## GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED

TRANSMISSION CIRCLE MAKTUMPUR, BHARUCH- 392012



# **TENDER SPECIFICATION FOR**

(R&M) REPLACEMENT OF CONDUCTORS, INSULATORS HARD WARE ETC. FOR STRENGTHENING OF 66 KV D/C BHARUCH-HALDARVA-PALEJ LINE UNDER TRANSMISSION CIRCLE, BHARUCH

## PART- I TECHNICAL & COMMERCIAL BID

# TENDER SPECIFICATION NO. TCBRH/2012/8

INDEX					
Sr. No.	Document	Document Code	Part	Page No.	
1.	Notice Inviting Tender	-	Ι		
2.	General Conditions of Contract	GCC	I (A)	9 - 42	
3.	Erection Conditions of Contract	ECC	I (B)	43 - 51	
4.	Special Conditions of Contract with Declaration Form	SCC	I (C)	52	
5	Commercial Terms & Conditions for dismantling & restringing work.		I (D)	53 - 62	
6	Commercial Terms & Conditions for payment of cost of old line materials.		I (E)	63 - 65	
7	Technical Particulars		I (F)	66 - 72	
8.	Schedules		I (G)	73 - 112	
9	Drawings			112 - 118	

LAUSE NO.	TITLE	PAGE NO
I [A]	GENERAL CONDITION OF CONTRACT (GCC)	9 - 42
1	GENERAL PARTICULARS	9
2	SCOPE OF THE PROPOSAL AND WORK	9
3	BIDDING COSTS	10
4	DETAILS OF DOCUMENTS	10
5	KNOWING THE BID DOCUMENTS	10
6	CLARIFICATIONS ON BID DOCUMENTS	10
7	AMENDMENT OF BIDDING DOCUMENT	10
8	LANGUAGE OF BID	11
9	LOCAL CONDITIONS	11
10	DOCUMENTS COMPRISING THE BID	11
11	BID PRICE	11
12	BID SECURITY/EMD	12
12	FORMAT OF BID	12
13	SIGNATURE OF BIDS	
		13
15	SEALING AND MARKING OF BIDS	13
16	DEADLINE FOR SUBMISSION OF BIDS	14
17		15
18	MODIFICATION AND WITHDRAWAL OF BIDS	15
19	INFORMATION REQUIRED WITH THE PROPOSAL	15
20	OPENING OF BIDS BY OWNER	15
21	PURPOSE OF EVALUATION OF BIDS	16
22	POLICY FOR BIDS UNDER CONSIDERATION	16
23	PRELIMINARY EXAMINATION	16
24	AWARD CRITERIA	17
27	OWNER'S RIGHT TO ACCEPT / REJECT ANY OR ALL BIDS	17
28	NOTIFICATION OF AWARD	17
29	SIGNING OF CONTRACT	17
30	DEFINITION OF TERMS	18
31	APPLICATION & STANDARDS	20
32	LANGUAGE AND MEASURES	20
33	PRICE BASIS	20
34	TAXES AND DUTIES	20
35	TAXES, PERMITS & LICENCES	21
36	PRICE INCLUSIONS (INCLUDING TAXES & DUTIES)	21
37	CONTRACT PERFORMANCE GUARANTEE	22
38	GUARANTEE & PERFORMANCE GUARANTEE	23
39	TIME SCHEDULE	24
40	TIME – THE ESSENCE OF CONTRACT	24
41	PENALTY FOR DELAY	24
42	DELAYS BY OWNER OR HIS AUTHORISED AGENTS	25
44	PRESENTATION OF BILLS & PAYMENTS	25
45	DEDUCTIONS FROM CONTRACT PRICE	26
46	TERMS OF PAYMENT	26
47	TAKING DELIVERY AND INSURANCE	27
48	CONTRACT QUALITY ASSURANCE	28
49	ERECTION TOOLS AND TACKLES	28
50	BRAND NAMES	20
51	CONTRACT DOCUMENTS	29
52	USE OF CONTRACT DOCUMENTS AND INFORMATION	29
	CONSTRUCTION OF THE CONTRACT	
<u>53</u> 54	JURISDICTION OF CONTRACT	<u> </u>

