## ଓଡ଼ିଶା ବିଦ୍ୟୁତ ଶକ୍ତି ସଂଚାରଣ ନିଗମ ଲିଃ.

#### ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A GOVERNMENT OF ODISHA UNDER TAKING) CIN- U40102OR2004SGC007553

# OFFICE OF THE GENERAL MANAGER, EHT (0&M) CIRCLE, CUTTACK

AT: MADHUSUDAN NAGAR, TULSIPUR, CUTTACK-753008

Phone: 0671-2300226 Fax: 0671-2300547

#### OPEN TENDER CALL NOTICE NO. 08/CTC/2018-19

Sealed tenders are invited by the undersigned from experienced contractors possessing HT/MV license issued by Govt. of Odisha/Govt. of India / Railways/ Military possessing valid I.T. Pan Card / GST registration/ clearance certificates for Construction of Plinth mounted, 250 KVA 33/0.4 KV substation with DP structure and other associated arrangements on turnkey basis. Only the Transformer shall be supplied departmentally. The contractor has to complete the work in all respect including erection and supply of all the required materials. Cost of Tender Paper: Rs 4480/- which is Non-refundable and to be paid in shape of Cash/DD. EMD: 1% of the quoted value should be submitted with the tender in shape of DD only .The DD is to be drawn in favour of EHT (O&M) Circle, OPTCL, Cuttack, Payable at Cuttack. . The detail tender specification can be obtained from the office of the undersigned, on payment of dues as mentioned below during office hours from 11.00A.M. to 5.00P.M. from Dt. 18.07.2018 to Dt.30.07.2018. The tenders shall be received up to 3 P.M. on Dt.31.07.2018 and will be opened at 3.30P.M on same date in the office of the undersigned. The tender not accompanied with EMD will be rejected. The estimated quantity schedule is given below for reference. However the contractors are advised to visit the work site to assess the volume of work before filling the tender.

This office will not be responsible for non-receipt / late receipt of tender document due to postal delay. All other terms and conditions of OPTCL purchase & contract regulation will also be applicable to the successful bidders while placing the work order.

The undersigned reserves the right to reject any or all the tenders without assigning any reason thereof.

Sd/-

SL	Name of the item	Cost Of tender	Eligibility Criteria for
No		specification	bidders
1	Construction of Plinth mounted,	Rs4000/-	Experienced contractors with
	250 KVA 33/0.4 KV substation	+GST @ 12%	HT / MV license issued by
	with DP structure and other	i.e Rs. 480/-	Govt. of Odisha / Govt. of
	associated arrangements on	=Rs4480/-	India / Railways/ Military
	turnkey basis at Grid S/S	(Non-refundable	possessing valid I.T. Pan Card
	Paradeep and Grid S/S	in shape of Cash/DD)	/ GST registration/ clearance
	Kendrapada		certificates are eligible to
			apply.

### **SCHEDULE OF QUANTITY**

## 1. <u>220/132/33KV Grid S/S, Paradeep</u>

	PART-A: Supply of Materials		
Sl. No	Description	Unit	Quantity
1	33 KV 400/200 amp 3 pole AB Switch	set	1
2	33 KV 3 pole HG fuse	set	1
3	Pressure channel (100*50*6) mm 3mtrs long 2 nos (9.2Kg/mtr)	kg	55.2
4	AB Switch & HG Fuse mounting channel (75*40*6mm) 3 mtr long 2 nos. (6.8kg/mtr)	Kg	81.6
5	Cantilever channel for supporting AB Switch Arm (75*40*6mm) 1 mtr long 2 nos. (6.8kg/mtr)	Kg	13.6
6	Cantilever channel for supporting HG fuse, Arm (50*50*6mm) Angle 1 mtr long 2 nos. (4.5kg/mtr)	Kg	9
7	Angle for cantilever arrangement to AB switch with HG FUSE (50*50*6MM) 2 Mtrs each 2 Nos. (4.5KG/mtr)	Kg	18
8	8 mtr pole	No	2
9	Earthing of Support (coil type)	No	6
10	MS nuts bolts with washer	No	10
11	No 8 GI wire for Earthing	Kg	9
12	200 AMP change over switch	No	1
13	240 sq. mm. * 3.5 core power cable available at Kendrapara grid	Mtr.	120

	PART B: Erection Portion		
SL. No	Specification	Unit	Quantity
1	Erection of DP structure with mounting LA, AB switch, HG fuse, Cantilever structure for AB switch & HG fuse	Set	1
2	Erection of 250 KVA 33/0.4 KV 5tation Transformer	No	1
3	Laying of 240 5q mm LT Aluminum power Armored/ Unarmored cable including fixing of cable trays with terminal connections both at equipment & panels with supply and fixing of lugs, glands with crimping and clamps made of aluminum, fixing of cables on the trays with bolts and nuts, supply an fixing of PVC bend and pipes (where required) / Excavation and laying underground where required.	Mtr	120

