

ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAVAN
UNIT-VIII, BHUBANESWAR – 751 012
e-mail : orierc@rediffmail.com website : www.orierc.org

No.OERC/Engg./7/2013/Cost data(OPTCL)/336
Dt. 21.02.2014

To

The Chairman-cum-Managing Director,
OPTCL,
Janpath, Bhubaneswar.

Sub : Approval of Cost data for FY 2013-14.

Sir,

With reference to the subject mentioned above, I am directed to say that the Commission is pleased to approve the Cost-data of line, sub-station and power line carrier communication materials along with associated accessories etc. of state transmission system based on the proposal submitted by OPTCL for the FY 2013-14. It may be noted that the approved cost data are indicative only. This is only for the purpose of preparation of estimate and budgetary purpose. Actual expenditure and procurement of material should be done through transparent competitive bidding process. The supervision charges shall be levied as per the existing norms and in case of cost data for the subsequent years are not approved by the commission due to any reason, the cost may be escalated by 5% every year. Further, OPTCL is directed to submit the cost data for the FY 2014-15 on or before 30.04.2014 for approval of the Commission.

Yours faithfully

Encl : As above

Sd/-

SECRETARY

Copy alongwith the enclosure forwarded to:

The Principal Secretary, Department of Energy, Govt. of Odisha, Bhubaneswar –
for information.

Encl : As above

Sd/-

SECRETARY

COST DATA FOR THE LINES & SUB STATION MATERIALS FOR THE YEAR 2013-14**LINE MATERIALS**

Sl. NO.	Name of the Materials	Unit	Unit ex-works price (in Rs.)
1	2	3	4
1	TOWER STRUCTURE	MT	54,682.00
2	SUBSTATION STRUCTURE	MT	54,682.00
3	NUTS AND BOLTS	MT	87,163.00
4	EARTHING DEVICE	SET	1,763.00
5	DANGER BOARD	Nos.	183.00
6	NUMBER PLATE	Nos.	100.00
7	PHASE PLATE	Nos.	78.00
8	CIRCUIT PLATE	Nos.	78.00
9	ANTICLIMBING DEVICE	SET	3,401.00
10	ACSR PANTHER CONDUCTOR (WITHOUT PV)	KM	132,946.00
11	ACSR ZEBRA CONDUCTOR (WITHOUT PV)	KM	237,852.00
12	AAAC ZEBRA CONDUCTOR (WITHOUT PV)	KM	238,894.00
13	AAAC MOOSE CONDUCTOR (WITHOUT PV)	KM	264,695.00
14	7/3.15 G.I.EARTH WIRE	KM	21,395.00

ACCESSORIES FOR DIFFERENT CONDUCTOR SIZE

1	SINGLE SUSPENSION HARD WARE FITTING SUITABLE FOR AAAC MOOSE	NOS	2,975.00
2	DOUBEL SUSPENSION HARDWARE FITTING FOR AAAC MOOSE	NOS	3,800.00
3	SINGLE TENSION HARDWARE FITTING FOR AAAC MOOSE	Nos.	2,291.00
4	DOUBEL TENSION HARDWARE FITTING FOR AAAC MOOSE	Nos.	4,204.00
5	SINGLE SUSPENSION HARD WARE FITTING FOR AAAC MOOSE	Nos.	2,546.00
6	DOUBEL SUSPENSION HARDWARE FITTING FOR AAAC MOOSE	Nos.	3,485.00
7	SINGLE SUSPENSION HARD WARE FITTING SUITABLE FOR ACSR MOOSE	Nos.	3,333.00