FORCEMENT OF TERMS30MPLETION OF CONTRACT31PLACEMENT OF DEFECTIVE PARTS AND MATERIALS31TENT RIGHTS AND ROYALTIES31FENCE OF SUITS32GINEER'S DECISION32WER TO VARY OR OMIT WORK32SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RTIACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS3930UR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43(NER'S LIEN ON EQUIPMENT43	55		
MPLETION OF CONTRACT31PLACEMENT OF DEFECTIVE PARTS AND MATERIALS31TENT RIGHTS AND ROYALTIES31FENCE OF SUITS32IITATION OF LIABILITIES32GINEER'S DECISION32WER TO VARY OR OMIT WORK32SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35KING OVER35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36SPENSION OF WORK36NTRACTOR'S DE FAULT36RIMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43(NER'S LIEN ON EQUIPMENT43		EXECUTION OF CONTRACT	30
PLACEMENT OF DEFECTIVE PARTS AND MATERIALS31TENT RIGHTS AND ROYALTIES31FENCE OF SUITS32IITATION OF LIABILITIES32GINEER'S DECISION32WER TO VARY OR OMIT WORK32SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT37USTRATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	56	ENFORCEMENT OF TERMS	
TENT RIGHTS AND ROYALTIES31FENCE OF SUITS32IITATION OF LIABILITIES32GINEER'S DECISION32WER TO VARY OR OMIT WORK32SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35ANGE OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36SPENSION OF WORK36NTRACTOR'S DE FAULT36RTIACTOR'S DE FAULT37USTRATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS3930UR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43QULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	57	COMPLETION OF CONTRACT	
FENCE OF SUITS32IITATION OF LIABILITIES32GINEER'S DECISION32WER TO VARY OR OMIT WORK32SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35ANGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RTATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS3930UR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	58	REPLACEMENT OF DEFECTIVE PARTS AND MATERIALS	
IITATION OF LIABILITIES32GINEER'S DECISION32WER TO VARY OR OMIT WORK32SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36SPENSION OF WORK36NTRACTOR'S DE FAULT36RTIFIS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43QULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	59	PATENT RIGHTS AND ROYALTIES	
GINEER'S DECISION32WER TO VARY OR OMIT WORK32SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36SPENSION OF WORK36NTRACTOR'S DE FAULT36RTIFLS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43QULATION OF LOCAL AUTHORITIES AND STATUTES43(NER'S LIEN ON EQUIPMENT43	60	DEFENCE OF SUITS	
WER TO VARY OR OMIT WORK32SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35XING OVER35BILITY FOR ACCIDENTS AND DAMAGES35BILITY FOR ACCIDENTS AND DAMAGES36SPENSION OF WORK36SPENSION OF WORK36RTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TILEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43(J) ARTION OF LOCAL AUTHORITIES AND STATUTES43(I) ARTION OF LOCAL AUTHORITIES AND STATUTES43 <td>61</td> <td>LIMITATION OF LIABILITIES</td> <td></td>	61	LIMITATION OF LIABILITIES	
SIGNMENT AND SUB-LE TTING OF CONTRACT33ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT37USTRATION OF CONTRACT ON OWNER'S INITIATIVE37VARTAND OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43(JULATION OF LOCAL AUTHORITIES AND STATUTES43(INER'S LIEN ON EQUIPMENT43	62	ENGINEER'S DECISION	
ANGE OF QUANTITY33CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35VING OVER35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/INER'S LIEN ON EQUIPMENT43	63		
CKING, FORWARDING AND SHIPMENT34OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35VING OVER35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/INER'S LIEN ON EQUIPMENT43	64		
OPERATION WITH OTHER CONTRACTORS & ENGRS.34WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND35BILITY OF THE CONTRACTOR35OGRESS REPORTS35KING OVER35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RINNATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/INER'S LIEN ON EQUIPMENT43	65		
WAIVER OF RIGHTS34RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND BILITY OF THE CONTRACTOR35OGRESS REPORTS35OGRESS REPORTS35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR`S DE FAULT36RMINATION OF CONTRACT ON OWNER`S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	66		
RTIFICATE NOT TO AFFECT RIGHT OF OWNER AND BILITY OF THE CONTRACTOR35OGRESS REPORTS35(ING OVER35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	67		
BILITY OF THE CONTRACTOROGRESS REPORTS35OGRESS REPORTS35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	68		
OGRESS REPORTS35KING OVER35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT ON OWNER'S INITIATIVE37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	69		35
KING OVER35ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT ON OWNER'S INITIATIVE37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	70		05
ANSFER OF TITLE35BILITY FOR ACCIDENTS AND DAMAGES35BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT ON OWNER'S INITIATIVE37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	70 71		
BILITY FOR ACCIDENTS AND DAMAGES35MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT ON OWNER'S INITIATIVE37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43			
MURRAGE, WHARFAGE, ETC36RCE MAJEURE36SPENSION OF WORK36NTRACTOR`S DE FAULT36RMINATION OF CONTRACT ON OWNER`S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	72		
RCE MAJEURE36SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	73 74		
SPENSION OF WORK36NTRACTOR'S DE FAULT36RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	74		
NTRACTOR`S DE FAULT36RMINATION OF CONTRACT ON OWNER`S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	76		
RMINATION OF CONTRACT ON OWNER'S INITIATIVE37USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	70		
USTRATION OF CONTRACT37AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	78		
AFTS AND COMMISSIONS ETC.38TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	79		
TTLEMENT OF DISPUTES & ARBITRATION38CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	80		
CONCILIATION OF ACCOUNTS39BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	00		00
BOUR LAWS39ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43		SETTLEMENT OF DISPUTES & ABBITRATION	38
ECTION CONDITIONS OF CONTRACT (ECC)43 - 51NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	81		
NERAL43GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	81 82	RECONCILIATION OF ACCOUNTS	39
GULATION OF LOCAL AUTHORITIES AND STATUTES43/NER'S LIEN ON EQUIPMENT43	81 82 83	RECONCILIATION OF ACCOUNTS LABOUR LAWS	39 39
INER'S LIEN ON EQUIPMENT 43	81 82 83 I [B]	RECONCILIATION OF ACCOUNTS	39 39 <b>43 - 51</b>
	81 82 83 <b>I [B]</b> 1	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL	39 39 <b>43 - 51</b> 43
	81 82 83 <b>I [B]</b> 1 2	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL      REGULATION OF LOCAL AUTHORITIES AND STATUTES	39 39 <b>43 - 51</b> 43 43
	81 82 83 <b>I [B]</b> 1 2 3	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL      REGULATION OF LOCAL AUTHORITIES AND STATUTES      OWNER'S LIEN ON EQUIPMENT	39 39 <b>43 - 51</b> 43 43 43
	81 82 83 <b>I [B]</b> 1 2 3 4	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL      REGULATION OF LOCAL AUTHORITIES AND STATUTES      OWNER'S LIEN ON EQUIPMENT      ACCESS TO SITE AND WORKS ON SITE	39 39 <b>43 - 51</b> 43 43 43 43
	81 82 83 <b>I [B]</b> 1 2 3 4 5	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL      REGULATION OF LOCAL AUTHORITIES AND STATUTES      OWNER'S LIEN ON EQUIPMENT      ACCESS TO SITE AND WORKS ON SITE      CONTRACTOR'S SITE ESTABLISHMENT	39 39 <b>43 - 51</b> 43 43 43 43 43 43
-OPERATION WITH OTHER CONTRACTORS 44	81 82 83 <b>I [B]</b> 1 2 3 4	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL      REGULATION OF LOCAL AUTHORITIES AND STATUTES      OWNER'S LIEN ON EQUIPMENT      ACCESS TO SITE AND WORKS ON SITE	39 39 <b>43 - 51</b> 43 43 43 43 43 43 43
-OPERATION WITH OTHER CONTRACTORS 44	81 82 83 <b>I [B]</b> 1 2 3 4 5	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL      REGULATION OF LOCAL AUTHORITIES AND STATUTES      OWNER'S LIEN ON EQUIPMENT      ACCESS TO SITE AND WORKS ON SITE      CONTRACTOR'S SITE ESTABLISHMENT	39 39 <b>43 - 51</b> 43 43 43 43 43 43 43
-OPERATION WITH OTHER CONTRACTORS 44 CIPLINE OF WORKMEN 44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORS	39 39 <b>43 - 51</b> 43 43 43 43 43 43 43 44
-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATION	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44
-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORT	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44
-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORT	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 9 10 11	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORK	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44GCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 10 11 12	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOUR	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44GCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 9 10 11	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORK	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 10 11 12	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOUR	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46EE PROTECTION & SECURITY46	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITY	39 39 43 - 51 43 43 43 43 43 43 43 43 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46E PROTECTION & SECURITY46E-COMMISSIONING TRIALS AND INITIAL OPERATIONS46	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15 16	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITYPRE-COMMISSIONING TRIALS AND INITIAL OPERATIONS	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46EE PROTECTION & SECURITY46E-COMMISSIONING TRIALS AND INITIAL OPERATIONS46TERIALS HANDLING AND STORAGE47	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 12 13 14 15 16 17	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITYPRE-COMMISSIONING TRIALS AND INITIAL OPERATIONSMATERIALS HANDLING AND STORAGE	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46EE PROTECTION & SECURITY46E-COMMISSIONING TRIALS AND INITIAL OPERATIONS46TERIALS HANDLING AND STORAGE47NSTRUCTION MANAGEMENT47	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITYPRE-COMMISSIONING TRIALS AND INITIAL OPERATIONSMATERIALS HANDLING AND STORAGECONSTRUCTION MANAGEMENT	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46E PROTECTION & SECURITY46E-COMMISSIONING TRIALS AND INITIAL OPERATIONS46TERIALS HANDLING AND STORAGE47NSTRUCTION MANAGEMENT47LD OFFICE RECORDS48	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 12 13 14 15 16 17 18 19	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITYPRE-COMMISSIONING TRIALS AND INITIAL OPERATIONSMATERIALS HANDLING AND STORAGECONSTRUCTION MANAGEMENTFIELD OFFICE RECORDS	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
	81 82 83	RECONCILIATION OF ACCOUNTS LABOUR LAWS	3
NTRACTOR'S SITE ESTABLISHMENT 43	81 82 83 <b>I [B]</b> 1 2 3 4	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL      REGULATION OF LOCAL AUTHORITIES AND STATUTES      OWNER'S LIEN ON EQUIPMENT      ACCESS TO SITE AND WORKS ON SITE	39 39 <b>43 - 51</b> 43 43 43 43
	81 82 83 <b>I [B]</b> 1 2 3 4 5	RECONCILIATION OF ACCOUNTS      LABOUR LAWS      ERECTION CONDITIONS OF CONTRACT (ECC)      GENERAL      REGULATION OF LOCAL AUTHORITIES AND STATUTES      OWNER'S LIEN ON EQUIPMENT      ACCESS TO SITE AND WORKS ON SITE      CONTRACTOR'S SITE ESTABLISHMENT	39 39 <b>43 - 51</b> 43 43 43 43 43 43
-OPERATION WITH OTHER CONTRACTORS 44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORS	39 39 <b>43 - 51</b> 43 43 43 43 43 43 43
-OPERATION WITH OTHER CONTRACTORS 44 CIPLINE OF WORKMEN 44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORS	39 39 <b>43 - 51</b> 43 43 43 43 43 43 43 44
-OPERATION WITH OTHER CONTRACTORS44GCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMEN	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44
-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATION	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44
-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORT	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORT	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 10 11	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORK	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44GCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 10 11 12	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOUR	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13 14	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADES	39 39 43 - 51 43 43 43 43 43 43 43 43 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46EE PROTECTION & SECURITY46	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITY	39 39 43 - 51 43 43 43 43 43 43 43 43 43 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46EE PROTECTION & SECURITY46	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITY	39 39 43 - 51 43 43 43 43 43 43 43 43 43 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46E PROTECTION & SECURITY46E-COMMISSIONING TRIALS AND INITIAL OPERATIONS46	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15 16	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITYPRE-COMMISSIONING TRIALS AND INITIAL OPERATIONS	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46EE PROTECTION & SECURITY46E-COMMISSIONING TRIALS AND INITIAL OPERATIONS46TERIALS HANDLING AND STORAGE47	81 82 83 1[B] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 12 13 14 15 16 17	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITYPRE-COMMISSIONING TRIALS AND INITIAL OPERATIONSMATERIALS HANDLING AND STORAGE	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
-OPERATION WITH OTHER CONTRACTORS44-OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46E PROTECTION & SECURITY46E-COMMISSIONING TRIALS AND INITIAL OPERATIONS46TERIALS HANDLING AND STORAGE47NSTRUCTION MANAGEMENT47	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITYPRE-COMMISSIONING TRIALS AND INITIAL OPERATIONSMATERIALS HANDLING AND STORAGECONSTRUCTION MANAGEMENT	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44
OPERATION WITH OTHER CONTRACTORS44OPERATION WITH OTHER CONTRACTORS44SCIPLINE OF WORKMEN44NTRACTOR'S FIELD OPERATION44OGRESS REPORT44N-POWER REPORT44OTECTION OF WORK45PLOYMENT OF LABOUR45CILITIES TO BE PROVIDED BY THE OWNER/CONTRACTOR45ES AND GRADES46E PROTECTION & SECURITY46E-COMMISSIONING TRIALS AND INITIAL OPERATIONS46TERIALS HANDLING AND STORAGE47NSTRUCTION MANAGEMENT47LD OFFICE RECORDS48	81 82 83 <b>I [B]</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	RECONCILIATION OF ACCOUNTSLABOUR LAWSERECTION CONDITIONS OF CONTRACT (ECC)GENERALREGULATION OF LOCAL AUTHORITIES AND STATUTESOWNER'S LIEN ON EQUIPMENTACCESS TO SITE AND WORKS ON SITECONTRACTOR'S SITE ESTABLISHMENTCO-OPERATION WITH OTHER CONTRACTORSDISCIPLINE OF WORKMENCONTRACTOR'S FIELD OPERATIONPROGRESS REPORTMAN-POWER REPORTPROTECTION OF WORKEMPLOYMENT OF LABOURFACILITIES TO BE PROVIDED BY THE OWNER/CONTRACTORLINES AND GRADESFIRE PROTECTION & SECURITYPRE-COMMISSIONING TRIALS AND INITIAL OPERATIONSMATERIALS HANDLING AND STORAGECONSTRUCTION MANAGEMENT	39 39 43 - 51 43 43 43 43 43 43 43 44 44 44 44 44 44

