

Date: 29-May-2014

**Addendum for open tender RFQ No: NHK 10001**

**“Boundary wall and watch tower for 15MWp Solar PV plant at Singrauli”**

#	Tender clause	Description as in the tender	Revised description as per this addendum
1	Clause A.2 (approximate estimated cost) of Part-I Technical-cum-commercial bid  (Page 2 of 27)	Rs 396 Lakhs (Rupees three hundred and ninety lakhs only) inclusive of all taxes, for the total scope of work.	Rs 396 Lakhs (Rupees three hundred and ninety six lakhs only) inclusive of all taxes, for the total scope of work.
2	Item No 6 (Estimated cost) of Notice Inviting Tender  (Page 4 of 27)	Rs 396 Lakhs (Rupees three hundred and ninety lakhs only) inclusive of all taxes, for the total scope of work.	Rs 396 Lakhs (Rupees three hundred and ninety six lakhs only) inclusive of all taxes, for the total scope of work.
3	Part-II: Bill of Quantities for total scope of work	Part-II was missed out in the original tender document.	Part-II Bill of Quantities table is included in this addendum.

AGM (SC&PV)  
BHEL-EDN, Bangalore

## Part - II

### BILL OF QUANTITIES FOR BOUNDARY WALL AND WATCH TOWER CONSTRUCTION WORKS AT, 15MW SPV POWER PLANT AT NTPC-SINGRAULI,MGR,NEAR JAYANTH COAL MINE,SINGRAULI DIST.(M.P.)

S.NO.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	Earth work in excavation over areas ( Exceeding 30 cm in depth, 1.50 mtrs in width as well as 10 sqm on plan ) including disposal of excavated earth, lead upto 50 mtrs and lift upto 1.5 mtr, disposed earth to be levelled and neatly dressed in all type of soil as per the directions of Engineer In charge.	Cum	6300		
2	Earth work in excavation in ordinary rock over areas ( Exceeding 30 cm in depth, 1.50 mtrs in width as well as 10 sqm on plan ) including disposal of excavated earth, lead upto 50 mtrs and lift upto 1.5 mtr, disposed earth to be levelled and neatly dressed in all type of soil as per the directions of Engineer In charge.	Cum	550		
3	Earth work in excavation in hard rock over areas ( Exceeding 30 cm in depth, 1.50 mtrs in width as well as 10 sqm on plan ) including disposal of excavated earth, lead upto 50 mtrs and lift upto 1.5 mtr, disposed earth to be levelled and neatly dressed in all type of soil as per the directions of Engineer In charge.	Cum	100		
4	Filling available excavated earth ( excluding rock ) in trenches plinth, sides of foundations etc., in layers not exceeding 20 cm in depth consolidating each deposited layer by ramming and watering, lead upto 50 mtrs and lift upto 1.50m as per the directions of Engineer In charge	Cum	4700		
5	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level 1:3:6 with curing complete as per direction of Engineer-in-charge.	Cum	350		
6	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level for foundation 1:1.5:3 (M25 grade as per IS:456) (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size with curing complete as per direction of Engineer-in-charge.	Cum	1290		
7	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts, beams,slabs etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement 1:1.5:3 (M25 grade as per IS:456) (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) as per the directions of Engineer In charge.	Cum	270		
8	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) with curing complete as per direction of Engineer-in-charge.	Sqm	600		
9	Centering and shuttering including strutting, propping etc. and removal of form work for :Foundations, footings, bases for columns as per the directions of Engineer In charge.	Sqm	1550		
10	Centering and shuttering including strutting, propping etc. and removal of form work for :Columns, piers, abutments, pillars, posts and struts as per the directions of Engineer In charge.	Sqm	5850		
11	Centering and shuttering including strutting, propping etc. and removal of form for Lintels, beams, plinth beams, girders, bressumers and cantilever slab, roof slabs as per the directions of Engineer In charge.	Sqm	1550		
12	Reinforcement for RCC work including straightening, cutting,bending,placing in position & binding all complete with TMT bars of various dia (Fe-500 grade) for various works footings,columns,beams,pillasters, watch tower slab etc at all levels complete all as per direction of Engineer-in -charge.	Kg	140000		

