



Government of Goa Office of the Executive Engineer, Electricity Department,



Division-VII, Curchorem-Goa Pin Code 403706

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EE/Div.VII/Tech-Tender-09 (18-19)/4398 /2019-20.

Dated: - / 6 /01/2020

CORRIGENDUM

Name of work: Work of conversion of existing 11KV overhead Netravali feeder to U/G cabling network emanating from 33/11KV Waddem substation in Sanguem constituency under the jurisdiction of Sub Division-III, Sanguem.

Ref work order no: EE/Div.VII/Tech-Tender-09 (18-19)CSC/1241/2019-20 Dated: -26/06/2019

The following corrigendum is hereby accorded for the above referred work order.

EXISTING

Sr No	Description	Unit	Qty	AMOUNT
1.	Work of conversion of existing 11KV overhead Netravali feeder to 11KV U/G cabling network emanating from 33/11KV Vaddem substation in Sanguem constituency under the jurisdiction of Elect. Sub Division-III, Sanguem.	Sche	closed in dule of ork.	Rs. 33, 35, 99, 894.75/-
		Gran	d Total	Rs. 33, 35, 99, 894.75/-

Total value of the order: Rs. 33, 35, 99, 894.75/- (Rupees Thirty-Three Crores Thirty Five Lakh Ninety Nine Thousand Eight Hundred Ninety Four and Paisa Seventy Five Only), which is inclusive of GST @12%

Security <u>Deposit</u> Rs. 1, 66, 79, 995/- (Rupees One Crore Sixty Six Lakhs Seventy Nine Thousand Nine Hundred & Ninety Five Only), i.e. 5% of the Order value.

TO BE READ AS

Sr No	Description	Unit	Qty	AMOUNT
1.	Work of conversion of existing 11KV overhead Netravali feeder to 11KV U/G cabling network emanating from 33/11KV Vaddem substation in Sanguem constituency under the jurisdiction of Elect. Sub Division-III, Sanguem.	in Scl of v	nedule	Rs. 35, 13, 13, 163.50/-
		Grand	Total	Rs. 35, 13, 13, 163,50/-

Total value of the order: Rs. 35, 13, 13, 163.50/- (Rupees Thirty Five Crores Thirteen Lakh Thirteen Thousand One Hundred Sixty Three and Paise Fifty Only) which is inclusive of GST@18%

Security Deposit

We will deduct an amount of Rs. 1, 75, 65, 658/- (Rupees One Crore Seventy Five Lakhs Sixty Five Thousand Six Hundred & Fifty Eight Only), i.e. 5% of the Order value from the running bills and the EMD if paid at the time of tender will be treated as part of security deposit. The security deposit will also be accepted in the form of Government Securities, fixed deposit receipts. The refund of security deposit to the Contractor on completion of work will be regulated as per Clause-17.

In this regard, the revised schedule of works with GST@18% is enclosed herewith for reference.

All other terms and conditions will remain same.

Encl: as above

EXECUTIVE ENGINEER VII

To, M/s. Powertech Engineers, E-195, Sector-63, Noida-201301.

Copy to:

