

**GUJARAT ENERGY TRANSMISSION CORPORATION LTD.
TR SUB- DIVISION BAREJADI**

SCHEDULE -B

Estimate for Shifting/Raising of various 66kV Lines under Narol AM Division passing through new Railway line project between Geratpur- Sanand Section under Western Railway Ahmedabad unit of Gujarat under deposit Scheme Option-I.

Sr No	SOR No	Description of Work/Supply	Unit	66kV Barejadi- Vinjol Line	66kV Barejadi GIS- Hirapur Line No. 1 and 2	66kV Vatva- Barejadi Line No. 1 and 2	66kV Lambha- Paladika nkaj H Frame	66kV Lambha- Paladika nkaj (13-15)and 66kV Jetalpur- Paladika nkaj (47-49)	66kV Lambha- Paladika nkaj (20-22)and 66kV Jetalpur- Paladika nkaj (54-56)	66kV Bhat- Sanathal & 66kV Bhat- Vishalpur	66kV Sanand- Bopal H Frame	Total	Tender Quantity	Rate Rs.	Amount Rs.
				Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty	Qty			
1	Part-A-1	Work of an original survey with line route alignment, preparation & submission of detail reports as per requirement of EIC in 6 copies including excavation for trail pits in any type of soil for soil classification work, the size of trial pits is 1x1x3 meter, 2 Nos. of such pits in 1 km length & providing and fixing of pre-cast permanent concrete blocks/stones of 150mm x 100mm x 300mm (LxBxH) on each deviation point / trial pit on entire line with chain age / Trail Pit number (TP-1) painted on it as per instruction of the EIC. The rate is inclusive of back filling of the pits so excavated after classification of soil for foundation. Detail scope of Work :- (a) Submission of feasible and shortest 3 numbers of line route on survey of India topo sheet and kmz file. Also, fixing and submission of one final route on survey of India Topo Sheet, on google map and kmz file as per requirement. (c) Preparing tower schedule with details like type of tower with summary - Indication of all angle point with fixing of suspension tower in between angle point, foundation type, sectional length, lat-long (co-ordinate), name of village, land type (Waste or agriculture), BOQ of foundation, BOQ of tower etc. as per requirement of EIC. (d) To take level of major crossing with detail & indicate detail about major nearby installation Like defense, Airport, Oil filled etc. (e) Submit all type of statutory details with drawing, which require for statutory approval i.e. Crossing of Electric Line (all type), Gas Line, National / State highways, Railway, Canal, Forest etc. Importantly, any work other than mentioned will align with the specific requirements outlined by the Engineer-in-Charge. Note : The survey report will be submit with sign and stamp of the surveyor agency and engineer in charge.	Km	0.674	0.7	0.632	0	0.456	0.5	0.769		3.731	4	9,467.00	37,868.00
2	Part-C-2	Original survey with route alignment (3 alternative route) on survey of India Topo sheets, detailed survey, preparation and submission of route alignment with modern techniques in 6 copies & providing pre-cast permanent concrete blocks/stones of 600mm x 300mm x 100mm on each deviation point on entire line with chain age painted on it, as per	KM	0	0	0	1.153	0	0	0	0.5	1.653	2	5,247.00	10,494.00
3	Part-A-3	Check Survey along with plotting of line route on village (tika) map with Coordinates including detailed survey, preparation of profiles and revision in original route alignment, if any and as per instruction of EIC.	Km	0.674	0.7	0.632	0	0.456	0.5	0.769		3.731	4	9,277.00	37,108.00
4		Excavation excluding back filling, but including shoring, shuttering, dewatering, tree cutting for tower footings etc. for :-													0.00
	Part-A-4a	a) Normal soil either dry or wet/Sandy soil	Cu.m	150	27.99	65	0	60	38	95		435.99	475	307.00	145,825.00
