

EHT (CONST.) DN 12/10/17
CSPTCL, BILASPUR (CIN):- U40108CT2003SGC015820

R.NO. 1398 DT. CHHATTISGARH STATE POWER TRANSMISSION COMPANY LIMITED

ESTT. CASH (A Government of Chhattisgarh Undertaking)

WORKS OFFICE OF THE EXECUTIVE DIRECTOR (COMMERCIAL & PLANNING)

B & P. Floor, State Load Dispatch Building, Danganiya, Raipur (C.G.) - 492013

TECH. No. 02-12/PL/S/ESTT/1398/16 Website: www.cseeb.co.in, E-mail: cecnp.csptcl@cseeb.co.in Ph. : 2574831 Fax : 2574698

AE (CONST.) BSP./RGH

Raipur, dated 12 OCT 2017

1. The ED (C&LM) CSPTCL, Raipur.
2. The CE (P&P) CSPTCL, Raipur.
3. The SE (C&LM) Cir. CSPTCL, Bilaspur.
4. The SE, O/O the MD. CSPTCL, Raipur.
5. The EE (EHT:C) (Store) Dn. CSPTCL, Bilaspur.
6. The RAO, CSPTCL, Bilaspur.
7. The Drawing Section O/o CE (P&P) CSPTCL, Raipur.
8. Estimate file.

Sub:- Estimate for construction of 132KV DCDS line (3 phase, 6 wire) providing 132KV Supply from 132/33KV S/s Kondatarai to proposed M/s NTPC Ltd, Vill- Jurda, Raigarh under deposit work scheme.

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The Executive Director (C&P) CSPTCL Raipur has accorded sanction to the above estimate vide Estt. No. 44-401-3405-17-0099 dtd. 10.10.2017 (SAP Gr. No. Z054440117.0001, I.O.No. Z05401170002 (EHT:C), amounting to Rs. 28.59 Cr. (Rs. Twenty Eight Core Fifty Nine Lakhs Only) under Deposit work Scheme. A copy of the sanctioned estimate is enclosed herewith.

The work may be taken up after the confirmation of deposit of amount by, M/s NTPC Ltd in CSPTCL's account. Executing division may ensure to take care of all requirements as per guide line of Task Force Report issued by CEA in Aug. 2005 regarding planning criteria, before execution of the work.

The payment shall be made to CSPTCL A/c. The details of account is as under:-

Bank Name:-	State Bank Of India, Bilaspur
Branch Code:-	6276
IFS NO/RTGS Code:-	SBIN0006276
Account No:-	31118564465
Account Name:-	RAO, CSPTCL, Bilaspur (Chhattisgarh)

Please confirm the above payment to this office and ensure that completion report to be furnished within three months after completion of work.

Encl: As above.

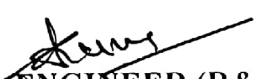
Suptdg. Engineer(R&D)
O/o Executive Director (C&P)
CSPTCL, Raipur

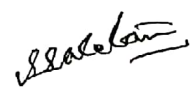
Copy to:- M/s NTPC Ltd. Lara Super Thermal Power Project, Vill-Chhapora, Post-Pussore, Distt.- Raigarh (C.G.). please pay estimated amount in to CSPTCL account within 30 days without deduction of income tax(TDS).

Note:- The SE (EHT:C&M) CSPTCL, Bilaspur please issue the necessary demand note to M/s NTPC Ltd for deposit of the required amount in to CSPTCL's account within 30 days without deduction of T.D.S. and inform the details of deposit to all concern and to this office also.

REPORT

Name of Work	Estimate for Construction of 132KV DCDS line (3 phase, 6 wire) providing 132KV Supply from 132/33KV S/s Kondatarai (Gorra) to proposed NTPC's Ltd. Vill. Jurda Dist. Raigarh
Cost of Work	Rs. 28.59 Cr. (Rs. Twenty Eight Crore, Fifty Nine Lakhs Only)
History & Scope	The competent authority vide U.O. note No. 1437 dtd. 07.10.2017 has accorded approval for sanction of estimate for Construction of 132KV DCDS line (3 phase, 6 wire) providing 132KV Supply from 132/33KV S/s Kondatarai (Gorra) to proposed NTPC's Ltd. Vill. Jurda Dist. Raigarh . Accordingly the estimate has been prepared on the basis of approved SoR 2017-18.
Scheme	Deposit Work Scheme (401)
Operating Divisions	The SE (EHT:C) Dn., CSPTCL, Bilaspur
Allocation	L110702