8	DOUBEL SUSPENSION HARDWARE FITTING FOR ACSR MOOSE	Nos.	4,256.00
9	SINGLE TENSION HARDWARE FITTING FOR ACSR MOOSE	Nos.	2,499.00
10	DOUBEL TENSION HARDWARE FITTING FOR ACSR MOOSE	Nos.	3,876.00
11	SINGLE SUSPENSION HARD WARE FITTING SUITABLE FOR AAAC ZEBRA	Nos.	2,747.00
12	DOUBEL SUSPENSION HARDWARE FITTING FOR AAAC ZEBRA	Nos.	3,603.00
13	SINGLE TENSION HARDWARE FITTING FOR AAAC ZEBRA	Nos.	1,740.00
14	DOUBEL TENSION HARDWARE FITTING FOR AAAC ZEBRA	Nos.	2,846.00
15	SINGLE SUSPENSION HARD WARE FITTING FOR ACSR ZEBRA	Nos.	2,502.00
16	DOUBEL SUSPENSION HARDWARE FITTING FOR ACSR ZEBRA	Nos.	3,603.00
17	SINGLE TENSION HARDWARE FITTING FOR ACSR ZEBRA	Nos.	1,985.00
18	DOUBLE TENSION HARDWARE FITTING FOR ACSR ZEBRA	Nos.	3,502.00
19	SINGLE SUSPENSION HARD WARE FITTING FOR AAAC PANTHER	Nos.	1,553.00
20	DOUBLE SUSPENSION HARDWARE FITTING FOR AAAC PANTHER	Nos.	3,015.00
21	DOUBLE SUSPENSION HARDWARE FITTING FOR ACSR PANTHER	Nos.	3,015.00
22	SINGLE TENSION HARDWARE FITTING FOR ACSR PANTHER	Nos.	1,359.00
23	DOUBLE TENSION HARDWARE FITTING FOR ACSR PANTHER	Nos.	2,797.00
24	SINGLE TENSION HARDWARE FITTING FOR AAAC PANTHER	Nos.	1,439.00
25	SINGLE SUSPENSION HARD WARE FITTING FOR ACSR PANTHER	Nos.	1,553.00
26	PA ROD FOR AAAC ZEBRA	Nos.	1,383.00
27	PA ROD FOR ACSR ZEBRA	Nos.	1,115.00
28	PA ROD FOR AAAC PANTHER	Nos.	659.00
29	PA ROD FOR ACSR PANTHER	Nos.	618.00
30	VIBRATION DAMPER FOR AAAC ZEBRA	Nos.	486.00
31	VIBRATION DAMPER FOR ACSR ZEBRA	Nos.	486.00
32	VIBRATION DAMPER FOR AAAC PANTHER	Nos.	556.00

33	VIBRATION DAMPER FOR ACSR PANTHER	Nos.	311.00
34	MIDSPAN COMPRESION JOINT FOR AAAC ZEBRA	Nos.	678.00
35	MID SPAN COMPRESION JOINT FOR ACSR ZEBRA	Nos.	738.00
36	MIDSPAN COMPRESION JOINT FOR AAAC PANTHER	Nos.	372.00
37	MIDSPAN COMPRESION JOINT FOR ACSR PANTHER	Nos.	432.00
38	REPAIR SLEEVE FOR AAAC ZEBRA	Nos.	271.00
39	REPAIR SLEEVE FOR ACSR ZEBRA	Nos.	271.00
40	REPAIR SLEEVE FOR AAAC PANTHER	Nos.	155.00
41	REPAIR SLEEVE FOR ACSR PANTHER	Nos.	155.00
42	VIBRATION DAMPER FOR EARTH WIRE	Nos.	349.00
43	VIBRATION DAMPER FOR AAAC MOOSE	Nos.	558.00
44	FEXIBLE EARTH BOND FOR EARTH WIRE	Nos.	215.00
45	MIDSPAN COMPRESION JOINT FOR EARTH WIRE	Nos.	29.00
46	SUSPENSION CLAMP FOR EARTHWIRE	Nos.	360.00
47	U CLAMP	Nos.	78.00
48	TENSION CLAMP FOR EARTHWIRE	Nos.	396.00
<u>INSULATOR</u>			
49	70 KN DISC ANTIFOG INSULATOR	Nos.	727.00
50	90 KN DISC ANTIFOG INSULATOR	Nos.	779.00
51	120 KN DISC ANTIFOG INSULATOR	Nos.	817.00
52	160 KN DISC ANTIFOG INSULATOR	Nos.	1,134.00
53	70 KN DISC INSULATOR	Nos.	507.00
54	90 KN DISC INSULATOR	Nos.	512.00
55	120 KN DISC INSULATOR	Nos.	661.00
56	160 KN DISC INSULATOR	Nos.	661.00
57	132KV LONG ROD 90KN INSULATOR	Nos.	5,461.00
58	132KV LONG ROD 120KN INSULATOR	Nos.	6,867.00