	Part-A-4b	b) Black Cotton Soil either dry or wet	Cu.m	330	65.31	240	0	200	150	350		1335.31	1350	614.00	828,900.00
	Part-A-4.d	(C). Black cotton Submerged /marine soil where dewatering is necessary	Cu.m	1	0	0	0	0	0	0		1	1	703.00	703.00
	Part-A-4.e	(.e.) Soft Rock	Cu.m	1	0	0	0	0	0	0		1	1	1,066.00	1,066.00
5	Part-A-5	Installation of steel reinforcement in concrete foundation including supply of GETCO Approved M.S. bars, binding wire. Work also includes their cutting, bending, shaping and binding with binding wire and fixing in position of TMT bars as per drawing before the concrete work and as per instruction of the EIC	MT	6	0.55	2	0	2	1.086	5.5		17.136	18	99,900.00	1,798,200.00
6	Part-A-6	Stub-setting with prop or template including back-filling, during back filling dispose of excess soil and levelling of site is to be done as per instructions of EIC but excluding excavation and concreting etc. for all types of towers/extensions except special towers. (Weight of stub, cleat & template with Bolt & Nuts of stub & template shall be counted)	MT	3	0.879	3.2	0	2.5	1.758	3		14.337	15	8,206.00	123,090.00
7	Part-A-7	Concreting of foundation by M20 mixture including shoring, shuttering, compaction, dewatering etc. for normal tower / tower with extension upto 25mtr. After completion of concrete work, curring (watering to concerte) is to be done as per instruction of EIC.	Cu.m	60	9.53	35	0	30	19.06	60		213.59	220	12,246.00	2,694,120.00
8	Part-A-7.b	Concreting of foundation by M15 mixture including shoring shuttering ;dewatering etc.for normal tower /tower with extension up to 21 mtr.(rates are with cement)	Cu.m	6.532	0	0	0	0	0	7		13.532	14	10,306.00	144,284.00

9	Part-A-8	Grounding of towers with pipe type earthing including excavation and back filling, with supply of all materials like 32mm dia heavy duty 3 mtr. long G.I. Pipe, 50 x 6 mm G.I. flat, GI bolt-nuts, with GI spring washer, salt, charcoal etc. as per drawing and as per instruction of EIC.	Set	3	1	3	0	3	2	3		15	30	8,985.00	269,550.00
10	Part-A-14	Erection of super structure upto 6 meter extension including tree cutting, fixing of tower accessories, attachments except ACD /DP /NP /CIP /PP and excluding tack welding of bolts as per instruction of EIC. This includes taking delivery of tower materials and bolt-nuts from GETCO's stores etc. for normal, extension & special towers at destination and keeping them	MT	14	4.55	13	0	11	8	16		66.55	75	10,076.00	755,700.00
11	Part-A-18a	Fixing of Anti-climbing devices including supply of barbed wire as per drawing and as per instruction of EIC. a) 66KV	Loc.	3	1	3	0	3	2	3		15	15	2,596.00	38,940.00
12	Part-A-19a	Fixing of DP / NP / PP / CIP including supply of plates and supply of G.I. bolts-nuts & tack welding as per drawings and as per instruction of EIC. A) S/C	Loc.	3	1	3	0	3	2	3		15	15	1,690.00	25,350.00
13	Part-A-20	Tack welding of nuts upto approx. 10 mtrs. height OR two bottom-most panel from ground level at three places on the nuts diametrically and applying zinc rich paint immediately after tack welding and as per instruction of EIC.	Per Bolt.	1500	500	1500	0	1500	1000	1500		7500	7500	15.00	112,500.00
14	Part-A-21	Dismantling of any type of tower including transportation & crediting to nearest GETCO's store or substation as per instruction of EIC.	Per MT	15	6.5	8	0	8	6	9		52.5	60	8,434.00	506,040.00
15	Part-A-22	Cutting of stubs of old tower to be dismantled including breaking of chimney/cutting of RCC upto 450mm below ground level & crediting stubs & steel bars to GETCO's store or substation including back-filling & leveling of site as per inst. of EIC.	Per tower	3	2	2	0	2	1	2		12	15	12,618.00	189,270.00