I [G]	SCHEDULES & DRAWINGS	73 - 118	
11	HANDING OVER OF LINE DOCUMENTS	71	
10		71	
9		71	
8	INSULATOR HOISTING & STRINGING	70	
7	PROVIDING & FIXING OF PLATES	70	
6	STRENGTHENING OF CROSS ARM & INSULATOR HOISTING	69	
5	REMOVAL OF OLD LINE MATERIALS	69	
4	RIGHT OF WAY & WAY LEAVE & ACCESS TO LOCATION	68	
3	TAKING DELIVERY & INSURANCE	67	
2	PREPARATION OF SAG TENSION CHART	67	
1	SCOPE	66	
I [F]	TECHNICAL PARTICULARS	66 - 72	
5	TERMS OF PAYMENT & SALES TAX / VAT	64 - 65	
4	PAYMENT OF COST OF OLD LINE MATERIALS	63	
		63	
3	DAMAGED TO GETCO'S PROPERTY		
2	EARNEST MONEY DEPOSIT (EMD), SECURITY DEPOSIT (SD)	63	
1	SCOPE	63	
I [E]	COMMERCIAL TERMS FOR PAYMENT OF COST OF OLD LINE MATERIALSERECTION WORK		
15	TESTING OF LINE, WARRANTY & PROGRESS REPORT	62	
14	MATERIAL ACCOUNT & WASTAGES	61	
13	PRESENTATION OF BILLS	61	
12	PRICES, SALES TAX , INCOME TAX, LEVIS & DUTIES	59 - 60	
11	COMPLETION PERIOD & PENALTY FOR DELAY	59	
10	PROVIDING & FIXING OF PLATES	58	
9	REVENUE LOSS	58	
8	STRENGTHENING OF CROSS ARM & INSULATOR HOISTING	58	
7	REMOVAL OF OLD LINE MATERIALS	57	
6	ACCESS TO LOCATION	57	
5	RIGHT OF WAY & WAY LEAVE	56	
4	TAKING DELIVERY & INSURANCE	55	
3	PREPARATION OF SAG TENSION CHART	55	
2	EARNEST MONEY DEPOSIT (EMD), SECURITY DEPOSIT (SD)	54	
1	SCOPE	53	
I [D]	COMMERCIAL TERMS FOR ERECTION WORK		
5	ADDITIONAL DOCUMENTS	52	
4	DECLARATION BY BIDDER	52	
3	QUALIFYING REQUIREMENT	52	
2	TENDER FEE & EARNEST MONEY DEPOSIT (EMD)	52	
1	GENERAL PARTICULARS	52	
I [C]	SPECIAL CONDITIONS OF CONTRACT (SCC)	52 - 52	
26	CODE REQUIREMENTS	51	
25	WORK & SAFETY REGULATIONS	50	
24	PROTECTION OF MONUMENTS AND REFERENCE POINTS	49	
23	UNFAVOURABLE WORKING CONDITIONS	49	
22	INSURANCE	49	
22			

## **TENDER NOTICE**

### GUJARAT ENERGY TRANSMISSION CORPORATION LIMITED TRANSMISSION CIRCLE MAKTUMPUR, BHARUCH- 392012

Tender for (R&M) Replacement of Conductors, Insulators, Earth wires etc. for strengthening of 66 KV D/C Bharuch-Haldarva-Palej line.

\_\_\_\_\_

ISSUED TO M/s. \_\_\_\_\_

1	Tender No.	TCBRH/2012/8			
2	Line Name.	Estimated cost of Labour Rs. In Lacs	Estimated cost of OLM Rs. In Lacs	EMD amount (1% of labour + 2 % of OLM) Rs. In Lacs	
	66kV D/C Bharuch- Haldarva- Palej	45.097	78.364	2.018	
3	Date of publishing of tender document on web site –				
4	Last date of downloading of tender from web site -				
5	Last date of tender receipt through RPAD/Speed Post: 16.04.12 up to 15.00 hrs.				
6	Date & Time of Tender opening (Technical Bid) 16.04.12 at 17.00 hrs.				
7	Tender fee - Rs. 4510.00				
8	Type of Tender - Percentage basis.				
9	Validity of offer - 180 days				

### SUPERTENDING ENGINEER (TR) GETCO, BHARUCH

### **TENDER SPECIFICATION NO. : TCBRH/2012/8**

#### Sub: Tender for (R&M) Replacement of Conductors, Insulators, and Earth wires etc. for strengthening of 66 KV Transmission lines on Towers / 'H' frame structures.