59	220KV LONG ROD 90KN SILICON COMPOSITE INSULATOR	Nos.	3,988.00
60	132KV LONG ROD 120KN SILICON COMPOSITE INSULATOR	Nos.	3,212.00
61	220KV LONG ROD 160KN SILICON COMPOSITE INSULATOR	Nos.	4,437.00
<u>SUB STATION MATERIALS</u>			
1	400 KV CB (SF6)	Nos.	2,785,000.00
2	220 KV CB (SF6)	Nos.	1,149,786.00
3	132 KV CB (SF6)	Nos.	525,000.00
4	33 KV CB (VCB)	Nos.	174,000.00
5	220 KV SINGLE ISOLATOR WITHOUT EARTH SWITCH	SET	362,598.00
6	220 KV SINGLE ISOLATOR WITH EARTH SWITCH	SET	393,977.00
7	132 KV SINGLE ISOLATOR WITHOUT EARTH SWITCH	SET	149,000.00
8	132 KV SINGLE ISOLATOR WITH EARTH SWITCH	SET	212,678.00
9	132 KV DOUBLE ISOLATOR WITH EARTH SWITCH	SET	301,800.00
10	132 KV DOUBLE ISOLATOR WITHOUT EARTH SWITCH	SET	276,500.00
11	132 KV BEAM MOUNTED ISOLATOR WITHOUT EARTH SWITCH	SET	153,500.00
12	132 KV TANDEM ISOLATOR WITHOUT EARTH SWITCH	SET	217,327.00
13	33 KV SINGLE ISOLATOR WITHOUT EARTH SWITCH	SET	32,400.00
14	33 KV DOUBLE ISOLATOR WITH EARTH SWITCH	SET	81,900.00
15	33 KV DOUBLE ISOLATOR WITHOUT EARTH SWITCH	SET	62,100.00
16	400KV CT	Nos.	784,467.00
17	220 KV CT	Nos.	315,900.00
18	220 KV SF6 CT	Nos.	449,022.00
19	132 KV CT	Nos.	121,394.00
20	33 KV CT	Nos.	35,288.00
21	33 KV NCT	Nos.	16,894.00
22	400KV SA	Nos.	90,000.00

23	220 KV LA	Nos.	37,500.00
24	132 KV LA	Nos.	25,000.00
25	33 KV LA	Nos.	8,000.00
26	400KV CVT	Nos.	271,000.00
27	220KV CVT	Nos.	185,000.00
28	132KV CVT	Nos.	134,000.00
29	220 KV C.R.PANEL[FEEDER]WITH MAIN I&II DISTANCE PROTECTION	Nos.	2,354,396.00
30	220 KV C.R.PANEL [TRANSFORMER] WITH ALL MAIN PROTECTION	Nos.	473,995.00
31	220 KV C.R.PANEL[BUS COUPLER]	Nos.	680,359.00
32	220 KV C.R.PANEL WITH ONLY BACKUP PROTECTION	Nos.	697,304.00
33	132 KV C.R.PANEL[FEEDER]WITH MAIN I&II DISTANCE PROTECTION	Nos.	485,813.00
34	132 KV C.R.PANEL [TRANSFORMER] WITH ALL MAIN PROTECTION	Nos.	473,995.00
35	132 KV C.R.PANEL[BUS COUPLER]	Nos.	559,366.00
36	132 KV C.R.PANEL WITH ONLY BACKUP PROTECTION	Nos.	697,304.00
37	33 KV C.R.PANEL[FEEDER]	Nos.	182,834.00
38	33 KV C.R.PANEL [TRANSFORMER]	Nos.	180,010.00
39	33 KV C.R.PANEL [BUS COUPLER]	Nos.	173,317.00
40	220 KV P.T (IVT)	Nos.	375,000.00
41	132 KV PT (IVT)	Nos.	168,000.00
42	33 KV PT (IVT)	Nos.	19,800.00
43	220/132 KV 100 MVA AUTO-TRANSFORMER	Nos.	34,498,844.00
44	220/132 KV 160 MVA AUTO-TRANSFORMER (WITHOUT PV)	Nos.	47,000,000.00
45	220/132 KV 63 MVA AUTO-TRANSFORMER		22,715,217.00
46	132/33 KV 40 MVA TRANSFORMER (WITHOUT PV)	Nos.	22,488,065.00
47	220/33 KV 40 MVA TRANSFORMER (WITHOUT PV)	Nos.	27,892,174.00
48	132/33 KV 20 MVA TRANSFORMER	Nos.	10,650,000.00

