

CIN - U40102GJ2003SGC042906 (A subsidiary of Gujarat Urja Vikas Nigam Limited)

## TENDER NOTICE No:-UGVCL/PROJECT/REMAINING AREA OF BOL GIDC/UG/83

	SCHEDULE-B									
	UNDERGROUND MAIN ELECTRICAL NETWORK AT REMAINING AREA OF BOL GIDC									
Sr. No.	Particulars of Item	Grand Total in Rs.								
1	TOTAL AMOUNT OF SCHEDULE-B1: UNDERGROUND MAIN ELECTRICAL NETWORK AT REMAINING AREA OF BOL GIDC	238452595.75								
2	TOTAL AMOUNT OF SCHEDULE-B2: ALL TYPES OF CIVIL WORKS	141148142.00								
Α	TOTAL	379600737.75								
3	GST @ 18%	68328132.80								
4	Welfare cess @ 1%	3796007.38								
В	Grand Total including GST	451724877.92								

Date

Signature of Bidder

Stamp

		SCHED	DULE-B1						
	UNDERGROUND MAIN ELECTRICAL N	TWOR	K AT REMAIN	IING AREA OF	BOL GIDC (Sanar	nd)	1		
Sr. No.	Particulars of Item	Unit	Supply Qty.	Unit Rate in Rs	Total in Rs	Erection Qty.	Unit Rate in Rs	Total in Rs	Grand Total in Rs.
A	<b>RMU</b> : Supply, Installation, Testing & Commissioning of SF6 gas insulated, 630Amp both sides extensible, SCADA compatible Ring Mains Units (RMU) as per the attached specifications: preferably Siemens/Schneider/ABB make as under excluding foundation.								
а	1 Circuit Breaker 2 Isolater	Nos	15.00	419316.0	6289740.00	15.00	2000.00	30000.00	6319740.00
b	1 Circuit Breaker 3 Isolater	Nos	15.00	558096.0	8371440.00	15.00	2000.00	30000.00	8401440.00
С	2 Circuit Breaker 2 Isolater	Nos	83.00	558096.0	46321968.00	83.00	2000.00	166000.00	46487968.00
d	4 Isolator (4-Way)	Nos	11.00	538096.0	5919056.00	11.00	2000.00	22000.00	5941056.00
в	PSS: Supply,Installation,Testing & Commissioning of 11/0.433 KV, Package Substation with RMU (which can be converted in to motorized operation at site, in future), 500 KVA transformer, LT Distribution board (without metering) as directed by engineer in charge. Rates are excluding the Plinth.								
а	500 KVA, 11/0.433 KV with 3 way RMU (1 CB 2 isolators)	Nos.	40	1,450,000.00	58,000,000.00	40	14,082.00	563,280.00	58563280.00
b	500 KVA, 11/0.433 KV with 4 way RMU (1 CB 3 isolators)	Nos.	20	1,600,000.00	32,000,000.00	20	14,082.00	281,640.00	32281640.00
с	HT CABLE : Supply, installation , Testing & commissioning of 11 kV(E), 3 Core, 300 mm <sup>2</sup> , XLPE Insulated Aluminum Conductor, Armored cable as per enclosed specifications. (Make as approved by UGVCL)	Mtrs							
а	11KV(E), 3 Core, 300 mm <sup>2</sup>	Nos	35632.00	1162.00	41404384.00	35632.00	172.50	6146520.00	47550904.00
D	HT CABLE ACESSARIES:								
а	OUT DOOR KIT: HT push on/heat shrink type end termination preferably 3m(m-seal) or Raychem make at switchgear end boxes, transformer for 11 kV XLPE Insulated Aluminum Conductor Armored cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool FOR OUT DOOR application								
i	3C X 300 mm <sup>2</sup> 11 KV XLPE	Nos	10.00	5635.00	56350.00	10.00	1041.00	10410.00	66760.00
b	IN DOOR KIT: HT push on/heat shrink type end termination preferably 3m(m-seal) or Raychem make at switchgear end boxes, transformer 11 kV XLPE Aluminum Conductor Armored cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool FOR IN DOOR application								
i	3c X300 mm <sup>2</sup> 11 KV XLPE	Nos	414.00	4508.00	1866312.00	414.00	1041.00	430974.00	2297286.00
с	STRAIGHT JOINT: HT push on/heat shrink type STRAIGHT JOINT preferably 3m(m-seal) or Raychem make for 11 kV XLPE Aluminium Conductor Armoured cable as specified with connection of leads including cutting, stripping of cable, insulations, providing compression type terminals, crimping of lugs with suitable crimping tool.								
i	3c X300 mm <sup>2</sup> 11 KV XLPE	Nos.	50.00	6999.00	349950.00	50.00	1041.00	52050.00	402000.00