In connection with above subject, I/we confirm the following:

- I / we, the undersigned, have read and examined the Tender specification No TCBRH/2012/8 along-with booklet of "General Terms and Conditions" in detail.
- 2) The price components for old-line materials in the bid are subject to firm price basis in line with Tender Specification and stand valid till completion of the contract, if awarded.
- 3) I / we declare that our bid is strictly in line with Tender Specification and there is no deviation. Further, I / we also agree that additional conditions / deviations, if any, found in bid, the offer shall be out rightly rejected without assigning any reason thereof.

Signature of Authorised Representative Of Company / Agency

NAME:	

STATUS:	
---------	--

Name of tendering Company

SEAL / STAMP

#### **CONFIRMATION OF DETAILS OF BIDDER**

Bidders are required to furnish following information specifying YES / NO

1)	Whether the Bid is on percentage basis as called for. Yes / No					
2)	Whether rebate furnished is in percentage basis as called for. Yes / No					
3)		her the Bid is submitted by RPAD / Speed Post.	Yes / No			
,						
4)	Wheth the Bi	ner all pages of Bid Specifications are sealed and signed by dder.	Yes / No			
5)	a)	Whether the Bidder is registered with GETCO for				
		Transmission line erection.				
	b)	b) In case of "Yes", please furnish following details:				
		i) Registration Letter No. & date.				
		ii) Class of Registration				
	lii) Validity					
- )	c)	Whether Bidder is having PF Code No.	Yes / No			
6)	a)	Whether EMD paid. ( DD / BG )	Yes / No			
	b)	In case "Yes", furnish details	Yes / No			
7)	Wheth	ner following documents as specified are submitted.				
	a)	Human Resources detail.	Yes / No			
	b)	Availability of tools, equipments etc.				
	c)	c) Details of orders executed / on hand				
	d)	d) Financial capability.				
	e)	Experience as specified.	Yes / No			
	f)	Latest Income-tax certificate	Yes / No			
	g)	Company's Articles Of Association	Yes / No			
	h)	Details Of Partners / Directors	Yes / No			
	i)	B.R./P.A. Authorising Person	Yes / No			
	j)	Power of Attorney of Consortium Members	Yes / No.			

Signature of Authorized Representative of Company/Agency

NAM	-

STATUS:\_\_\_\_\_

Name of tendering Company

### **GENERAL TERMS AND CONDITION OF CONTRACT**

#### 1.0 General Particulars

1.1 The Gujarat Energy Transmission Corporation Ltd., Baroda hereinafter called 'GETCO'/ 'OWNER' intends to receive bids for (R&M) Replacement of Conductors, Insulators, Earth wires etc. for strengthening of 66 KV transmission lines on towers / H- frame structures all detailed in the accompanying specifications in accordance with Terms and Conditions herein. The bids shall be prepared and furnished as per these Instructions.

#### 2.0 Scope of the proposal and Work

- 2.1 The Scope of the proposal shall be on the basis of a single Bidder's responsibility for a particular Lot, completely covering Dismantling, Stringing, Testing and Commissioning of 66 kV Transmission lines on towers / "H " frame structures specified under the accompanying Technical Specifications. It will include among others as specified therein the following:
  - a) Detailed Engineering.
  - b) Insurance, Dismantling, Stringing, testing and commissioning of line.
- 2.2 No deviation whatsoever to certain conditions of the bidding documents permitted by the Owner and therefore, the Bidders are advised that while making Bid Proposals and quoting prices these conditions may appropriately be taken into consideration. Bidders are required to furnish a certificate in this regard as per the format provided in Special Conditions of Contract in a separate sealed envelope containing Bid security, which shall accompany the Technical Bid. Any Bid not accompanied by such certificate shall be rejected by the Owner and shall not be opened.
- 2.3 Bids not covering the above-cited entire scope of works may be treated as incomplete and will be rejected.
- 2.4 The Bidder shall complete all the schedules & annexure in the Bid Proposal Sheets, Technical Data Sheets and specified elsewhere. The Qualifying Data should be filled in the required schedule of Bid Proposal Sheets.
- 2.5 This specification covers the detailing like Dismantling, Stringing, & commissioning and handing over in ready to switch on condition to GETCO complete including fixing of accessories on line.

The scope shall include Dismantling, Stringing of conductor & earth wire and commissioning 66 KV Transmission lines on Towers / 'H' frame structures including, laying, jointing, tensioning, clamping with armoring, hoisting of insulator string, fixing of jumpers, vibration dampers etc with required tree cutting on entire line for adequate clearance and safe charging.

#### 3.0 Project Particulars

Name of Project: (R&M) Replacement of Conductors, Insulators, Earth wires Hardwares etc. for strengthening of /66 KV Tr. lines on Towers / H-frame structures

System Data	1.	System Voltage and	:	66 KV
		System of Earthing	:	Pipe type /Counter poise earthing
	2.	Rated frequency	:	50 Hz ± 5%

#### 4.0 Bidding Costs

All costs/expenses in the preparation and submission of the Bid (including any post Bid discussions/presentations) shall be fully borne by the Bidder. Owner will not be responsible / liable for these costs irrespective of the course and conclusion of this Bidding.

#### 5.0 Bid Documents Details of Documents

The tender should be published in two parts Part - I: Technical bid & PART - II: Price Bid. The following Bid documents apart from Invitation to Bid detail the material and equipment specifications/characteristics, the bidding procedures and the terms & conditions of contract:

- a. General Conditions of Contract (GCC-Part I)
- b. Erection Conditions of Contract (ECC-Part I)
- c. Special Conditions of Contract (SCC-Part I)
- d. Technical Specifications (TSP-Part I)
- e Technical Data Sheets (TDS-Part I)
- f. Bid Form and Price Schedules (BF/PS-Part II)

#### 6.0 Knowing the Bid Documents

6.1 Every intending Bidder is to examine and understand all instructions, forms, terms, conditions and specifications in the Bid Documents and fully know himself all the conditions and contents therein, which may in any manner, affect the scope & content of work and the costs thereof. Submission of a Bid not substantially responsive to the Bid Document in all respects and/or failure to furnish all information required by the Bid Document may entail rejection of the Bid at the Bidder's risk.

#### 7.0 Clarifications on Bid Documents

- 7.1 In case an intending Bidder finds any discrepancy or omission in the documents and specifications or is in doubt as to the true meaning of any part, he shall make a request, in writing not later than the due date of opening of technical bid. The owner will issue explanations, interpretations and clarifications as deemed fit in writing as a response to this request. On receipt of such interpretations/clarifications, the Bidder may submit his Bid within the date and time stipulated in the Bid invitation, All such explanations, interpretations and clarifications from the Owner shall be deemed as part of Bid Documents and shall invariably accompany the Bidder's proposal.
- 7.2 Any verbal/telephonic clarifications and information given by the Owner or his employee (s) or his representative(s) will not in anyway be binding on the Owner.

#### 8.0 Amendment of bidding document:

- 8.1 At any time prior to the deadline for submission of Bids the Owner may, for any reason, whether at his own initiative or in response to a clarification requested by the intending Bidder, modify the Bidding Document with amendment(s).
- 8.2 The amendment will be notified in writing or Fax / web site to all intending Bidders who have received the Bidding Document at the address contained in the letter of request for issue of Bidding document from the Bidders. Owner will bear no responsibility or liability arising out of non-receipt of the same in time or otherwise.

