aluminum flat/tube/ACSR moose conductor/copper conductor etc. for platform mounted equipment connection	m	100		
31	Cabling including laying, dressing and termination of cables. Cable glands will be supplied by BHEL and all other erection materials viz, ferrules, lugs, cable ties / straps, markers etc. is included in the quoted rates.				
31.1	5C, 2.5 sq.mm (Screen cable, through PVC/GI conduit) Supply of PVC/GI pipe is under BHEL scope.	m	200		
31.2	4C, 6 sq.mm (through PVC/GI conduit) Supply of PVC/GI pipe is under BHEL scope.	m	50		
	Cable trench material				
31.3	10C, 2.5 sq.mm (through PVC/GI conduit) Supply of PVC/GI pipe is under BHEL scope.	m	100		
31.4	19C, 2.5 sq.mm (through PVC/GI conduit) Supply of PVC/GI pipe is under BHEL scope.	m	100		
32	75 x 12 mm GS Flat*	m	200		
33	50 x 6 mm GS Flat*	m	200		
34	Dismantling of 400KV post Insulator/400kV Signal column foundations **	Nos.	4		
TOTAL AMOUNT :					
Notes for ETC works					
1	All the equipment at Rengali and Muradnagar shall be erected on the GI platform (at a height of around 4.5 m from ground)				
2	The equipment (Item # 1 to 5 of the BOQ) have to be dismantled at Muradnagar are on the platform (at a height of 4.5 m).				
3	Unloading/loading, packing, transportation etc. of the equipment from Muradnagar to Rengali is included in the scope of the bidder.				
4	Loading / Unloading, handling, shifting to & from stores, proper storage, assembly, installation, pre-commissioning test and commissioning tests at both the sites (Muradnagar and Rengali) are included in the scope of the bidder.				
5	MS welding - apply red lead paint then aluminium paint then bitumen after welding				
6	GS welding - apply 2 coats of cold galvanising anti corrosive paint after welding				
7	10% welding joints in earthing shall be tested for dye penetration test.				
8	Quoted rates are deemed to be inclusive of miscellaneous works, viz.. Erection of clamps and connectors, phase colour discs etc.				
9	The enclosed drawings of the equipment are for the reference purpose. The actual (contract) drawings may vary from the enclosed drawing.				
10	* GI flat shall be used for earthing of 400kV post Insulators/long rod insulators/ platform mounted equipment/platform earthing (Typical drawings enclosed).				
11	** Some touch up work on the existing foundations may be required. That is also included in the scope of work of the bidder.				