	PART C: Civil Portion (As per R/C)		
SL. No	Specification	Unit	Quantity
1	Excavation for foundation of equipments (soft/Loose) soil (2.25* 1.9*0.6mtr)	Cum	2.565
2	Supply and spreading of loose fine, clear good quality river sand/crusher dust in switch yard, including stacking for measurement with supply of all labour & T&P (2.25*1.9*0.1)	Cum	0.4275
3	Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering, supply of good quality 20mm machine broken granite chips, good quality river sands and concreting, curing for foundation transformer as per IS:4156 including cost of taxes, royalties, lead lift, labour and T&P. (With cost of cement and without steel).  PCC (1:3:6)2.25* 1.90*0.1	Cum	0.4275
4	Brick masonary in ratio 1:5 with supply of first class K.B Bricks, good quality river sand, labour & T&P (With supply of cement)		
a)	2.25*1.5*0.375*2=2.53	Cum	2.53
b)	1.150*1.5*0.375*2=1.293	Cum	1.293
5	Supply and spreading of loose fine, clear good quality river sand/crusher dust in switchyard, including stacking for measurement with supply of all labour & T&P (1.5* 1.5*1.15 )=2.588	Cum	2.588
6	Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering, supply of good quality 20mm machine broken granite chips, good quality river sands and concreting, curing for foundation transformer as per IS:4156 including cost of taxes, royalties, lead lift, labour and T&P. (With cost of cement and without steel).		

	RCC (1:2:4)		
a)	2.25*1.9*0.1=0.4275 Cum	Cum	0.4275
b)	Supply of rod 8 mm (13 nos. *2.25*29.25 mtr. *0.395 KG/ mtr) = 11.55	Kg	11.55
c)	Supply of rod 10 mm (16 nos. *1.6*25.6 mtr*0.616 KG/mtr) = 15.76	Kg	15.76
7	Cutting, bending, binding placing in position of steel rod for foundation concreting including cost of binding wire. (without supply of rod)	MT	0.02731
8	Pipe earthing including excavation of earth, treatment of bentonate compound, back filling with borrowed earth, termination to earth mat riser by nut bolting, apply of paint where necessary with supply of all labour and T&P as per 155-3043 (With cost of earthing pipe & flat).	Nos.	3
	POLE CONCRETING DETAILS		
9	Excavation for foundation of equipments (soft/Loose soil) (0.9*0.9*1.40)*2	Cum	2.268
10	Supply and spreading of loose fine, clear good quality river sand/crusher dust in switch yard, including stacking for measurement with supply of all labour & T&P (0.9*0.9*0.1)*2	Cum	0.162
11	Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering, supply of good quality 20mm machine broken granite chips, good quality river sands and concreting, curing for foundation transformer as per IS:4156 including cost of taxes, royalties, lead lift, labour and T&P. (With cost of cement and without steel). PCC (1:3:6): (0.90* 0.90*0.1)*2	Cum	0.162
12	Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering, supply of good quality 20mm machine broken granite chips, good quality river sands and concreting, curing for foundation transformer as per IS:4156 including cost of taxes, royalties, lead lift, labour and T&P. (With cost of cement and without steel). RCC (1:2:4): (0.90* 0.90*0.1)*2	Cum	1.944

## 2. 132/33KV Grid S/S, Kendrapada

	PART-A: Supply of Materials		
Sl. No	Description	Unit	Quantity
1	33 KV 400/200 amp 3 pole AB Switch	Set	1
2	33 KV 3 pole HG fuse	Set	1
3	Pressure channel (100*50*6) mm 3mtrs long 2 nos (9.2Kg/mtr)	Kg	55.2
4	AB Switch & HG Fuse mounting channel (75*40*6mm) 3 mtr long 2 nos. (6.8kg/mtr)	Kg	81.6
5	Cantilever channel for supporting AB Switch Arm (75*40*6mm) 1 mtr long 2 nos. (6.8kg/mtr)	Kg	13.6
6	Cantilever channel for supporting HG fuse, Arm (50*50*6mm)  Angle 1 mtr long 2 nos. (4.5kg/mtr)	Kg	9
7	Angle for cantilever arrangement to AB switch with HG FUSE (50*50*6MM) 2 Mtrs each 2 Nos. (4.5KG/mtr)	Kg	18
8	8 mtr pole	No	2
9	Earthing of Support (coil type)	No	6
10	MS nuts bolts with washer	No	10
11	No 8 GI wire for Earthing	Kg	9
12	200 AMP change over switch	No	1

	PART B: Erection Portion		
SL. No	Specification	Unit	Quantity
1	Erection of DP structure with mounting LA, AB switch, HG fuse, Cantilever structure for AB switch & HG fuse	Set	1
2	Erection of 250 KVA 33/0.4 KV 5tation Transformer	No	1
3	Laying of 240 Sq mm LT Aluminum power Armored / Unarmored cable including fixing of cable trays with terminal connections both at equipment & panels with supply and fixing of lugs, glands with crimping and clamps made of aluminum, fixing of cables on the trays with bolts and nuts, supply an fixing of PVC bend and pipes (where required) / Excavation and laying underground where required.	Mtr	100