- 8.3 In order to afford prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Owner may, at his discretion, extend the deadline for the submission of bids.
- 8.4 Such amendments, clarifications etc. shall be binding on bidders and will be given due consideration by the Bidders while they submit their bids and shall invariably enclose such documents as a part of the bid.

#### PREPARATION OF BIDS

#### 9.0 Language Of Bid:

9.1 The Bid prepared by the Bidder and all correspondence and documents relating to the Bid, exchanged by the Bidder and the Owner, shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages. Failure to comply with this may disqualify a bid. For purposes of interpretation of the bid, the English translation shall govern.

#### 9.2 Bid Format

Bidders have to make the Bid in the formats furnished with this Document. Verbatim without adding any printed/type written text of their own.

#### 10.0 Local Conditions:

- 10.1 It will be imperative on each Bidder to fully inform himself of all local conditions and factors, which may have any effect on the execution of the Contract covered under these documents and specifications. The Owner shall not entertain any request for clarifications from the bidders, regarding such local conditions.
- 10.2 It must be understood and agreed that such factors have properly been investigated and considered while submitting the proposals. No claim for financial adjustment to the Contract awarded under these specifications and documents will be entertained by the owner. Neither any change in the time schedule of the Contract nor any financial adjustments arising thereof shall be permitted by the Owner, which are based on the lack of such clear information or its effect on the cost of the works to the Bidder.

#### 11.0 Documents comprising the Bid:

- 11.1 The Bidder shall complete the Bid form inclusive of Price Schedules, Technical Data Requirements etc. furnished in the Bidding Documents.
- 11.2 The Bidder shall also submit documentary evidence to establish that the Bidder meets the Qualification Requirements as detailed in Special Conditions of Contract and GCC (Detail of transmission line work executed with copy of completion certificate).
- 11.3 All Tender Documents/ formats are to be returned completed and filled in all respects and signed by the Company Authorized Signatory wherever specified.
- 11.4 The Bid Guarantee shall be furnished in a separate cover in accordance with clause at GCC.

#### 12.0 Bid Price:

12.1 The Bidder shall indicate, in the appropriate price schedules, enclosed in bid proposal Sheets, indicating the percentage basis and Firm Price for the erection work to be executed. For erection, commissioning of line the service tax component is also to be mentioned.



12.2 The bidder's separation of price components in accordance with above clause No: 12.1 will be solely for the purpose of the facilitating the comparison of Bids by the owner, for contract price amendment due to quantity variation and for on account payments (in case of award) and shall not in any way limit the Owner's rights.

## 12.3 The Bidder shall specifically note that the Tenders are invited on Firm Price on percentage base.

#### 13.0 Bid Security / EMD:

13.1 The bidder shall furnish, as a part of its bid EMD, bid security for an amount of one percent of estimated labor cost + two percent of cost of old line materials to be paid as under:

#### In the form of crossed DD drawn in favor of Gujarat Energy Transmission Corporation Limited payable at BHARUCH. Alternatively it can be paid in CASH, the receipt of payment to be enclosed with Bid.

- 13.2 The bid security is required to protect the owner against the risk of Bidder's conduct, which would warrant the guarantee forfeiture, pursuant to relevant paras elsewhere The bid guarantee shall be made payable to the Owner without any condition whatsoever.
- 13.3 Any bid not secured in accordance with above will be rejected by the Owner as nonresponsive. No exemptions are made in the furnishing of the security.
- 13.4 Unsuccessful Bidder's bid security/EMD will be returned/refunded on finalization of tender or three months from the date of submission of tender whichever is later.
- 13.5 The successful bidders, Bid Security will be discharged upon, furnishing the contract performance guarantee
- 13.6 The bid guarantee may be forfeited.
  - a) If a Bidder withdraws its bid during the period of bid validity specified by the bidder on the bid Form:
  - b) If a bidder refuses to accept the contract or fails to commence the works (including supplies within thirty days of letter of award of contract)

#### 14.0 Format of Bid:

- 14.1 The Bidder shall prepare two copies of the bid, clearly marking each "Original bid" and "Copy of Bid", as appropriate. In the event of any discrepancy between them the original shall govern. All the documents furnished in original document shall be furnished in other copies of Bids.
- 14.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized by the Bidder to sign the Contract. Written power-of-attorney accompanying the bid shall indicate the letter of authorization. The person or persons have to sign on all pages of the bid, except for unamended printed literature.
- 14.3 The Bidders must submit the qualifying data in one original and one duplicate copy as required in this Instructions to Bidders in separate envelopes sealed and enclosed in the envelope submitting proposals, super scribed as under:

#### QUALIFYING DATA FOR THE WORK OF (R&M) Replacement of Conductors, Insulators, Earth wires Hardware's etc. for strengthening of 66 KV Tr. lines on Towers / H-frame structures

#### SPECIFICATION NO. : TCBRH/2011/

- 14.4 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- 14.5 Bids shall be submitted as under:
  - Cover-1 Earnest Money Deposit (Bid-Security), as per relevant clause of SCC duly signed and covering letter. Tender fee details (as per tender notice).
  - Cover-2 Qualifying Requirements.
  - Cover-3 Technical Bid Must contain conditions and schedules of Part-II Technical Data Requirement Sheets.

#### (Cover I, II and III will be collectively called Technical Bid).

Cover-4 Price Bid Price offer as per Part-II including Form of Tender (with six hard copies and one soft copy (CD ROM) of Price schedules in Excel)

#### 15.0 Signature Of Bids:

- 15.1 The bid must contain the name, residence and place of business of the person or persons making the bid and must signed and sealed by the Bidder with his usual signature. Names of persons signing should also be typed / printed below the signature.
- 15.2 Bid by a partnership must be furnished with full names of all partners and be signed with the partnership name, followed by the signature(s) and designation(s) or the authorized partner(s) or other authorized representative(s).
- 15.3 Bids by Corporation / Company must be signed with the legal name of the Corporation / Company by the President/Managing Director or by the Secretary or other person or persons authorized to bid on behalf of such Corporation / Company in the matter.
- 15.4 A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his Principal will be rejected.
- 14.5 If it is found that two or more persons who are connected with one another either financially or as a principal and agent have bid under different names without disclosing their connection then such bids will be liable for rejection. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid.
- 15.6 The Bidder's name stated on the proposal shall be the exact legal name of the firm.
- 15.7 Bids not conforming to the above requirements of signing may be disqualified and EMD forfeited.

#### 16.0 Sealing and marking of bids:

- 16.1 Cover-I
- 2. Due dates for opening

1. Bid No.

3. Reference of tender fee & earnest money deposit

Cover-II

- Bid No.
  Due date for opening.
- 3. Qualifying Requirements.
- Cover-III 1. Bid No. 2. Due date for opening 3. Technical bid & reference and required certificates
- Cover-IV 1. Bid No.
  - 2. Price Bid and reference.

Cover-I, Cover-II & Cover-III shall be individually sealed and super scribed as indicated above and should be enclosed in the main cover duly sealed and super scribed as Tender for ...... against Bid No...... due on...... containing Cover-I, Cover-II, Cover-III & Cover IV of this tender.

The original Bid and accompanying documents clearly marked "Original" plus one copy for Cover I, II & III and six copies for Cover IV shall be submitted by the Bidder at the date, time and place specified. In the event of any discrepancy between the original and the copies, the original shall govern.

The Bid shall be submitted by RPAD or through speed post services or in person at the Office of the EE (TR) GETCO, BHARUCH. Bids submitted should be posted with due allowance for any postal delay. The Bids received after the due date & times of opening are liable to be rejected. Telegraphic/Telex/Fax/e-mail Bids shall not be entertained.