- 1. The Finance (Exp) Department, Secretariat Porvorim.
- 2. The P.A. to Hon'ble Chief Minister, Secretariat, Goa.
- 3. The P.A. to Hon'ble Power Minister, Secretariat, Porvorim Goa.
- 4. The Chief Electrical Engineer, 3rd floor, Vidyut Bhavan, Panaji-Goa
- 5. The Superintending Engineer Circle-I(S), Margao.
- 6. The Executive Engineer (CSC), Office of the Chief Electrical Engineer, Panaji Goa
- 7. The Jt. Director of Accounts, Office of the Chief Electrical Engineer, Panaji Goa
- The Senior Audit Officer/CA (HQ), Indian Audit & Accts. Department, Office of the Accountant General, Goa, Audit Bhavan Green Valley, Alto-Porvorim-Goa.
- The REC Power Distribution Company Limited, Corporate Office- 4th Floor, KRIBHCO Bhawan, A-10, Sector-1 Noida, Gautam Budh Nagar-201301(UP).
- The Assistant Project Manager, REC Power Distribution Company Limited. 5th Floor, Vidyut Bhavan, Panaji Goa
- The Commercial Tax Officer, Panaji Ward, Panaji Goa.
- The Commercial Tax Officer, Department of commercial Taxes, Jack Cruzman Apartments, Near Datta Mandir, H.No.187, Champhabhat, Amona, Quepem, Goa. 403705.
- 13. The Sales Tax officer, Pontemol Rd, Bepquegal, Vodlemol Cacora, Goa 403706.
- The Sub-Divisional Engineer, Elect. Sub Div- III, Sanguem...alongwith revised schedule of works.
- The Divisional Accountant, Accounts Section, Elect-Division-VII, Curchorem..... along with revised schedule of works



GOVERNMENT OF GOA, OFFICE OF THE EXECUTIVE ENGINEER, ELECTRICITY DEPARTMENT, DIVISION-VII, CURCHOREM-GOA

Tender No: CEE/CSC/Tech/Tender Notice/18-19/464 Date: 20/06/2018

Tender No: Tender-09(18-19)/CSC

REVISED SCHEDULE OF WORKS

(ESTIMATE-1A) -WORK FOR SETC OF CONVERSION OF EXISTING 11KV OVERHEAD NETRAVALI FEEDER TO 11KV UNDERGROUND CABELING NETWORK EMANATING FROM 33/11KV VADDEM SUB-STATION IN SANGUEM CONSTITUENCY UNDER JURISDICTION OF SUB.DIVISION-III, DIV-VII, SANGUEM-GOA.

	Description	Unit	Qty	Supply Cost		Erection Cost	
Sr. No.				Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)
1	2	3	4	5	6=4*5	7	8=4*7
A	HT CABLES						
i	Supply, Erection, Testing and Comissioning of 3 core, 300 sq.mm. aluminium, XLPE insulated, Flat Type armoured, 11KV (Earthed) Cable, type A2XFY conforming LS. 7098 PART 2 and carrying ISI MARK (for the Ring Main System) by Open Trenching Method.	Mtr	15444	1850.00	28571400.00	75.00	1158300.00
ii	Supply, Erection, Testing and Comissioning of 3 core, 185 sq.mm. aluminium, XLPE insulated, Flat Type armoured, 11KV (Earthed) Cable, type A2XFY conforming I.S. 7098 PART 2 and carrying ISI MARK (for the Ring Main System) by Open Trenching Method.	Mtr	116624	1365.00	159191760.00	70.00	8163680.00
iii	Supply of 3 core, 185sq.mm. aluminium, XLPE insulated, Flat Type armoured, 11KV (Earthed) Cable, type A2XFY conforming I.S. 7098 PART 2 and carrying ISI MARK (for the Ring Main System) by HDD Method	Mre	325	1365.00	443625.00	Inclusive	0.00