		SCHEDULE-B1 UNDERGROUND MAIN ELECTRICAL NETWORK AT REMAINING AREA OF BOL GIDC (Sanand)										
Sr. No.	Particulars of Item	Unit		Unit Rate in Rs	Total in Rs	Erection Qty.	Unit Rate in Rs	Total in Rs	Grand Total in Rs.			
Е	EARTHING:											
а	EARTHING ELECTRODS: Supplying & erecting of maintained free earthing system comprising of Minimum 17 mm dia 3 mtr Long Earthing Electrode of low carbon steel electrode with 250 microns copper coating + carbon based conductive concrete back fill safe compound(resistivity of less than 0.10 ohm mtr) & copper clamp. Supply, Erecting and Install pre cast RCC Earth pit Chamber (ID/OD: 400/500, H-500), Making 100 mm Dia Bore, 3 Mtr Long, Making of Earth pit chamber in normal Soil. As per attached Drawing	Nos.	598.00	8700.00	5202600.00	598.00	1500.00	897000.00	6099600.00			
b	EARTHING STRIP: Supply installation & commissioning of earthing conductor 38 x 3mm G.I. strip for pole mounted transformer and up to FSP,RMU as well as connection to be made to the earth pit. Rates inclusive of hot dipped hard wares.	Mtrs.	6578.00	107.00	703846.00	6578.00	52.00	342056.00	1045902.00			
F	CEI APPROVAL: To prepare lay out, drawings of consumer wise installation and to obtain statutory approval from Electrical Inspector for installation of the system consumer wise.(CEI fees shall be in the scope of UGVCL)	Job				1.00	104,120.00	104120.00	104120.00			
G	MSP: (Mini Section Piller): Supplying and erecting 120x100x40 cms. Mini section pillar fabricated from 4 mm thick Thermosetting Plastic(moulded in a single piece) i.e. Glass Reinforced Polyester Sheet Moulding Compound (SMC) with cable clamps to be burried in ground to have appropriate erection on look uniform unit erected with cement concrete foundation and 45 cms high brick masonary internal supported on both side with internal and outer side locking arrangement with lock and keys in duplicate. Incoming HRC SMC fuse base and knife type links 32 Amp to 250 Amp Capacity copper Busbar with RYB colour coding and insulated strip with all internal connections and entry for incoming 1 Core 300 Sq.mm 4 Nos. and outgoing 5/6 nos. 3.5 core cables of suitable sizes.(As per Technical specification of MSP)	Nos.	110	39445.00	4338950.00	110	2082.00	229020.00	4567970.00			
н	<b>DRAWING:</b> Preparing complete drawing of entire network as well as individual feeder map showing joints also in AutoCad and providing the same to UGVCL in AutoCad copy as ell as pdf copy and hard copy in six sets. The drawing should be geographical indicating all directions	Job				1.00	25000.00	25000.00	25000.00			
Ι	FENCING: FRP Fencing for RMU and PSS, post shall be made out of FRP Pultruded hollow section of size 50x50x5mm and shall be grouted in the ground with c. c. of ratio 1:3:6., Sub frame provided using hollow FRP section 50x25x5mm or FRP angles 50x50x5 at top and bottom and other accessories for fixing of gates etc. Rails shall be made out of FRP notch bars of 12mm dia, Pickets shall be made of flats of size 35x5mm SMC or FRP as per specifications and Drawing NO: UGVCL/R&D/Fencing/FRP/001	RMT	1264.80	2700.00	3414960.00	1264.80	445.00	562836.00	3977796.00			
J	<b>Push Through</b> : Providing and Laying of HDPE ducts confirming to IS:4984 at a minimum depth of 1000mm below the road surface by pushthrough method by drilling the road with HDD machine without breaking the road surface for laying of cable for internal GIDC road crossing for enclosing XLPE insulated aluminum armoured cable through the duct as under as per the instructions of EIC.											
а	OD/ID 120/90.mm, minimum thickness 5 mm as per IS (Amendment no. 2 - IS 4984:1995) PE-100, 6kg/cm <sup>2</sup> , for 11kv,3C 300mm <sup>2</sup> /1.1kv 3.5CX120 mm <sup>2</sup> cable	Mtrs.	5345.00	525.00	2806125.00	5345.00	948.75	5071068.75	7877193.75			
к	Cable Tag: The PVC Cable tag for HT/LT cables shall be provided at a distance of every 10 RMT stating detail as under.	Nos										
a	UGVCL/HT cable/Feeder Name/SS name		10000.00	15.00	150000.00	10000.00	5.00	50000.00	200000.00			
b c	UGVCL/LT cable/TC Name/FSP Name RMU name/Feeder Name/SS name/		4									
	TC Name/FSP Name		1									
4	LT CABLE: Providing & erecting XLPE(IS:7098) (I)- 88 ISI marked Armored cable multistoried	1										
L	Aluminum conductor for 1.1 kV to be laid on pole or in existing cable thence/pipe at road crossing of following size of cables.											
а	3.1/2 Core 240 mm <sup>2</sup> (35 mm <sup>2</sup> 1/2 Core)	Mtrs.	4400.00	777.00	3418800.00	4400.00	75.00	330000.00	3748800.00			
b	3.1/2 Core 120 mm <sup>2</sup> (70 mm <sup>2</sup> 1/2 Core)	Mtrs.	4400.00	415.00	1826000.00	4400.00	50.00	220000.00	2046000.00			
м	LT CABLE ACESSARIES: Cable termination on MSP,LT Distribution Transformer Box of pole mounted transformer of LT cable grade as specified below including cutting, stripping of cable,insulations,providing compression type terminals, suitable cable glands, crimping lugs with necessary connections.(INDOOR)											
а	3.1/2 Core 240 mm <sup>2</sup> (35 mm <sup>2</sup> 1/2 Core)	Nos	220.00	1,000.00	220000.00	220.00	126.00	27720.00	247720.00			
b	3.1/2 Core 120 mm <sup>2</sup> (70 mm <sup>2</sup> 1/2 Core)	Nos	220.00	785.00	172700.00	220.00	126.00	27720.00	200420.00			
			TOTAL	-	222833181.00			15619414.75	238452595.75			

