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|| REPORT ||

1	NAME OF WORK	Estimate for constr. of approx. 105 Km 132KV DCSS line from 220/132 KV S/s Barsoor to proposed 132/33 KV S/S Bijapur.
2	COST OF WORK	Rs.78.75 Cr. (Rs. Seventy Eight Crore, Seventy Five Lakhs Only)
3	History & Scope	BoD of CSPTCL in it's meeting held on dtd. 28.03.2014 has accorded approval for construction of approx. 105 Km 132KV DCSS line from 220/132 KV S/s Barsoor to proposed 132/33 KV S/S Bijapur. Accordingly, the estimate has been prepared.
4	RATES	The rates has been taken as per the approved schedule of rates for the year 2013-14.
5	SCHEME	Transmission Scheme 132KV Line(415 code)
6	OPERATING DIVISION	E.E.[EHT:Const.] Dn. Bhilai.
7	Allocation No.	A076610

HE 27.3.2014

SUPDT. ENGINEER [PL]
O/o E.D[C&P]
CSPTCL,RAIPUR.

31.03.14

EXECUTIVE ENGINEER [PL]
O/o E.D[C&P]
CSPTCL, RAIPUR.

ESTIMATE TECHNICALLY SANCTIONED

Sap Gr. No. - Y344441513.0004

Internal Order No. - Y34415130022

Estt.No. 44-415-5234-13-0143 Dtd. 31.03.2014

For Rs.78.75Cr.(Rs. Seventy Eight Crore, Seventy Five Lakhs Only)

Chargable to Transmission Scheme 132KV Line(Scheme code 415)

Allocation No. A076610

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EXECUTIVE DIRECTOR [C&P]
CSPTCL, RAIPUR
O/c *Atkar*

A B S T R A C T		
Estimate for constn. of approx. 105 Km 132KV DCSS line from 220/132 KV S/s Barsoor to proposed 132/33 KV S/S Bijapur.		
		Route length:105Km
		No.of Locs. - 350 Nos.
S.No.	Particulars	Amount (Rs.)
1	Supply of towers, conductor, ground wire, insulators, accessories and hardware etc. (Schedule-A)	220442875
2	Store incidental charges @ 2.5% on item No.1	5511072
3	Sub- Total (1+2)	225953947
4	Line erection work as per schedule-B	64237490
5	Way leave-clearance & Forest compensation Charges as per Schedule -C	411440953
6	Sub- Total (3+4+5)	701632390
7	Contingencies @ 3% HQ Estt/Engg 6% and special T&P/Vehicle @ 1% total 10% on item no.6	70163239
8	Sub- Total (6+7)	771795629
9	Building & other construction workers welfare cess @ 1% on item No.8	7717956
10	Service tax @ 12.36% on item No 4	7939754
11	Grand Total (8+9+10)	787,453,338.92
12	Say Rs.	78.75 Cr.
(Rs. Seventy Eight Crore, Seventy Five Lakhs Only)		

HE 31.3.2014

SUPDT. ENGINEER (PL)
O/O E.D.(C&P)CSPTCL RAIPUR

21.03.14
EXECUTIVE ENGINEER (PL)
O/O E.D.(C&P)CSPTCL RAIPUR

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SCHEDULE "A"

(Material Element) Estimate for constn. of approx. 105 Km 132KV DCSS line from 220/132 KV S/s Barsoor to proposed 132/33 KV S/S Bijapur.

Route length:105Km

No.of Locs. - 350 Nos.

Sl. No.	Item	Qty	Unit	Rate	Amount
1	Supply of towers, Superstructure with Stubs & Templates :-				
i	DN 2 type tower & stub	293	Nos		
ii	DN 30 type tower & stub	32	Nos		
iii	DN 60 type tower & stub	25	Nos		
iv	3 Mtr extension for DN 2	25	Nos		
v	3 Mtr extension for DN 30	16	Nos		
vi	3 Mtr extension for DN 60	2	Nos		
vii	6 Mtr extension for DN 2	15	Nos		
viii	6 Mtr extension for DN 30	14	Nos		
ix	6 Mtr extension for DN 60	22	Nos		
x	9 Mtr extension for DN 2	10	Nos		
xi	9 Mtr extension for DN 30	2	Nos		
xii	9 Mtr extension for DN 60	1	Nos		
xiii	Stub setting template for DN2	30	Nos		
xiv	Stub setting template for DN30	7	Nos		
xv	Stub setting template for DN60	6	Nos		
xvi	132KV Truncated Gantry column	0	Nos		
xvii	132KV Gantry Beam	0	Nos		
xviii	Supply of tower				
	a) Cost of raw Steel	1295.00	MT	54574	70,673,330.00
	b) Cost of Fabrication	1295.00	MT	19173	24,829,035.00
	c) Cost of Galvanization	1190.00	MT	24586	29,257,340.00
II	G.I. Nut & Bolts & Washers	65.00	MT	80321	5,220,865.00
TOTAL					129,980,570.00
2	Conductor & Ground Wire				
I	ACSR Panther	317	KM	144224	45,719,008.00
ii	95 Kg/mm sq. 7/3.66mm groundwire	107	KM	62960	6,736,720.00
TOTAL					52,455,728.00