- 16.2 The Bidders shall seal the original and each copy of the bid in an inner and an outer envelope, duly marking the envelopes as "original" and "copy".
- 16.3 a. Addressed to the Owner at the following address:

The Superintending Engineer (TR) - GETCO TRANSMISSION CIRCLE, MAKTUMPUR, BHARUCH- 392012

- b. Bear the name of package bid enquiry number, name of the work and the words. "DO NOT OPEN BEFORE.....
- 16.4 The inner envelope shall indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late" or "rejected".
- 16.5 If the outer envelope is not sealed and marked as required by Clause No: 15.1 the Owner will assume no responsibility for the bid's misplacement or premature opening.
- 16.6 The Bid Security conditions must be submitted in a separate sealed envelope.

#### 17.0 Deadline for submission of bids:

- 17.1 Bids submitted by telex / telegram will not be accepted. No request from any Bidder to the Owner to collect the proposals from airlines, cargo agent etc. shall be entertained by the Owner.
- 17.2 Bids must be received by the Owner at the address specified under Clause No: 16.3, not later than the time & date mentioned in the Invitation to Bid.
- 17.3 The Owner may, at its discretion, extend this deadline for the submission of bids by amending the Bidding Document in which case all rights and obligations on the Owner and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

#### 18.0 Late Bids

18.1 Any bid received by the Owner after the time and date fixed or extended for submission of bids prescribed by the Owner, will be rejected and not considered for evaluation.

#### **19.0** Modification and withdrawal of bids:

- 19.1 The Bidder may modify or withdraw its bid after the bid's submission provided that written notice of the modification or withdrawal is received by the Owner prior to the deadline prescribed for submission of bids.
- 19.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of clause No: 15.0. The envelope should clearly indicate whether the modification is for the Technical bid or the Price bid. No bid modifications notice by Telex/Grams/Fax shall be entertained by the Owner.
- 19.3 No bid shall be modified in any manner, whatsoever subsequent to the deadline for submission of bids.
- 19.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal/modification of a bid during this interval may result in the Bidder's forfeiture of its bid security.

#### 20.0 Information required with the proposal:

- 20.1 The Bidder, along with his Proposal, shall submit a list of recommended erection tools and tackle, name of supplier for cement, RCC, earthing material, NP/DP/CIP etc must be reputed supplier approve by GETCO which will be required for the purpose of erection & commissioning of line and materials supplied under the Contract.
- 20.2 In case the 'Proposal' information contradicts specification requirements, the specification requirements will govern, unless otherwise brought out clearly in the technical commercial deviation schedule.

#### BID OPENING AND EVALUATION

#### 21.0 Opening of bids by owner:

- 21.1 The Owner will open the bids in the presence of Bidder's representatives who choose to attend on the date and time mentioned for opening of bids in the Invitation to Bid or in case any extension has been given thereto, on the extended bid opening date and time notified to all the Bidders who have purchased the bidding document. The Bidder's representatives who are present shall sign a register evidencing their attendance.
- 21.2 The Bidder's names, Technical modifications, Bid withdrawal and such other details as the Owner, at his discretion may consider appropriate, will be announced in the Technical Bid Opening.
- 21.3 The price bids of all the "Techno-Commercial" Responsive Bidders shall be opened in the presence of representatives (up to two per firm) of such bidders who choose to be present. The date & time of opening the Price Bid shall be intimated to all such qualified bidders by Fax/Telex, at least one week in advance besides inviting final price bid if found appropriate after evaluation of Technical bids.

- 21.4 The Bidder's name, Bid Price, all discounts if any, modifications in the Price Bid and any such other details as the Owner, at his discretion, may consider appropriate, will be announced/ furnished in the Price Bid Opening.
- 21.5 No electronic recording/transmitting devices will be permitted during Bid opening.

#### 22.0 Purpose of evaluation of bids:

22.1 The Bids received/accepted/opened will be evaluated by the Owner to ascertain the technical responsiveness of the bid for the complete scope of the proposal, as covered under these specifications and documents. All technically responsive bids shall then be examined to determine the LOWEST EVALUATED COMMERCIALLY AND TECHNICALLY RESPONSIVE BIDS.

#### 23.0 Policy for bids under consideration:

23.1 Bids shall be deemed to be under consideration immediately after opening of Technical Bid and until such time official intimation of award/rejection is made by the Owner to the Bidders. While the Bids are under consideration, Bidders and / or their representatives and other interested parties are advised to refrain from contacting by any means, the owner and/or his employee's representatives on the matters related to Bids under consideration.

#### 24.0 Clarification of bids:

24.1 To assist in the examination evaluation and comparison of Bids the owner may on his own ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

#### 25.0 **Preliminary Examination:**

25.1 The Owner will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

#### 25.2 Arithmetical errors will be rectified on the following basis:

If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between the total bid amount and the sum of total costs, the latter shall prevail and the total bid amount will be corrected accordingly. If there is a discrepancy between words and figures, the amount advantageous to the Owner will prevail. If the Bidder does not accept the correction of the errors as above, his Bid will be rejected and the amount of Bid Security will be forfeited. The Bidder should ensure that the prices furnished in various price schedules are consistent with each other. In the case of any inconsistency in the prices furnished in the specified prices schedules to be identified in Bid Form for this purpose, the Owner shall be entitled to consider the highest price for the purpose of evaluation and for the purpose of award of Contract use the lowest of the prices in these schedules.

25.3 Prior to the detailed evaluation, the Owner will determine the substantial responsiveness of each bid to the Bidding Document. For purpose of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the Bidding Document without material deviations. A material deviation is one which affects in any way the prices, quality, quantity or delivery period of the equipment, completion of works

or which limits in any way the responsibilities or liabilities of the Bidder of any right of the Owner as required in these specifications and documents. The Owner's determination of a bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence.

- 25.4 A bid determined as not substantially responsive will be rejected by the Owner and may not subsequently be made responsive by the Bidder by correction of non-conformity.
- 25.5 The Owner may waive any minor informality or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

#### 26.0 Award Criteria

- 26.1 The owner will award the contract to the successful Bidder, whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, providing further that the Bidder is determined to be qualified to perform the contract satisfactorily. The Owner shall be the sole judge in this regard.
- 26.2 In case of award of Contract on a bidder there shall be one contracts for erection & commissioning of transmission line.

#### 27.0 MATCHING OF END COST:

- 27.1 In case the GETCO decides to award contract on matching end-cost basis, the bidder has to reduce all the quoted rates proportionately. The reduction on overall basis will not be accepted (i.e. all unit rates of erection schedule shall be reduced proportionately by difference in percentage). The confirmation for matching end cost shall be given within 7 (seven) days from the letter from GETCO.
- 27.2 Further, the Owner reserves the right to award separate contracts to two or more parties in line with the terms and conditions specified in the accompanying Technical Specifications.

#### 28.0 Owner's right to accept any bid and to reject any or all bids:

28.1 The Owner reserves the right to accept or reject any bid, and to annual the bidding process and reject all bids at time prior to award of contract, any without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Owner's action.

#### 29.0 Notification of award:

- 29.1 Prior to the expiration of the period of bid validity and extended validity period, if any, the Owner will notify the successful Bidder in writing by registered letter or cable or telex or FAX, to be confirmed in writing by registered letter, that its bid has been accepted.
- 29.2 The notification of award will constitute the formation of the Contract.
- 29.3 Upon the successful Bidder's furnishing of performance guarantee pursuant to relevant clause No: 38 & 40, the Owner will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to Clause No: 13.0.

#### 30.0 Signing of contract:

30.1 At the same time as the Owner notifies the successful Bidder that his bid has been accepted, the Owner will send the Bidder the detailed of Award, incorporating all agreements between the parties.

- 30.2 Within 15 days of receipt of the detailed of Award, the successful bidder shall sign the same with date and return it to the Owner.
- 30.3 The Bidder will prepare the Contract Agreement as per the proforma prescribed and the same will be signed within 30 (Thirty) days of notification of Award.