49	132/33 KV 12.5 MVA TRANSFORMER	Nos.	9,886,235.00
50	33/0.4 KV 250 KVA TRANSFORMER	Nos.	335,091.00
51	33/0.4 KV 315 KVA TRANSFORMER		461,864.00
52	BATTERY CHARGER 220 V FOR 330 AH VRLA BATTERY	Nos.	335,578.00
53	330 AH VRLA TYPE 220V BATTERY SET	SET	381,216.00
54	350 AH PLANTE TYPE 220 V BATTERY SET	SET	1,470,000.00
55	BATTERY CHARGER 35/60A	SET	200,000.00
56	BATTERY CHARGER 220 KV FOR 350 AH Plante Battery with Madatory spares	SET	264,130.00
57	EHV GRADE TRANSFORMER OIL	KL	70,000.00
58	SF6 GAS CYLINDER OF 50KGS	Nos.	45,700.00
59	CT/PT CONSOLE BOX	Nos.	34,865.00
60	BAY MARSHALLING KIOSK	Nos.	116,217.00
61	SYNCHRONISATION TROLLY	Nos.	290,543.00
62	A.C DISTRIBUTION BOARD	Nos.	290,543.00
63	D.C DISTRIBUTION BOARD	Nos.	290,543.00
64	DIFFERENTIALPROTECTION RELAY-TYPE MICOM – P633	Nos.	148,000.00
65	BACK UP DIRECTIONAL AND NON DIRECTIONALPROTECTION RELAY-TYPE MICOM – P141	Nos.	81,352.00
66	EVENT Logger Pannel-Model - C264	Nos.	912,250.00
67	DISTANCE PROTECTION RELAY	Nos.	129,000.00
68	BUSBAR PROTECTION RELAY SCHEME	Nos.	5,347,618.00
69	LAP TOPS AS PER SPN.	Nos.	60,585.00
70	ELECTROMECHANICAL TYPE REF RELAY TYPE CAG14	Nos.	5,753.00
71	AXU RELAY FOR ALARM AND TRIP THREE ELEMENT TYPE	Nos.	3,219.00
72	CONTACT MULTIPLIER RELAY TYPEVAJC11	Nos.	5,927.00
73	AUX RELAY TYPE VAA33	Nos.	5,345.00
74	AUX RELAY TYPE VAJHM33	Nos.	9,845.00

75	AUX RELAY TYPE VAJH33	Nos.	9,845.00
76	AUX RELAY TYPE VAJHM53	Nos.	12,257.00
77	ELECTROMECHANICAL MASTER TRIP RELAY TYPE-VAJH-13	Nos.	3,374.00
78	AUX RELAY TYPE VAA11YF	Nos.	1,859.00
79	FACIA 12 WINDOW TYPE	Nos.	5,578.00
80	FACIA 24 WINDOW TYPE	Nos.	11,157.00
81	FACIA 8 WINDOW TYPE	Nos.	3,719.00
82	0.2CLASS ABT COMPLIANT DLMS PROTOCOL APEX ENERGY METER	Nos.	88,850.00
83	CMRI WINDOW VERSION	Nos.	39,620.00
84	2C X 2.5SQMM CONTROL ARMOURED CABLE	KM	60,607.00
85	3C X 2.5SQMM CONTROL ARMOURED CABLE	KM	77,343.00
86	4C X 2.5SQMM CONTROL ARMOURED CABLE	KM	95,589.00
87	7C X 2.5SQMM CONTROL ARMOURED CABLE	KM	144,691.00
88	10C X 2.5SQMM CONTROL ARMOURED CABLE	KM	196,640.00
89	16C X 2.5SQMM CONTROL ARMOURED CABLE	KM	299,144.00
90	19C X 2.5SQMM CONTROL ARMOURED CABLE	KM	346,909.00
91	24C X 2.5SQMM CONTROL ARMOURED CABLE	KM	445,694.00
92	2C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	42,768.00
93	3C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	52,058.00
94	4C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	66,480.00
95	7C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	107,735.00
96	9C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	137,432.00
97	12C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	171,333.00
98	16C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	282,931.00
99	19C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	274,963.00
100	24C X 2.5SQMM CONTROL UNARMOURED CABLE	KM	415,710.00