HE 31.3.2014

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3	Conductors Accessories.				
I	Midspan joints	216	Nos	347	74,799.32
ii	Vibration dampers	4200	Nos	368	1,545,600.00
iii	Repair sleeves	35	Nos	164	5,718.68
TOTAL					1,626,118.00
4	Groundwire Accessories				
I	Suspension assembly	293	Nos	341	99,913.00
ii	Tension assembly	114	Nos	366	41,724.00
iii	Midspan joints	37	Nos	65	2,434.25
iv	Repair sleeves	27	Nos	89	2,380.75
v	Copper earth bond	700	Nos	389	272,300.00
vi	Vibration dampers	700	Nos	336	235,200.00
TOTAL					653,952.00
5	Conductor hardwares				
I	Single tension	384	Nos	920	353,280.00
ii	Double tension	600	Nos	1818	1,090,800.00
iii	Single Suspension	1056	Nos	1360	1,436,160.00
iv	Double Suspension	1404	Nos	2445	3,432,780.00
TOTAL					6,313,020.00
6	Dics Insulator				
I	70 KN	15822	Nos	441	6,977,502.00
2	90 KN	6840	Nos	474	3,242,160.00
TOTAL					10,219,662.00
7	Miscellaneous.				
I	Enamelled danger board	350	Nos	279	97,650.00
ii	Enamelled number plate	350	Nos	279	97,650.00
iii	Phase / Circuit Plate	700	Nos	279	195,300.00
iv	Earthing set	700	Nos	2778	1,944,600.00
v	7/8WG galvanised G. Wire	35	MT	60775	2,127,125.00
vi	Anticlimbing devices	350	Sets	7786	2,725,100.00
TOTAL					7,187,425.00
8	Reinforcement steel	200	MT	60032	12,006,400.00
TOTAL					12,006,400.00
					220,442,875.00

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-A-11/14

SCHEDULE "B"

(Labour Element) Estimate for constn. of approx. 105 Km 132KV DCSS line from 220/132 KV S/s Barsoor to proposed 132/33 KV S/S Bijapur.

Route length:105Km

No.of Locs. - 350 Nos.

S. No.	Item	Unit	Qty	Rate	Amount
1	Survey :-				
(a)	Preliminary survey & measurement of S.R. etc.	KM	105	25000	2625000
(b)	Detailed survey	KM	105	50000	5250000
(c)	Check survey including site clearance	KM	105	25000	2625000
2	Soil classification (Bore log data)	No.	350	5500	1925000
3	Excavation in different soil				
i)	Normal/ Intermediate soil	CUM	1475	232	342200
ii)	Wet Soil	CUM	7555	232	1752760
iii)	Black Cotton Soil	CUM	8480	232	1967360
iv)	Partially Submerged Soil	CUM	1250	332	415000
v)	Fully Submerged Soil	CUM	40	332	13280
vi)	Dry Fissured Rock (Soft Rock)	CUM	1900	772	1466800
vii)	Submerged Fissured Rock	CUM	640	772	494080
viii)	Hard Rock	CUM	90	1512	136080
ix)	Sandy Soil	CUM	720	354	254880
4	Setting of template & stub setting	LOC	69	4550	313950
5	Tower Erection	MT	1295	6000	7770000
6	Stringing of conductor & groundwire for 132KV line DCSS with 3 Nos. Panther Conductor and DT groundwire.	KM	105	46000	4830000
7	Reinforcement incl. Cost of binding wire	MT	200	10000	2000000
8	Concreting including back filling muffing, coupling & curing (including cost of cement, sand, metal & water etc.)	CUM	2600	10000	26000000
9	Peripheral Welding of Nuts & Bolts	loc.	350	4228	1479800
10	Revetment including base padding stone masonry wall to cover painting including cost of stone sand water etc.	CUM	300	5425	1627500
11	Back filling for revetment	CUM	200	100	20000
12	Counter poise earthing	Mtr.	100	279	27900
13	Final checking and rectification fixing of ACD Fixing of Danger Board & Number Plate	LOC.	350	2574	900900
Total:-					64,237,490.00

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**SUPDT. ENGINEER (PL)
O/O E.D.(C&P)CSPTCL RAIPUR**

31.03.14
**EXECUTIVE ENGINEER (PL)
O/O E.D.(C&P)CSPTCL RAIPUR**

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SCHEDULE "C"

Estimate for constn. of approx. 105 Km 132KV DCSS line from 220/132 KV S/s Barsoor to proposed 132/33 KV S/S Bijapur.

forest involved:45 Km

(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 (Non refundable)	Each	1	5000	5000
2	Processing fee applicable for diversion of forest land (non refundable)				
(I)	Up to 50 Hectare	Each	0	25000	0
(II)	From 51 Hectares to 100 Hectares	Each	0	25000	0
(III)	More than 101 Hectares	Each	1	25000	25000
3	Compensation for Trees, Way leave clearance etc	KM	45	20963	943335
4	Forest compensation (Compensatory afforestation, Tree cutting Transportation, Stacking charges, Fire Protection charges etc)	Hectare	122	461192	56034828
5	Net present value for quality II/III type D forest	Hectare	122	1677060	203762790
6	Cost of Land to be acquired by CSPTCL	Acre	301	500000	150670000
	Total				41144095

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