				Supp	ly Cost	Erection Cost	
Sr. No.	Description	Unit	Qty	Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)
1	2	3	4	5	6=4*5	7	8=4*7
iv	Supply, Erection, Testing and Comissioning of 3 core, 95sq.mm. aluminium, XLPE insulated, Flat Type armoured, 11KV (Earthed) Cable, type AZXFY conforming I.S. 7098 PART 2 and carrying ISI MARK (for the Ring Main Unit to 11KV DP)	Mtr	456	1050.00	478800.00	60.00	27360.00
В	RING MAIN UNITS & LOAD BREAK SWITCH UNITS				(9)		
1	11KV, 630 Amps, Outdoor, SF6 Ring Main Unit with two Load Break Switches and one Circuit Breaker conforming to International Standards and complete with Fault Passage Indicator & SCADA Compliant as per technical specification.	No.	37	550000.00	20350000.00	10000.00	370000.00
ii	Supply and erection & Commissioning of 11KV, 630A, 25KA, 3 way Outdoor Load Break Switch comprising of 3 nos. 630A isolators and all required accessories, confirming to International standards complete with fault passage indicator as per Technical specs and SCADA compliant.	No	5	750000.00	3750000.00	12000.00	60000.00
C	CABLE JOINTING AND TERMINATION KITS.						
ı	Supply, Erection, Testing and Comissioning of Outdoor type, heat shrinkable, three phase, end termination kit complete, for 11KV XLPE cable of size 3 x 300sq.mm including sockets /lugs / connectors etc. Make:- Raychem	Kits	5	8000.00	40000.00	1500.00	7500.00
ii	Supply, Erection, Testing and Comissioning of Outdoor type, heat shrinkable, three phase, end termination kit complete, for 11KV XLPE cable of size 3 x 185sq.mm including sockets /lugs / connectors etc. Make:- Raychem	Kits	1	7000.00	7000.00	1500.00	1500.00

				Supp	ly Cost	Erection Cost		
Sr. No.	Description	Unit	it Qty	Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)	
1	2	3	4	5	6=4*5	7	8=4*7	
ш	Supply, Erection, Testing and Comissioning of Outdoor type, heat shrinkable, three phase, end termination kit complete, for 11KV XLPE cable of size 3 x 95sq.mm including sockets /lugs / connectors etc. Make:- Raychem	Kits	37	6000.00	222000.00	1500.00	55500.00	
iv	Supply, Erection, Testing and Comissioning of Indoor type, heat shrinkable, three phase, end termination kit complete, for 11KV XLPE cable of size 3 x 300sq.mm including sockets /lugs / connectors etc.Make:- Raychem	Kits	31	7500.00	232500.00	1500.00	46500.00	
٧	Supply, Erection, Testing and Comissioning of Indoor type, heat shrinkable, three phase, end termination kit complete, for 11KV XLPE cable of size 3 x 185sq.mm including sockets /lugs / connectors etc.Make:- Raychem		84	7000.00	588000.00	1500.00	126000.00	
vi	Supply, Erection, Testing and Comissioning of Indoor type, heat shrinkable, three phase, end termination kit complete, for 11KV XLPE cable of size 3 x 95sq.mm including sockets /lugs / connectors etc.Make:- Raychem	Vite	37	5000.00	185000.00	1500.00	55500.00	
vii	Supply, Erection, Testing & comissioning of 11KV, three phase, Heat shrinkable, Straight Through Jointing Kit complete for XLPE cable of size 3 core 300sq.mm. Make:- Raychem		52	12000.00	624000.00	1500.00	78000.00	
viii	Supply, Erection, Testing & comissioning of 11KV, three phase, Heat shrinkable, Straight Through Jointing Kit complete for XLPE cable of size 3 core 185sq.mm. Make:- Raychem	Kits	466	10000.00	4660000.00	2500.00	1165000.00	

				Supp	ly Cost	Erection Cost		
Sr. No.	Description	Unit	Qty	Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)	
1	2	3	4	5	6=4*5	7	8=4*7	
D	Route Markers, Warning Tapes							
i	Supply, Erection and Comissioning of Cable route Markers (for entire route length) as per technical specification and drawing.	Nos.	848	300.00	254400.00	300.00	254400.00	
ii	Supply, Laying of Warning Tapes (for entire route length) as per technical specification and drawing.	Kms	84.83	4000.00	339320.00	Inclusive	0.00	
iii	Bricks class design 75 kg/cm2 (1st class wire cut)	Nos.	266640	10.00	2666400.00	Inclusive	0.00	
E	RCC Hume pipe inclusive of erection							
i	Design, Supply & Erection of RCC Hume pipes for road crossings, nullah crossings, small river crossings, culverts of 150 mm inner diameter, alongwith required no. of collars, PCC and Masonary work as per technical specifications.	Mtr	2280	800.00	1824000.00	500.00	1140000.00	
F	GI PIPE (INCLUDING LAYING/ERECTION)							
i	Design, Supply & Erection of Medium duty, HDGI Class B pipe of nominal diameter 150 mm (alongwith HDGI bends wherever required) for bridge crossing, riser pipe for 95Sq.mm & 300Sq.mm XLPE Cable etc., as per technical specifications including supporting arrangement for the pipe.	Mtr	1770	1500.00	2655000.00	300.00	531000.00	