	SCHEDULE	-B2 (Cl	VIL)						
	UNDERGROUND MAIN ELECTRICAL NETWORK	AT RE	MAININ	IG AREA (	OF BOL GI	DC (Sanand	)		
	Particulars of Item		Supply				Erectio	n	
Sr. No.		Unit	Qty.	Unit Rate in Rs	Total in Rs	Qty.	Unit Rate in Rs	Total in Rs	Grand Total in Rs.
A	<b>RCC CABLE TRENCH:</b> Construction of RCC cable trench (Three tier / Four tier) as per approved design and drawing and as per directives of engineer-in-charge with required excavation as per site condition, Base concreting, providing and laying of reinforcement as per design, concreting of M-20 grade for Pardi and Raft, Precast RCC cover of 75 mm thick, fabrication of cable tray as per design with one coat of red oxide and two coats of oil paintaing to structural steel, two coats of waterproof cement paint to all inside, outside surfaces of cable trench with top cover. the work to be done as per drawing and PWD specification. Detail description of major civil work activites involved are as under.								
	<ul> <li>i. Excavation for foundation in dense or hard soil up to 1.5 M depth including sorting out and stacking of useful materials and disposing of the excavated stuff up to 50 meter lead. And filling excavated stuff in trenches and besides cable trench in layers not exceeding 20 cm in depth with consolidating/watering etc. complete.</li> <li>ii. Providing and laying cement concrete 1:4:8 (1 cement :4 coarse sand :8 Machine crush metal</li> </ul>								
	aggregates 40 mm nomial size) and curing complete including cost of form work in foundation etc. complete.								
	iii. Providing and laying control cement concrete M200 and curing complete including cost of form work and reinforcement for reinforced cement concrete work in (A)Raft Foundations, vertical pardi etc.(Form work of steel sheet to be utilized.)								
	iv. Providing and placing 75mm thick Precast RCC cover of size 1500 x 300mm, made in M-200 cement concrete with necessary reinforcement of 3 Nos. of 10 mm TMT bars bars as main bar and 8 mm TMT distribution bars at 200mm c/c incl providing 8mm TMT bars hook for lifting arrangement & curing, finishing all the surfaces etc complete incl. placing in position at site.								
	v. Providing and fabrication of structural steel for cable tray including cuting, erecting, fixing in position and applying one coat of red oxide & two coats of oil painting in angles, flat and like section etc complete.								
	vi.Expansion Joint: Providing and placing 12 mm thick premoulded asphalt or bitumen cork board filler joint at every 50 Mtr length.								
	(VII) Painting the inside, outside of Cable trench wall including precast cover with two coats of water proofing cement paint.								
1	Three tier cable trench as per approved design and drawing	RMT	0.00	0.00	0.00	14935.00	8806.00	131517610.00	131517610.00