16	Part-A-23c	Work of Painting of Line name, Location No., two coat Painting Color code of desired length and telephone no. on Tower Leg with letter of Gujarati language using ISI marked Paint as per instruction of EIC including Supply of paints and other require materials. C). Two legs - For 1 Nos. of Line (S/C)													0.00
	Part-A-23b	All four legs - For 2 Nos. of Line (D/C)	per loc		1	3	0	3	2	3		12	20	431.00	8,620.00
	Part-A-23c	Two legs - For 1 Nos. of Line (S/C)	per loc	3			0	0				3	10	216.00	2,160.00
17	Part-B-1	Stringing of ONE ground wire including laying, jointing, tensioning, clamping with accessories, jumpering, & sister wire, vibration damper earth bond etc.& including tree cutting as per instruction of EIC.	RKM	0.85	0.218	0.478	0	0.243	0.315	0.562		2.666	3	16,843.00	50,529.00
18	Part-B-3	Stringing of ACSR/ AAAC 3 (Three) Dog conductors for single circuit including laying, jointing, tensioning, clamping with armour rods, hoisting of insulator string fixing of jumpers, dampers etc. & with required tree cutting on entire length for adequate clearances / safe charging of line, as per instruction of EIC.	RKM	0.532	0	0	0	0	0			0.532	1	39,916.00	39,916.00
19	Part-B-3	Stringing of ACSR/ AAAC 6 (Six) Dog conductors for Double circuit including laying, jointing, tensioning, clamping with armour rods, hoisting of insulator string fixing of jumpers, dampers etc. & with required tree cutting on entire length for adequate clearances / safe charging of line, as per instruction of EIC.	RKM	0	0	0.478	0	0	0			0.478	1	79,832.00	79,832.00
20	Part-B-4	-do- but for Stringing of ACSR/ AAAC 6 (SIX) conductors for double circuit. (Panther Conductor)	RKM	0	0.22	0	0	0.243	0.315	0.562		1.34	2	112,928.00	225,856.00
21	Part-B-13	Dismantling of Dog conductors and line materials of existing line including transportation & crediting to nearest GETCO's store or substation as per instruction of EIC.: (A) COLD CONDITION - 6 Conductors D/C	RKM	0.969	0	0.632	0	0	0	0	0	1.601	2	48,354.00	96,708.00
22	Part-B-13	Dismantling of Panther conductors and line materials of existing line including transportation & crediting to nearest GETCO's store or substation as per instruction of EIC.: (A) COLD CONDITION - 6 Conductors D/C	RKM	0	0.43	0	0	0.456	0.5	0.769		2.155	2.5	67,012.00	167,530.00
23	Part-B-13	Dismantling of Earth Wire and line materials of existing line including transportation & crediting to nearest GETCO's store or substation as per instruction of EIC.:	RKM	0.969	0.43	0.632	0	0.456	0.5	0.769		3.756	4	9,985.00	39,940.00

24		Erection of 66KV Double C type H frame structure for angular location upto 60-degree deviation/ dead end with channels, bracings, clamps etc. for double C type location including excavation, in normal/black cotton soil (Dry/Wet/submerged) and backfilling of earth, ramming and with supply of bolts, nuts, grounding with pipe type earthing as per drawing including excavation and back filling and supply of all materials like 32mm dia medium duty 2 mtr. long GI pipe (B class - Blue mark) and GI Flat of 50X6 mm size including supply of bolt nuts, salt, coal, charcoal, providing and fixing of NP with name of line/DP incl. supply of bolt and nuts and tack welding /punching as per drawings, Tack welding of nuts at three places on the nuts diametrically fitted to C ype structures and applying red oxide and zinc rich paint on it immediately after tack welding etc. as per drawing and painting of the complete structure including required tree cutting and transportation of all require materials as per instruction of EIC . Before erection, one coat of good quality primer must be applied to the complete structure and black Japan paint of standard make should be applied upto 3 mtr. from bottom. After erection. two coats of aluminum paint of Asian, Burger, Nerolac make shall be applied to the complete structure. (Work includes name of line , location number, color code and telephone number on D.P.(2 legs) for information of concerned S/S incl. supply of paints etc. providing and fixing of ACD on all the girders as per drawings)	No.				2	0			2	4	4	74,011.00	296,044.00