SUPDT. ENGINEER (R&D)
O/o ED (C&P) CSPTCL Raipur


EXECUTIVE ENGINEER (PL)
O/o ED (C&P) CSPTCL Raipur

ESTIMATE TECHNICALLY SANCTIONED

Estt.No. 44-401-3405-17-0099 dtd 10.10.2017

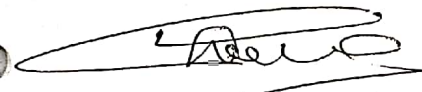
SAP Gr. No. Z054440117.0001

SAP I.O. No. Z05401170002

For Rs. 28.59 Cr. (Rs. Twenty Eight Crore, Fifty Nine Lakhs Only)

Chargable to Deposit Work Scheme (401)

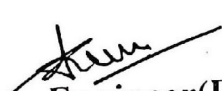
Allocation No. L110702

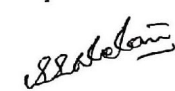

Executive Director [C&P]
C.S.P.T.C.L., RAIPUR

ABSTRACT

Estimate for Construction of 132KV DCDS line (3 phase, 6 wire) providing 132KV Supply from 132/33KV S/s Kondatarai (Gorra) to proposed NTPC's Ltd. Vill, Jurda Dist. Raigarh

Route lenth :26 Km & 102+12G Towers.		
S No.	Particulars	Amount (Rs.)
1	Supply of Towers , Conductor, Ground wire, insulator, accessories and hardwares etc. (Schedule A) After deloading excise duty sale tax etc. on SoR 2017-18	91577094.32
2	Store Incidental Charges @ 10.5% on item No.1	9615594.90
3	Line Erection work as per Schedule-B	42419192.00
4	Contractor's overhead & profit @ 10% on item No. 3	4241919.20
5	Sub Total (1+2+3+4)	147853800.43
6	Forest compensation cost as per schedule C	29428400.00
7	Assesment of land compensation as per Govt. circular/order Schedule-D	21227175.00
8	Way leave clearance on revenue land Schedule-F	573040.00
9	Sub Total (5+6+7+8)	199082415.43
10	Contingencies @3% HQ estt/Engg 3.82 and special T &P / Vehicle @ 1% total 7.82 % on item No.9	15568244.89
11	Sub Total (9+10)	214650660.31
12	Supervision Charges @15% on item No. 11	32197599.05
13	Railway Crossing Charges Schedule-E	2518800.00
14	Sub Total (11+12+13)	249367059.36
15	GST @18% on item No.5 with its centages @7.82% (excluding Land , forest Compensation, way leave clearance & its Centages) and item No.12 & 13	34943826.00
16	Building Construction and other welfare cess @1% on item No.5 with its centages @7.82% (excluding Land , forest Compensation, way leave clearance & its Centages)	1594159.68
17	Total (9+10+11)	285905045.04
		28.59 Crore


Superintending Engineer(R&D)
O/o ED (C&P), CSPTransCL, Raipur


Executive Engineer(PL)
O/o ED(C&P), CSPTransCL, Raipur

SCHEDULE "A"

(MATERIAL ELEMENTS) Estimate for Construction of 132KV DCDS line (3 phase, 6 wire) providing 132KV Supply from 132/33KV S/s Kondatarai (Gorra) to proposed NTPC's TSS at Vill, Jurda Dist. Raigarh for capacity of 2X21.6 MVA

Route lenth :26 Km

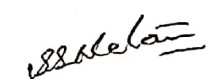
Towers. 102+12G

S.No.	Item	Qty	Unit	Rate	Amount
1	Supply of towers, Superstructure with Stubs & Templates :-				
i	DN-2 type tower & stub	46	Nos		
ii	DN-30 type tower & stub	11	Nos		
iii	DN- 60 type tower & stub	52	Nos		
iv	3 Mtr extension for DN-2	14	Nos		
v	3 Mtr extension for DN-30	5	Nos		
vi	3 Mtr extension for DN-60	8	Nos		
vii	6 Mtr extension for DN-2	14	Nos		
viii	6 Mtr extension for DN-30	3	Nos		
ix	6 Mtr extension for DN-60	7	Nos		
x	9 Mtr extension for DN-2	9	Nos		
xi	9 Mtr extension for DN-30	0	Nos		
xii	9 Mtr extension for DN-60	7	Nos		
xiii	18 Mtr extension for DN-60	4	Nos		
xiv	Stub setting template for DN-2	3	Nos		
xv	Stub setting template for DN-30	2	Nos		
xvi	Stub setting template for DN-60	2	Nos		
xvii	132KV Truncated Gantry column	36	Nos		
xviii	132KV Gantry Beam	24	Nos		
I	Supply of tower				
	a) Cost of raw Steel	670	MT	47024	31506080.00
	b) Cost of Fabrication	670	MT	12594	8437980.00
	c) Cost of galvanization charges	670	MT	25202	16885340.00
2	G.I. Nut & Bolts	28	MT	84207	2357796.00
TOTAL					59187196.00
2	Conductor & Ground Wire				
I	ACSR Panther	159	KM	151359	24066081.00
ii	95 Kg/mm sq. 7/3.66mm groundwire	27	KM	66077	1784079.00
TOTAL					25850160.00