	Description		Qty	Sup	ply Cost	Erection Cost		
Sr. No.		Unit		Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)	
1	2	3	4	5	6=4*5	7	8=4*7	
G	Open Trenching method:- Excavation of pit, laying of protective covers, RCC hume pipe, earthing, foundations for equipments etc							
ı	Earthwork in excavation by mechanical means (hydraulic excavator)/ manual means in foundation pipeline trenches drain (not exceeding 1.5 mt in width or 10 sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m including getting out the excavated soil and disposl of surplus excavated soil as directed within a lead of 50 m(a) for laying of HT cables of various sizes in all kinds of soil, hard rock etc. The trench lengths are as follows:							
a.	All types of rock including laterite/Hard rock, blasting prohibited							
	1. Size 1.1 x 0.45 x cable length mts for laying of 1 run.	Cu.mts	15384.6	Not Applicable	0.00	600.00	9230760.00	
	2. Size 1.1 x 0.60 x cable length mts for laying of 2 run.	Cu.mts	6430.38	Not Applicable	0.00	600.00	3858228.00	
b.	All kinds of soil							
	1. Size $1.1 \times 0.45 \times \text{cable length mts}$ for laying of 1 run.	Cu.mts	209.39	Not Applicable	0.00	150.00	31408.50	
	2. Size 1.1 x 0.60 x cable length mts for laying of 2 run.	Cu.mts	28766.1	Not Applicable	0.00	150.00	4314915.00	
II	Filling of available excavated earth (excluding rock/stones) in trench in layer not exceeding 0.2mts. Depth, consolidating each deposited layer by ramming and watering lead up to 40mts.	Cumte	32321.21	Not Applicable	0.00	30.00	969636.30	

	Description		Qty	Supp	ly Cost	Erection Cost	
Sr. No.		Unit		Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)
1	2	3	4	5	6=4*5	7	8=4*7
iii	Disposal of surplus excavated soil / material by mechanical transportation including loading and unloading, stacking/lavelling as directed within distance of 2500mts.		15630.93	Not Applicable	0.00	100.00	1563093.00
iv	Supply and laying of fine river sand of approved quality (except sandy soil) for cushioning of 11KV underground cables.		13390.22	800.00	10712176.00	Inclusive	0.00
v	Providing and laying of Kaddapa protective covers of size 0.6 mts long X 0.25 mts width and 37 mm thick, at non- road crossing & for partitioning Cable.	Nos.	183199	84.00	15388716.00	Inclusive	0.00
vi	Providing and laying in position cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded granitic or basaltic stone aggregate 40 m nominal size for foundation of Ring Main Unit and Load Break Switch.	Cumte	43.94	9000.00	395460.00	Inclusive	0.00
vii	Centering and shuttering including struttings, propping etc and removal of form work for RMU	Sq.mts	185.64	Not Applicable	0.00	200.00	37128.00
viii	Providing of 12 mm cement plaster 1:4 (1- cement: 4-fine sand) for foundations of RMU	Sq.mts	71.4	250.00	17850.00	Inclusive	0.00