101	4C X 16 SQMM POWER ARMOURED CABLE	KM	75,658.00
102	3.5C X 25 SQMM POWER ARMOURED CABLE	KM	87,385.00
103	3.5C X 35 SQMM POWER ARMOURED CABLE	KM	114,009.00
104	3.5C X 50 SQMM POWER ARMOURED CABLE	KM	147,131.00
105	3.5C X 70 SQMM POWER ARMOURED CABLE	KM	205,356.00
106	3.5C X 95SQMM POWER ARMOURED CABLE	KM	229,948.00
107	3.5C X 120 SQMM POWER ARMOURED CABLE	KM	320,644.00
108	3.5C X 150 SQMM POWER ARMOURED CABLE	KM	377,707.00
109	3.5C X 240 SQMM POWER ARMOURED CABLE	KM	594,452.00
110	3.5C X 300 SQMM POWER ARMOURED CABLE	KM	724,151.00

COST DATA FOR THE TELECOM MATERIALS FOR THE YEAR 2013-14

Sl.NO.	Name of the Materials	Unit	Unit ex-works price (in Rs.)
1	2	3	12
1	800A/0.5mH WAVE TRAP ALONGWITH CONNECTING CLAMPS, INSULATORS & STRUCTURE SUITABLE FOR PEDESTAL MOUNTING.	Nos.	135,000.00
2	1200A/1mH WAVE TRAP ALONGWITH CONNECTING CLAMPS, INSULATORS & STRUCTURE SUITABLE FOR PEDESTAL MOUNTING.	Nos.	232,435.00
3	1600A/1mH WAVE TRAP ALONGWITH CONNECTING CLAMPS, INSULATORS & STRUCTURE SUITABLE FOR PEDESTAL MOUNTING.	Nos.	976,226.00
4	2000A/1mH WAVE TRAP ALONGWITH CONNECTING CLAMPS, INSULATORS & STRUCTURE SUITABLE FOR PEDESTAL MOUNTING.	Nos.	976,226.00
5	132KV CVT INCLUDING CONNECTING CLAMPS	Nos.	140,517.00
6	220KV CVT INCLUDING CONNECTING CLAMPS	Nos.	200,739.00
7	400KV CVT INCLUDING CONNECTING CLAMPS AND STRUCTURE	Nos.	793,184.00
8	COMPOSITE TYPE FIELD PROGRAMMABLE LINE UNIT	SET	118,542.00
9	75 OMHS/125OHMS CO-AXIAL CABLE	KM	133,122.00
10	SSB CARRIER SET OF SINGLE CHANNEL	SET	466,456.00