	PART C: Civil Portion		
SL. No	Specification	Unit	Quantity
1	Breaking concrete surface of size $(2.25*1.9*0.1) = 0.4275$	Cum	0.4275
2	Excavation for foundation of equipments (soft/Loose) soil (2.25* 1.9*0.6mtr)	Cum	2.565
3	Supply and spreading of loose fine, clear good quality river sand/crusher dust in switch yard, including stacking for measurement with supply of all labour & T&P (2.25*1.9*0.1) = 0.4275	Cum	0.4275
4	Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering, supply of good quality 20mm machine broken granite chips, good quality river sands and concreting, curing for foundation transformer as per IS:4156 including cost of taxes, royalties, lead lift, labour and T&P. (With cost of cement and without steel).  PCC (1:3:6) 2.25* 1.90*0.1	Cum	0.4275
5	Brick masonary in ratio 1:5 with supply of first class K.B Bricks, good quality river sand, labour & T&P (With supply of cement)		
a)	(2.25*1.5*0.375)*2 = 2.53	Cum	2.53
<b>b</b> )	(1.150*1.5*0.375)*2 = 1.293	Cum	1.293
6	Supply and spreading of loose fine, clear good quality river sand/crusher dust in switchyard, including stacking for measurement with supply of all labour & T&P (1.5* 1.5*1.15 )=2.588	Cum	2.588
7	Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering, supply of good quality 20mm machine broken granite chips, good quality river sands and concreting, curing for foundation transformer as per IS:4156 including cost of taxes, royalties, lead lift, labour and T&P. (With cost of cement and without steel).  RCC (1:2:4)		
a)	2.25*1.9*0.1=0.4275 Cum	Cum	0.4275
b)	Supply of rod 8 mm (13 nos. *2.25*29.25 mtr. *0.395 KG/ mtr) = 11.55	KG	11.55
c)	Supply of rod 10 mm (16 nos. *1.6*25.6 mtr*0.616 KG/mtr) = 15.76	KG	15.76
8	Cutting, bending, binding placing in position of steel rod for foundation concreting including cost of binding wire. (without supply of rod)	МТ	0.02731
9	Pipe earthing including excavation of earth, treatment of bentonate compound, back filling with borrowed earth, termination to earth mat riser by nut bolting, apply of paint where necessary with supply of all labour and T&P as per 155-3043 (With cost of earthing pipe	Nos.	3

	& flat).		
	POLE CONCRETING DETAILS		
10	Excavation for foundation of equipments (soft/Loose soil) (0.9*0.9*1.40)*2	Cum	2.268
11	Supply and spreading of loose fine, clear good quality river sand/crusher dust in switch yard, including stacking for measurement with supply of all labour & T&P (0.9*0.9*0.1)*2	Cum	0.162
12	Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering, supply of good quality 20mm machine broken granite chips, good quality river sands and concreting, curing for foundation transformer as per IS:4156 including cost of taxes, royalties, lead lift, labour and T&P. (With cost of cement and without steel). PCC (1:3:6): (0.90* 0.90*0.1)*2	Cum	0.162
13	Supply of all materials, good quality planks, ballas, shuttering plates for centering, shuttering, supply of good quality 20mm machine broken granite chips, good quality river sands and concreting, curing for foundation transformer as per IS:4156 including cost of taxes, royalties, lead lift, labour and T&P. (With cost of cement and without steel).  RCC (1:2:4): (0.90m* 0.90m*0.1m)*2	Cum	1.944
I	Fencing of station TFR. Boundary and metal spreading of station tra	ansforme	r Yard
14	Excavation of 6 Nos. Fencing supporting pillar foundation 0.6X0.6X0.6=0.126 CUM	Cum	1.296
15	Spreading of sand at a depth 100 mm for 6 Nos. $[0.6x0.6x0.1] \times 6 = 0.216$	Cum	0.216
16	PCC work for 6 Nos excavated portion [0.6x0.6x0.2] x 6 = 0.432	Cum	0.432
17	RCC 1:2:4 for 6 Nos supporting angle structure $[0.6x0.6x0.3] \times 6 = 0.648$	Cum	0.648
18	Cost of GI angle of size 65mmx65mmx6mm for supporting wire mesh 3mtr each for 6 Nos.=18 mtr (5.4 kg/mtr)	Kg	97.2
19	Cost of GI Flat 50x5 mm used for supporting wire mesh top and bottom 4m for each side 4m x 4=16 mtr (2.5kg/mtr)	Kg	40
20	Cost of wire mesh of size (4mx2m)x4 Nos	Sqm	32
21	Metal spreading of station Tfr. yard		
a)	Excavation $(4mx4mx0.3) = 4.8$	Cum	4.8
b)	Sand spread $(4mx4mx0.2) = 3.2$	Cum	3.2
c)	Supply and spreading good quality 20 mm machine broken granite chips including cost of taxes royalities, lead lift, labour and T&P (With cost of cement and without steel).  PCC(1:3:6) (4mx4mx0.1)	Cum	1.6