	Description	Unit		Supp	ly Cost	Erection Cost		
Sr. No.			Qty	Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)	
1	2	3	4	5	6=4*5	7	8=4*7	
Н	G.I. Earthing							
1	Supply and erection of G.I. earthing pipe 2500mm long, 40mm dia class B fabricated and perforated filled with homogenous mixture of 20Kgs of Charcoal, 20Kgs of salt and sand /soil complete inclusive of excavation, backfilling & spreading of excavated earth evenly as per Drg No. CEE/E-829 for RMUs & Load Break Switches.	Set	84	3000.00	252000.00	1500.00	126000.00	
ii	Supply and erection of HDGI flat of size 50mm x 5 mm including supply and fixing of required quantity of HDGI nut bolts for earthing of all euipment.	Mts	840	250.00	210000.00	50.00	42000.00	
1	Horizontal Directional Drilling Method							
ì	Laying, Testing and Comissioning of UG cables by trenchless technology by adopting horizontal boring (HDD method). The work includes preparation of site, Boring as well as drawing of cable in any type soil including soft, watery, sandy soil, hard laterite, hard rock or any type of soil with minimum 8" bore size with HDPE pipe, including cost of the DWC HDPE pipe.	Mtr	325	3500.00	1137500.00	Inclusive	0.00	

	Description			Supply Cost		Erection Cost	
Sr. No.		Unit	Qty	Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)
1	2	3	4	5	6=4*5	7	8=4*7
1	Physical Surveying				S 1 5		
1	Carrying out detailed physical survey of the area including detailed GPS survey which includes indicating and marking location of other utilities if any, furnishing of optimum and economical route and design for laying of 11KV, 3 core, 300 & 185 sq.mm, XLPE cable and accessories, including plotting on the scaled land base map of size 1:1000 indicating all features, and submitting drilling profile indicating proposed plan for HDD, open trenching, road, nullah, culvert, over bridge, rail crossing or any other special crossing. The work shall include digging of trial pits at suitable intervals and reinstatement of dug-up area of trial pits. The Detailed documents as well as the write-up shall be furnished in 2 nos. of hard copies and soft copies for approval. Upon approval fresh 6 Nos. of hard copies alongwith a soft copy shall be furnished duly corrected. On completion, the contractor has to submit final survey map with longitude and latitude of each every item with other details for Asset Mapping.	Route Kms	84.83	Not Applicable	0.00	6000.00	508980.00
K	Indoor 12KV VCB's & Control and Relay Panel,						
III	Supply, Erection, Testing and Commissioning of 12 KV, 600/630 Amps, 25 KA, 3 phase, indoor type, feeder panel complete along with adapter panel (Proposed panel need to be connected with existing panel through adapter panel) Bidded need to do all necessary arrangement	1.1.	3	450000.00	1350000.00	10000.00	30000.00

	Description	Unit		Supp	ly Cost	Erection Cost	
Sr. No.				Ex-Works Price (Rs.)	Supply Amount (Rs.)	Ex-Works Price (Rs.)	Erection Amount (Rs.)
1	2	3	4	5	6=4*5	7	8=4*7
L	Dismantling of 11KV Lines						
í	Dismantling of 11KV Line and handing over removed material to Central Store, Margao with acknowledgement of Sub-Divisional Engineer.		44.37	Not Applicable	0.00	5000.00	221850.00
М	UG Cable Fault Finding Locator				100		
í	Van mounted micro processor based cable fault locator suitable for locating fault upto 33KV voltage level as per technical specification. Note: - Training and hand holding support to GED officials.	Nos.	1	4500000.00	4500000.00	Not Applicable	0.00
	Sub Total in Rs. [A]				261046907.00	(1)	34174238.80
	Add Cost of Erection in Rs.[B]				34174238.80		
	Total in Rs.[C]=[A]+[B]				295221145.80		
	Add GST-18%[D]				53139806.24		
	Add Cess@1%on cost of material and erection[E]				2952211.46		
	Grand Total[F] in Rs. =[C+D+E]				351313163.50		

Rs. 35, 13, 13, 163.50/- (Rupees Thirty-Five Crores Thirteen LakhsThirteen Thousand One Hundred Sixty Three and Paisa Fifty Only).

TEXECUTIVE ENGINEER-VII