11	SSB CARRIER SET OF DOUBLE CHANNEL	SET	612,094.00
12	VFT MODEM	SET	164,738.00
13	PROTECTION SIGNALLING EQUIPMENT	SET	238,077.00
14	PRINT TESTING KIT	Nos.	140,333.00
15	DIGITAL EPABX WITH BUILT IN PROGRAMMING FACILITY	Nos.	427,099.00
16	4 WIRE TELEPHONE	Nos.	7,322.00
17	2-WIRE TELEPHONE	Nos.	1,952.00
18	PLAN 1+ 1 TELEPHONE	Nos.	4,881.00
19	TRANSDUCER (MW/MVAR/KV/ FREQUENCY)	Nos.	12,203.00
20	REMOTE TERMINAL UNIT	Nos.	977,124.00
21	AC/DC PANEL BOARD	Nos.	61,014.00
22	48V/200AH VRLA BATTERY	Nos.	48,177.00
23	48V/300AH VRLA BATTERY	Nos.	72,266.00
24	48V/400AH VRLA BATTERY	Nos.	101,966.00
25	48V/500AH VRLA BATTERY	Nos.	120,443.00
26	50V/50AMP FLOAT CUM BOOST CHARGER (SCR TYPE)	Nos.	122,028.00
27	50V/75AMP FLOAT CUM BOOST CHARGER (SCR TYPE)	Nos.	148,264.00
28	50V/100AMP FLOAT CUM BOOST CHARGER (SCR TYPE)	Nos.	172,060.00
29	50V/125AMP FLOAT CUM BOOST CHARGER (SCR TYPE)	Nos.	189,144.00
30	25SQMM MULTISTRAND SINGLE CORE DC POWER SUPPLY CABLE	MTR	49.00
31	25PAIR JELLY FILLED ARMoured TELEPHONE CABLE	MTR	183.00
32	10PAIR JELLY FILLED ARMoured TELEPHONE CABLE	MTR	85.00
33	5PAIR JELLY FILLED ARMoured TELEPHONE CABLE	MTR	68.00
34	SLECTIVE LEVEL METER	Nos.	315,815.00
35	DIGITAL MULTIMETER	Nos.	100,063.00
36	LEVEL GENERATOR/ OSCILLATOR	Nos.	240,793.00
37	FREQUENCY COUNTER	Nos.	97,623.00

38	DUAL TRACE OSCILLOSCOPE	Nos.	195,245.00
39	SMPS BASED BATTERY CHARGER OF 50A SUITABLE FOR 48V VRLA BATTERY & UOGRADATION FACILITIES.	Nos.	91,029.00
40	SMPS BASED BATTERY CHARGER OF 75A SUITABLE FOR 48V VRLA BATTERY & UOGRADATION FACILITIES.	Nos.	104,162.00
41	SMPS BASED BATTERY CHARGER OF 125A SUITABLE FOR 48V VRLA BATTERY & UOGRADATION FACILITIES.	Nos.	134,094.00
42	VHF TRANRECEIVER WITH BATTERY CHARGER	Nos.	6,566.00
43	DPLC 8 KHZ	Nos.	798,103.00
44	DPLC 8 KHZ/16 KHZ	Nos.	872,020.00

COST DATA FOR 220 KV, 132 KV LINES/BAY EXTENSIONS AND PLCC EQUIPMENTS			
IN LAKHS			
SL.NO.	DESCRIPTION	DEPARTMENTAL WORK	DEPOSIT WORK
	EHV LINE		
1	220 KV D/C LINE ON DC TOWER /KM	53.193	64.879
2	220 KV S/C LINE ON DC TOWER /KM	37.735	46.021
3	132 KV D/C LINE ON DC TOWER/KM	35.246	42.985
4	132 KV S/C LINE ON DC TOWER/KM	26.352	32.134
	BAY EXTENSION		
5	220 KV FEEDER BAY	157.898	211.899
6	220 KV BUS COUPLER BAY	147.05	197.342
7	220 KV TRANSFORMER BAY	107.177	143.831
8	132 KV FEEDER BAY	56.117	75.309
9	132 KV BUS COUPLER BAY	59.09	79.299
10	132 KV TRANSFORMER BAY	56.587	75.939
11	33 KV FEEDER BAY	22.98	30.84
12	33 KV BUS COUPLER BAY	24.996	33.544
13	33 KV TRANSFORMER BAY	22.78	30.57
	PLCC		
14	PLCC EQUIPMENT (220 KV)	110	
15	PLCC EQUIPMENT (132 KV)	77	

NB: The above ex-works price are indicative only and can be used only for the purpose of preparation of estimate and budgetary purpose. Actual expenditure and procurement of material should be done through transparent competitive bidding process