13	Brick work with clay flyash F.P.S. (non modular) brick of class designation 7.5 in superstructure above plinth level up to floor five level in :Cement mortar 1:6 (1 cement : 6 coarse sand) with curing complete as per direction of Engineer-in-charge.	Cum	1800		
14	Steel work welded in built up sections/framed / box sections work including cutting,hoisting,fixing in position & applying a priming coat of approved steel primer & colour paint using structural steel etc, as required in gratings,frames,guard bars,railings,brackets,gates, grills, angles in wall and watch tower ladder etc, as per direction of Engineer- in- charge.	Kg	15000		
15	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length ( total length 90 m) having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4 m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal including necessary bolts or G.I. barbed wire tied to angle iron all complete as per direction of Engineer-in-charge with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately) complete all as per the directions of Engineer In charge.	RM	2600		
16	Embedment of fence post Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to all levels 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and for coping etc, complete all as per the directions of Engineer In charge.	Cum	20		
17	6 mm cement plaster of mix for coping in CM (1:3) with curing complete all as per the directions of Engineer In charge.	Sqm	910		
18	12 mm cement plaster finished with a floating coat of neat cement over coping with CM (1:3) with curing complete all as per the directions of Engineer In charge.	Sqm	1300		
19	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6mm thick cement plaster 1:3 (1 cement: 3 coarse sand) finished rough with sponge and curing complete all as per the directions of Engineer In charge.	Sqm	7800		
20	12 mm cement plaster of mix (1:4) brick work inside plastering with curing complete all as per the directions of Engineer In charge.	Sqm	7800		
21	Providing and fixing anodised aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular and other sections of approved made conforming to IS : 733 and IS : 1285 anodised transparent or dyed to required shade according to IS : 1868 ( minimum anodic coating of grade AC 15 ), fixed with rawl plugs and screns or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions at top, bottom and sides with required PVC / neoprime felt etc., Aluminium sections shall be smooth, rust free straight mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing, panelling, CP brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge ( Glazing and panelling to be paid for separately ) for shutters of doors, windows and ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of PVC / Neoprene gasket required complete all as per the directions of Engineer In charge.				
21a	For Fixed portion	Kg	50.00		
21b	Aluminium Doors, windows/ sliding including cost of all accessories	Kg	100.00		

22	( a ) Providing and fixing 12 mm thick prelaminated three layer medium density ( exterior grade ) particle board Grade - I, Type II conforming to IS : 12823 bonded with phenol formal dehyde synthetic resin, of approved brand and manufacture in panelling fixed in aluminium doors, windows shutters and partition frames with CP brass / stainless steel screws etc., complete as per architectural drawings and directions of Engineer-in-charge for prelaminated particle board with decorative lamination on both sides for Door / Windows / Partitions complete all as per the directions of Engineer In charge.	Sqm	10.00		
23	Providing and fixing Tinted glass in aluminium door, window, ventilator shutters and partitions etc., with PVC / neoprene gasket etc., complete as per the architectural drawings and the directions of Engineer-in-charge				
23a	With tinted glass panes of 5.00 mm thickness.	Sqm	10.00		
23b	With tinted glass panes of 6.00 mm thick for partition and Aluminium Doors.	Sqm	10.00		
<b>TOTAL AMOUNT INCLUSIVE OF ALL TAXES (Rs)</b>					
<b>TOTAL AMOUNT OF WORK INCLUDING TAXES (Rs) in figures:</b>					
<b>TOTAL AMOUNT OF WORK INCLUDING TAXES (Rs) in words:</b>					

**NOTE:** Rate quoted is inclusive of testing of all materials as per the NTPC/BHEL approved field quality plan (FQP) and establishing the field laboratory at site.

**CONTRACTOR**  
(With Seal)

  
**EMPLOYER**