#### 31.0 DEFINITION OF TERMS

- 31.1 The 'Contract' means the agreement entered into between the Owner and the Contractor as per the Contract Agreement signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 31.2 Owner' shall mean the Gujarat Energy Transmission Corporation Ltd. Vadodara or any of its subsidiaries and shall include its legal representatives, successors and assigns.
- 31.3 'Contractor' or 'Manufacturer' shall mean the Bidder whose bid is accepted by the Owner for the award of the Works and shall include such successful Bidder's legal representatives, successors and permitted assigns.
- 31.4 'Sub-Contractor' shall mean the person named in the Contract for any part of the Works or any person to whom any part of the Contract has been sublet by the Contractor with the consent in writing of the Engineer and will include the legal representatives, successors and permitted assigns of such person.
- 31.5 'Engineer' shall mean the officer appointed in writing by the Owner to act as Engineer from time to time for the purpose of the Contract.
- 31.6 The terms 'Equipment', 'Stores' and 'Materials' shall mean and include equipment, stores and materials to be provided by the Contractor under the Contract.
- 31.7 'Works' shall mean and include the furnishing of equipment, labour and services, as per the Specifications and complete erection, testing and putting into satisfactory operation including all transportation, handling, unloading and storage at the Site as defined in the Contract.
- 31.8 'Specifications' shall mean the Specifications and Bidding Document forming a part of the Contract and such other schedules and drawings as may be mutually agreed upon.
- 31.9 'Site' shall mean and include the land and other places on, into or through which the works and the related facilities are to be erected or installed and any adjacent land, paths, street or reservoir which may be allocated or used by the Owner or Contractor in the performance of the Contract.
- 31.10 The term 'Contract Price' shall mean the lump-sum price quoted by the Contractor in his bid with additions and/or deletions as may be agreed and incorporated in the Letter of Award and the contract agreement for the entire scope of the works.
- 31.11 The term 'Erection Portion' of the Contract price shall mean the value of field activities of the works including erection, testing and putting into satisfactory operation including successful completion of performance and guarantee tests to be performed at Site by the Contractor including cost of insurances.
- 31.12 Site Engineer 'Inspector' shall mean the Owner owner's Engineers or any person nominated by the time to inspect the equipment; stores or Works under the Contract and/or the duly authorized representative of the Owner.

- 31.13 'Notice of Award of Contract'/'Letter of Award'/'Telex of Award' shall mean the official notice issued by the Owner notifying the Contractor that his bid has been accepted.
- 31.14 'Order' shall mean the official letter issued by the Owner informing the acceptance of the Tender.
- 31.15 'Date of Contract' shall mean the date on which Notice of Award of Contract/Letter of Award has been issued.
- 31.16 'Month' shall mean the calendar month. 'Day' or 'Days' unless herein otherwise expressly defined shall mean calendar day or days of 24 hours each.
- 31.17 'Week' shall mean continuous period of seven (7) days.
- 31.18 Writing' shall include any manuscript, type written or printed statement, under or over signature and/or seal as the case may be.
- 31.19 When the words 'Approved', 'Subject to Approval', 'Satisfactory', 'Equal to', 'Proper', 'Requested', 'As Directed', 'Where Directed', 'When Directed', 'Determined by', 'Accepted', 'Permitted', or words and phrases of like importance are used the approval, judgment, direction etc. is understood to be a function of the Owner/Engineer.
- 31.20 Test on completion shall mean such tests as prescribed in the Contract to be performed by the Contractor before the work is taken over by the Owner.
- 31.21 'The term 'Final Acceptance'/'Taking Over' shall mean the Owner's written acceptance of the Works performed under the Contract, after successful commissioning/completion of Performance, as specified in the accompanying Technical Specifications or otherwise agreed in the Contract.
- 31.22 'Guarantee Period' shall mean the period during which the Contractor shall remain liable for repair or replacement of any defective part of the works performed under the Contract.
- 31.23 'Drawing', 'Plans, shall mean all:
  - a) Drawings furnished by the Owner to the Contractor during before execution of work / the progress of the work; and
  - b) Engineering data and drawings submitted by the Contractor during the progress of the work provided such drawings are acceptable to the Engineer/Owner after duly approved.
- 31.24 'Codes' shall mean the following including the latest amendments and/or replacements, if any:
  - a) Indian Electricity Act, 1905 and Rules and Regulations made there under.
  - b) Electricity Act 2003 and Rules & Regulations made there under.
  - c) Indian Factory Act, 1948 and Rules and Regulations made there under.
  - d) Indian Explosives Act, 1884 and Rules and Regulations made there under.
  - e) Indian Petroleum Act, 1934 and Rules and Regulations made there under.
  - f) A.S.M.E. Test Codes.
  - g) A.I.E.E. Test Codes.
  - h) American Society of Materials Testing Codes.
  - i) Standards of the Indian Standards Institution.
  - j) Other Internationally approved standards and/or rules and regulations touching the subject matter of the Contract.
  - k) Indian Telegraph Act 1910.



- 31.25 Words imparting the singular only shall also include the plural and vice –versa where the context so requires.
- 31.26 Words imparting 'Person' shall include firms, companies, corporations and associations or bodies of individuals, whether incorporated or not.
- 31.27 Terms and expressions not herein defined shall have the same meaning as are assigned to them in the Indian Sale of Goods Act (1930), failing that in the Indian Contract Act (1872) and failing that in the General Clauses Act (1897) including amendments thereof, if any.

Or

In addition to the above the following definitions shall also apply.

- a) 'All equipment and materials' to be supplied shall also mean 'Goods'.
- b) 'Constructed' shall also mean 'erected and installed'.
- c) 'Contract Performance Guarantee' shall also mean 'Contract Performance Security'.

#### 32.0 APPLICATION

These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

#### 33.0 STANDARDS

The goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the goods and such standards shall be the latest issued by the concerned institution.

#### 34.0 LANGUAGE AND MEASURES

All documents pertaining to the Contract including specifications, schedules, notices, correspondences, operating and maintenance instructions, drawings or any other writing shall be written in English language. The Metric System of measurement shall be used exclusively in the Contract.

#### 35.0 Price Basis:

- 35.1 The Price shall be quoted on firm basis.
- 35.2 The Price quoted by the bidder shall remain fixed during the bidder's performance of the contract and shall not be subject to variation on any account or for change in quantity.

#### 36.0 Taxes and Duties:

#### 36.1 Works contract-tax:

The structural and architectural portion of the contract shall be treated as works contract Consequently, any sales tax payable on the cost of these items of supply under the works contract shall also be included by the bidder in his total bid price and the owner shall have no liability whatsoever in respect of such works contract tax. However, the owner will deduct works contract tax out of the supplier's bills as per statutory rules.

36.2 As regards the income Tax, surcharge on income tax and any other corporate tax, including service tax if any the owner shall not bear any tax liability whatsoever. The bidder shall be liable and responsible for payment of such taxes as attracted under the provisions of the law.

- 36.3 Notwithstanding the tax liabilities as per the above sub-clause 36.1 & 36.2 the owner shall have the right to make deduction at source from the amounts payable to the contractor in respect of Income Tax (on the cost of items of supply included in the works contract) as may be mandatory in terms of the law. The owner shall not bear any liability in this regard but shall issue necessary certificate in respect of such deduction made.
- 36.4 In case any tax or duty is newly introduced by the Government applicable for this contract with effect from the next day of the date submission of the bid and if the contractor is required to pay additional tax or duty, then the owner shall reimburse the contractor the additional tax or duty so paid by the contractor against submission by the contractor of documentary evidence to the satisfaction of the owner. This provision will not be applicable to transaction between the contractor and his sub-suppliers, sub-contractors for raw materials, for bought out items etc and will be applicable only to the direct transactions between the contractors for the materials supplied from his own manufacturing units. Besides the said statutory variation, no other statutory variation shall be payable by the owner.
- 36.5 The owner's liability for all taxes and duties under the contract shall be limited to those indicated by the Bidder in the Bid Proposal Sheets, subject to the statutory variations and variations as per above Clause.