25	Part-C-5	Stringing of ACSR/AAAC - 3 (Three) Dog conductors for single circuit including laying, jointing, tensioning, clamping with armour rod, hoisting of insulator string, jumpering, fixing of dampers etc. complete as per specification including required tree cutting with adequate clearance and safe charging of Line and as per instruction of EIC.	Route KM				0.982	0			0.4	1.382	2	27,071.00	54,142.00
26	Part-C-7	Erection of stay set complete including excavation with stay clamp, turn buckle, eye bolt, anchor rod and binding with 7/8 or 7/10 SWG earth wire, as per instruction of EIC.	Set.				12	0			6	18	24	802.00	19,248.00
27	Part-C-8	Concreting of foundation for all the structures, with M15 mix. including concreting of stay sets with supply of materials like cement of 43 grade, sand, metal etc. with muffing (400 mm Dia x 300 mm Ht.) above ground level for all the structures. After completion of concrete work, watering to concerte is to be done as per instruction of EIC. Rates are inclusive of supply of GETCO approved Cement only.	CU.M.				6.48	0			4	10.48	11	10,306.00	113,366.00
28	Part-C-10i	Transportation of Girder / Rail from GETCO's nearest / any Store Centre to one end of the line including loading and unloading and as per instruction of EIC. up to 70 KMs (Upto 6 MT) - Lumsum (To be executed / considered for a particular Job / Lot while weight is not increasing 6 MT per Trip)	Job / Lot				1	0			1	2	2	16,848.00	33,696.00
29	Part-C-11	Conversion of 'A' type 'H' frame structure into 'B' type 'H' frame structure in existing line by replacing necessary channels etc. and termination and restringing of Dog or Panther 3 conductors for making LILO arrangement with existing line or for change over of line during availability of specified outage only. Supply of require size GI N/B will be in the scope of contractor. Item also include transportation of new B type channel from store / Substation as per availability to site and to be creadit the dismental old channel / any hardware and other materials if replaced to TR dept with necessary inventory as per instruction of EIC.	Job work (Per Loc)				2	0			1	3	5	34,042.00	170,210.00
30	Part-C-12	Dismantling of 'A' & 'B' type 'H' frame structure by breaking of muffing upto 450 mm depth from ground level and cutting the girders from 450 mm depth from ground level by gas cutting & crediting the material to GETCO Store or Substation including transportation as instructed by Engineer in-charge.	Loc.				2	0			2	4	4	7,656.00	30,624.00
31	Part-C-14	Dismantling of all three conductors and line materials such as insulators, hardwares etc. and crediting to the GETCO's Store or Substation including transporation as per instruction of Engineer in-charge with submission of pole wise inventory for preparing C.R.note.	Route Km.				1.153	0			0.5	1.653	2	16,136.00	32,272.00
32	Part-A-7	Concreting of foundation by M20 mixture including shoring, shuttering, compaction, dewatering etc. for normal tower / tower with extension upto 25mtr. After completion of concrete work, curring (watering to concerte) is to be done as per instruction of EIC. (Rates are inclusive of supply of GETCO approved Cement only.)	CU.M.				36.8	0			37	73.8	75	12,246.00	918,450.00
														Total Rs.	10,098,151.00
														GST 18%	1,817,667.18
														Total Amout with GST	11,915,818.18