28/10/2018

S.No.	Item	Qty	Unit	Rate	Amount
3	Conductors Accessories.				
I	Midspan joints	110	Nos	420	46200.00
ii	Vibration dampers	1452	Nos	388	563376.00
iii	Repair sleeves	60	Nos	178	10680.00
TOTAL					620256.00
4	Groundwire Accessories				
I	Suspension assembly	50	Nos	357	17850.00
ii	Tension assembly	156	Nos	388	60528.00
iii	Midspan joints	20	Nos	73	1460.00
iv	Repair sleeves	15	Nos	94	1410.00
v	Copper earth bond	200	Nos	409	81800.00
vi	Vibration dampers	225	Nos	357	80325.00
					243373.00
6	Conductor hardware				
I	Single tension	960	Nos	1154	1107840.00
ii	Double tension	120	Nos	2204	264480.00
iii	Single Suspension	180	Nos	1469	264420.00
iv	Double Suspension	144	Nos	2729	392976.00
TOTAL					2029716.00
7	Dics Insulator				
I	70 KN	3240	Nos	472	1529280.00
II	90 KN	7320	Nos	504	3689280.00
TOTAL					5218560.00
9	Miscellaneous.				
I	Enamelled danger board	121	Nos	294	35574.00
ii	Enamelled number plate/Phase / Circuit Plate	121	Nos	294	35574.00
iii	Phase plate (Set of 3)	242	Nos.	294	71148.00
iv	Earthing set	121	Nos	2939	355619.00
v	7/8WG galvanised G. Wire	2	MT	64439	128878.00
vi	Anticlimbing devices	109	Sets	8291	903719.00
TOTAL					1530512.00
10	Reinforcement Steel	160	MT	63600	10176000.00
TOTAL					10176000.00
TOTAL 'A'					104855773.00

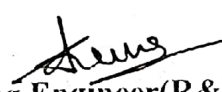

Suprentending Engineer(R&D)
O/o ED (C&P), CSPTransCL, Raipur

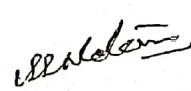

Executive Engineer(I
O/o ED(C&P), CSPTransCL, R

SCHEDULE "B"

(LABOUR ELEMENT) Estimate for Construction of 132KV DCDS line (3 phase, 6 wire) providing 132KV Supply from 132/33KV S/s Kondatarai (Gorra) to proposed NTPC's TSS at Vill, Jurda Dist. Raigarh for capacity of 2X21.6 MVA

S.No.	Item	UNIT	Unit	Rate	Amount
1	Preliminary survey & measurement of SR etc.	KM	26	8396	218296.00
2	Detailed survey including site clearance and tree cutting etc.	KM	26	12594	327444.00
3	Check survey	KM	26	8396	218296.00
4	Soil classification Bore log data at each loc.	No.	40	5772	230880.00
5	Excavation in different soil				
i)	Normal soil (Intermediate)	CUM	7850	315	2472750.00
iii)	Wet Soil	CUM	1350	357	481950.00
iv	Sandy Soil	CUM	0	378	0.00
v	Partially submerged Soil	CUM	900	357	321300.00
vi	Fully submerged Soil	CUM	1000	357	357000.00
vii	Soft rock	CUM	0	840	0.00
viii	Submerged Fissured Rock	CUM	5100	840	4284000.00
ix	Hard rock	CUM	10	1616	16160.00
6	Setting of template & stub setting 132 KV DN series	LOC	121	6297	761937.00
7	Tower Erection	MT	670	8396	5625320.00
8	Stringing of conductor & groundwire for 132 KV line DCDS with 6 No ACSR Panther Conductor and 01 No groundwire.	KM	26.000	83960	2182960.00
9	Labour charges for Reinforcement including Tor Steel and cost of Binding wire	MT	160	6297	1007520.00
10 (a)	Concreting ratio 1:3:6 M 10(Lean Concreting) including back filling muffing, coupling & curing (including cost of cement,sand,metal&water etc.)	CUM	255	7871	2007105.00
10(b)	Concreting ratio 1:1.5:3 M 20 including back filling muffing, coupling & curing (including cost of cement, sand, metal & water etc.)	CUM	1930	10495	20255350.00
11	Welding of Nuts & Bolts	Tower	121	10495	1269895.00
12	Revetment including base padding stone masonry wall to cover painting including cost of stone sand water etc.	CUM	0	12593	0.00
13	Back filling for revetment	CUM	0	136	0.00
14	Counter poise earthing	Mtr.	0	840	0.00
15	Final checking and rectification fixing of ACD Fixing of Danger Board & Number Plate	Loc	121	3149	381029.00
Total:-					42419192.00


Suprentending Engineer(R&D)
O/o ED (C&P), CSPTransCL, Raipur


Executive Engineer(PL)
O/o ED(C&P), CSPTransCL, Raipur

SCHEDULE "C"

Draft Estimate for construction of const. of providing 2 Phase , 2 feeder 132 KV supply from 132/33 KV S/S Kodatarai (Gorra) to proposed NTPC's TSS at vill. Jurda Dist. Raigarh for capacity of 2x21.6 MVA .