	SCHEDULE-B2 (CIVIL)										
	UNDERGROUND MAIN ELECTRICAL NETWORK AT REMAINING AREA OF BOL GIDC (Sanand)										
-				Supply	1		Erectio	n			
Sr. No.	Particulars of Item	Unit	Qty.	Unit Rate in Rs	Total in Rs	Qty.	Unit Rate in Rs	Total in Rs	Grand Total in Rs.		
в	<b>Murrum:</b> Providing and filling in foundation and plinth with murrum OR selected soil in layers of 20 mm thickness including watering, ramming and consolidating etc complete. <b>NOTE:</b> (1) Earth for filling to be brought from outside. (2) Item to be operated if required as per site conditions.	СМТ	0.00	0.00	0.00	1200.00	286.00	343200.00	343200.00		
с	<b>Sand Filling</b> : Providing & Filling in foundation and plinth with approved quality of sand including watering, ramming, consolidating and dressing etc complete (Item to be operated if required as per site conditions).		0.00	0.00	0.00	1200.00	398.00	477600.00	477600.00		
D	<b>Raising of cable trench wall:</b> Providing & laying controlled cement concrete M-200 for RCC pardi wall and curing complete including cost of form work and reinforcement steel etc complete. <b>NOTE:</b> (1) Rate per SMT is for actual raising of each side wall beyond cable trench height as per drawing. (2) item to be operated if required as per site condition.		0.00	0.00	0.00	500.00	1490.00	745000.00	745000.00		
Е	<b>RCC Stopper Wall at end of cable trench:</b> Construction of 150 mm thick RCC stopper wall at end of cable trench as per approved drawing in cement concrete 1:2:4 including TMT bar reinforcement main/vertical bars and distribution bar of 8 mm dia @ 200 mm c/c both side including bending, binding and placing in position as per drawing and form work of steel sheets so as to give a fair finish including centering, shuttering, strutting and propping etc including providing & fixing 110 mm dia. PVC pipe(6 kg/cm2) of 400mm length across the stopper wall with coupler & plug for future cable laying etc complete as per drawing and as directed by EIC.	JOB	0.00	0.00	0.00	130.00	2325.00	302250.00	302250.00		