(WAY LEAVE CLEARANCE AND FOREST COMPENSATION)

S.No.	Item	Unit	Qty	Rate	Amount
1	Registration fee for demand of forest land for its use other than forestry work,	Hectare	6	7500.00	45000.00
2	Processing fee applicable for diversion of forest land	Hectare	6	30000.00	180000.00
3	Net Present Value	Hectare	6	1043000.00	6258000.00
4	Compensatory afforestation	Hectare	12	660300.00	7923600.00
5	Medicinal Plantation	Hectare	6	660300.00	3961800.00
6	Van Vidohan Charges including stacking, transportation charges etc.	Hectare	6	100000.00	600000.00
7	Compensation of trees, Way leave clearance	KM	26	400000.00	10400000.00
8	local expenses like demarkation and construction of Munara etc. as per demand of local forest officer etc.	per Hect.	6	10000.00	60000.00
TOTAL					29428400.00

SUPERINTENDING ENGINEER

EHT:CONST..DN., CSPTCL BILASPUR

ASSISTANT ENGINEER

EHT:CONST..S/DN., CSPTCL Raigarh

SCHEDULE-D

ESTIMATED LAND COMPENSATION FOR PROPOSED TRANSMISSION LINE

ABSTRACT

Name of the Line:- PROPOSED 132 KV RAILWAY TRACTION LINE FROM 132 KV S/S KODATARAI (GORRA) TO PROPOSED 132 KV TSS. (NTPC) JURDA.

Total line length:- 26.00 Km.

Total Towers:-109 +12Nos. Gantry

Towers on Govt Land:- 00 Nos.

Towers on Private Land:- 109 +12 Nos Gantry Nos.

S.NO.	Item	No. of Villeges	Area of land (Hectare)	Compensation Amount (In Rs)
1	Land covered by tower foundations (a+b)	13	1.1281	1734061.00
	(a) Government land covered by tower foundations. (From Annex-1)	0	0	0.0
	(b) Private land covered by tower foundations. (From Annex-1)	13	1.1281	1734061.00
2	Total Land covered by Conductors. (a+b)	13	70.2	19493114
	(a) Government land covered by Conductors. (From Annex-2)	0	0	0.000
	(b) Private land covered by Conductors. (From Annex-2)	13	70.2	19493114.00
	TOTAL (1+2)		71.328	21227175.00


SUPERINTENDING ENGINEER
EHT:CONST. DN., CSPTCL BILASPUR


ASSISTANT ENGINEER
EHT:CONST. S/DN., CSPTCL Raigarh

SCHEDULE "E"

Draft Estimate for construction of const. of providing 2 Phase , 2 feeder 132 KV supply from 132/33 KV S/S Kodatarai (Gorra) to proposed NTPC's TSS at vill.

Jurda Dist. Raigarh for capacity of 2x21.6 MVA .

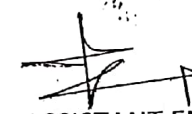
Tentative Route Length 26(approx.)
No. of Tower Locs.-109+12 G

(RAILAY CROSSING ,POWER/TRAFFIC)

S.No.	Item	Unit	Qty	Rate	Amount
2	Railway crossing -Power/Traffic block charges etc.	per hour	2	1259400.00	2518800.00
	TOTAL				2518800.00

T.S


SUPERINTENDING ENGINEER
EHT:CONST. DN., CSPTCL BILASPUR


ASSISTANT ENGINEER
EHT:CONST. S/DN., CSPTCL Raigarh

SCHEDULE "F"

Draft Estimate for construction of const. of providing 2 Phase , 2 feeder 132 KV supply from 132/33 KV S/S Kodatarai (Gorra) to proposed NTPC's TSS at vill. Jurda Dist. Raigarh for capacity of 2x21.6 MVA .

Tentative Route Length 26(approx.)

No. of Tower Locs.-109+12 G

(WAY LEAVE CLEARANCE ON REVENUE LAND)

S.No.	Item	Unit	Qty	Rate	Amount
1	Compensation for trees ,way leave clearance etc on revenue land	km	26	22040.00	573040.00
	TOTAL				573040.00



SUPERINTENDING ENGINEER
EHT:CONST. DN., CSPTCL BILASPUR



ASSISTANT ENGINEER
EHT:CONST. S/DN., CSPTCL Raigarh