	SCHEDULE								
		AT RE				DC (Sanand	,	_	
Sr. No.	Particulars of Item	Unit	Qty.	Supply Unit Rate in Rs	Total in Rs	Qty.	Erection Unit Rate in Rs	n Total in Rs	Grand Total in Rs.
F	<b>RMU Plinth:</b> Construction of RCC foundation for 3 way, 4-way RMU as per approved drawing including required excavation for foundation in dense or hard soil, including 100 mm thick cement concrete 1:4:8 for foundation, 300 mm thick RCC wall on one side & 200 mm thick RCC wall on other side in cement concrete 1:2:4 with providing and laying TMT bar rainforcement 10 mm dia 150mm c/c main/vertical bars and 8 mm dia 200 mm c/c distribution bar including bending, binding and placing in position and formwork of steel sheets so as to give a fair finish including curing and fabrication & fixing of structural steel 100x50mm M.S channel box etc. complete as per approved drawing and as directed by EIC.(item rate includes all materials, labours,tool & tackles etc.)								
1	3-Way RMU Plinth :	Nos	0.00	0.00	0.00	15.00	22311.00	334665.00	334665.00
2	4-Way RMU Plinth :	Nos.	0.00	0.0	0.00	109.00	24813.00	2704617.00	2704617.00
G	<b>PSS Plinth</b> : Construction of RCC foundation for PSS as per approved drawing incl. excavation for foundation including sorting out dense or hard soil, 100 mm thick cement concrete 1:4:8 for foundation, 300 mm thick RCC wall, 100 mm beam in cement concrete 1:2:4 incl. curing with providing & laying TMT bar reinforcement 10 mm dia 150 mm c/c main/vertical bars and 8 mm dia 200 mm c/c distribution bar including bending, binding and placing in position and formwork of steel sheets so as to give a fair finish including centering, shuttering, strutting and propping etc. Incl. fabrication & fixing of structural steel 100x50mm M.S channel box etc. complete as per approved drawing and as directed by EIC.(item rate includes all materials, labours, tool & tackles etc.)								
	3-Way PSS Plinth :	Nos	0.00	0.00	0.00	40.00	41060.00	1642400.00	1642400.00
2	4-Way PSS Plinth :	Nos.	0.00	0.0	0.00	20.00	47130.00	942600.00	942600.00
н	PRECAST RCC CABLE GUARD BLOCK: Providing & placing precast RCC cable guard block as per approved design and drawing made in M-200 concrete including required excavation for laying of under ground cable. Unit <i>1.0 Rmt consists of total 3-nos of precast RCC cable guard block assembly</i> . Precast RCC cable guard block (01-no.) of size 1000mmx300x50mm to be laid horizontaly and Precast RCC cable guard block (02-no.) of size 1000x300x50mm to be laid vertically incl. providing & laying reinforcement steel of 2 nos. of 6 mm dia. main longitudinal bars & 6 nos. of 6mm dia. distribution bars in all three precast RCC cable guard blocks as per approved drawing including necessary form work of steel sheets, curing, finishing all the surfaces and placing in position at site. The pre bond tape 300mm wide and continuously printed with "UGVCL POWER CABLE" and caution mark of approved make shall be laid 300mm above on top of horizontal RCC block along the length. Work to be done as per specifications and approved drawing etc. complete. (Item rate includes supply & erection)	Mtrs.	0.00	0.00	0.00	1200.00	323.00	387600.00	387600.00

	SCHEDULE	-B2 (C	IVIL)						
		AT RI	EMAININ			DC (Sanand	/		l
Sr. No.	Particulars of Item	Unit	Qty.	Supply Unit Rate in Rs	Total in Rs	Qty.	Erectio Unit Rate in Rs	n Total in Rs	Grand Total in Rs.
I	<b>CABLE ROUTE MARKER:</b> Providing & placing cable route marker as per drawing No. UGVCL/R&D/RM-001 duly marked with "DANGER" mark, "UGVCL POWER CABLE" and arrow of route of cable made of precast RCC block in M-200 concrete of size 220x75x800mm having top width round shaped as per drawing including providing & laying reinforcement steel of 1 no. x 10 mm dia tor steel main bar and 6nos. x 8mm dia. tor steel distribution bars as per drawing including necessary excavation, form work of steel sheets, curing, finishing all the surfaces and placing in position at site incl. fixing block by providing & laying 75mm thick PCC (1:4:8) on all vertical sides & bottom of precast RCC block as per approved drawing etc. complete. (Rate is inclusive of cost of form work and reinforcement steel )	Nos	0.00	0.00	0.00	150.00	460.00	69000.00	69000.00
J	<b>Hole in Trench Wall:</b> Making of precise size of hole in 150mm thick RCC cable trench wall using machine tool to avoid addition damages to the trench wall for fixing/passing of 120mm (OD) DWC HDPE duct and sealing the gap between outer surface of the duct and wall hole with rich mixture of cement and sand to avoid water or dust ingress in to the trench for cable outlet as per the instructions of EIC.	Nos	0.00	0.00	0.00	300.00	200.00	60000.00	60000.00
к	Brick work using common burnt clay using building bricks having crushing strength not less than 35 kg/sqcm in foundation and plinth in cement mortar 1:6. (Item rate includes supply & erection)		0.00	0.00	0.00	500.00	2798.00	1399000.00	1399000.00
L	Providing 10 mm thick cement plaster in single coat on brick/ concrete walls for plastering up to floor two level and finished even and smooth in (i) Cement mortar 1:3 including finishing with floating coat of neat cement slurry. <b>(Item rate includes supply &amp; erection)</b>	CNAT	0.00	0.00	0.00	2000.00	111.30	222600.00	222600.00
			ΤΟΤΑ	L	0.00			141148142.00	141148142.00

Date

Signature of Bidder

Stamp