If the cost to the Contractor during the performance of the 'Contract' shall be increased or reduced by reasons of the making, passing or promulgation of any law after the date of submission of bid or by any order, regulation or bye-law having the force of law the amount of such increase or reduction shall be added to or deducted from the "Contract Price" as the case may be for direct transactions between contactor & owner, and not for bought out items. It is the Bidders responsibility to furnish details of taxes, duties, levies etc. applicable as on the date of submission of the bid.

- 36.6 No claim for any increase towards the statutory variation regarding enhancement of existing tax or duty or introduction of a new tax or duty applicable shall be entertained by the Owner during the extended period of contract, if any, provided the extension of the contract is required by causes attributable to the contractor.
- 36.7 The provision of statutory variation regarding enhancement of existing tax or duty or introduction of a new tax or duty will be applicable only to the direct transaction between the contractor and the owner.
- 36.8 Before quoting, the bidder may ascertain from the concerned tax authorities of Government of Gujarat the applicability of Work Contract Tax. Service Tax, etc. in respect of this work and include the same in the quoted price. No separate claim in this regard will be entertained by the Owner, as it is the responsibility of the Bidder to pay all these taxes.

#### 37.0 TAXES, PERMITS & LICENCES

The Contractor shall be liable and pay all non-Indian taxes, duties, levies lawfully assessed against the Owner or the Contractor in pursuance of the Contract. In addition the Contractor shall be responsible for payment of all Indian duties, levies and taxes lawfully assessed against the Contractor for his personal income & property only.

#### 38.0 Price Inclusions (including Taxes & Duties):

38.1 Sale Tax on Works Contract:

Works contract tax is a liability of the bidder and if applicable, the same shall be borne by the bidder.

In case of contract value exceeding Rs. one crore, tax shall be deducted at source at 2% of the net value payable as per Gujarat VAT Act 2003 amended up to date. However, if contractor desires payment without deduction of 2% TDS, he has to obtain and produce certificate from competent authority of commercial tax department to that effect.

#### 38.2 Service Tax:

Service Tax @ 10.30 % as applicable presently to this Contract will be included in the price; however the percent of Tax applied on this account shall be specifically mentioned in the bid. If the tax is not eventually payable or there is a difference between the rate mentioned in the bid & service tax actually payable then such amount or difference in payment amount shall be deducted from the actual amount payable towards that item in the price schedule.

#### 38.3 Statutory Variations:

Any statutory increase or decrease in the taxes and duties subsequent to offer if it takes place within the original contractual delivery date will be to the GETCO's account subject to the claim being supported by documentary evidence. However, if any decrease takes place after the contractual delivery date, the advantage will have to be passed on to the GETCO. However such statutory variation is applicable to only direct supply or services.

No statutory variation shall be admitted, if the excise duty becomes payable because of exceeding the prescribed limits for turn over or for any such other reasons.

#### 38.4 Income Tax

Income tax at source at the prevailing rate will be deducted from bills in accordance with the provision of Income-Tax Laws and to that effect a certificate will be issued to the contractor.

#### 38.5 Octroi:

Octroi, if applicable, shall be paid extra by the corporation at consignee end, against submission of documentary evidence of payment.

#### **39.0 CONTRACT PERFORMANCE GUARANTEE**

- 39.1 As a contract performance security, the successful bidder, to whom the work is awarded, shall be required to furnish a performance guarantee as per Sr. No. 40 in form of Bank guarantee from a Public Sector Indian bank/Scheduled, Commercial Bank in the form to be furnished and it shall guarantee the faithful performance of the Contract in accordance with the terms and conditions specified in these documents and specifications. The guarantee shall be valid up to 90 days after end of Warranty Period.
- 39.2 Performance Guarantee shall cover additionally to following guarantee to the Owner:
  - a) The successful Bidder guarantees the successful and satisfactory operation of the equipment furnished and erected under the Contract, as per the specifications and documents.
  - b) The successful Bidder further guarantees that the equipment provided by him/his subvendors and installed by him shall be free from all defects in design, material and workmanship and shall upon written notice from the Owner fully remedy free of expenses to the Owner such defects as developed under the normal use of the said equipment within the period of guarantee specified in the relevant clause of the General Terms and Conditions in the Part-I.
- 39.3 The Contract Performance Guarantee is intended to secure the performance of the entire contract. However, it is not to be construed as limiting the damages under clause entitled "Equipment Performance Guarantee" in Technical Specifications, Part-II and damages stipulated in other clauses in the Bid documents.

39.4 The Contract performance guarantee will be discharged without any interest on successful completion of order and only after the performance guarantee condition is fulfilled. The Contractor shall furnish Contract Performance Guarantee(s) for the proper fulfillment of the Contract in the prescribed form within fifteen(15) days of "Notice of Award of Contract". The performance guarantee(s) shall be as per terms prescribed.

#### **GUARANTEES & LIABILITIES**

#### 40.0 GUARANTEE

- 40.1 The Contractor shall warrant that the whole project, in accordance with the Contract documents and free from defects in material/equipment and workmanship for a period of twenty four (24) calendar months commencing immediately upon the satisfactory commissioning of the project. The Contractor's liability shall be limited to the replacement of any defective parts in the equipment of his own manufacture or those of his Sub-Contractors under normal use and arising solely from faulty design, materials and/or workmanship provided always that such defective parts are repairable at the site and are not in meantime essential in the commercial use of the equipment. Such replaced/defective parts shall be returned to the Contractor unless otherwise arranged. No repairs or replacement shall normally be carried out by the Engineer when the equipment is under the supervision of the Contractor's Supervisory Engineer.
- 40.2 In the event of any emergency where in the judgment of the Engineer, delay would cause serious loss or damages, repairs or adjustment may be made by the Engineer or a third party chosen by the Engineer without advance notice to the Contractor and the cost of such work shall be paid by the Contractor. In the event such action is taken by the Engineer, the Contractor will be notified promptly and he shall assist wherever possible in making necessary corrections. This shall not relieve the Contractor of his liabilities under the terms and conditions of the Contract.
- 40.3 If it becomes necessary for the Contractor to replace or renew any defective portions of the works the provision of this clause shall apply to portion of the works so replaced or renewed until the expiry of twelve (12) months from the date of such replacement or renewal. If any defects are not remedied within a reasonable time, the Engineer may proceed to do the work at the Contractor's risk and cost but without prejudice to any other rights which the Owner may have against the Contractor in respect of such defects.
- 40.4 The repaired or new parts will be furnished and erected free of cost by the Contractor. If any repair is carried out on his behalf at the site, the Contractor shall bear the cost of such repairs.
- 40.5 The cost of any special or general overhaul rendered necessary during the maintenance period due to defects in the equipment or defective work carried out by the Contractor, the same shall be borne by the Contractor.
- 40.6 The acceptance of the erection work by the Engineer shall in no way relieve the Contractor of his obligations under this clause
- 40.7 In the case of those defective parts, which are not repairable at site but are essential for the commercial operation of the equipment, the Contractor and the Engineer shall mutually agree to a programme of replacement or renewal, which will minimize interruption to the maximum extent in the operation of the equipment.
- 40.8 The provisions contained in this clause will not be applicable: a) If the Owner has not used the equipment according to generally approved industrial practice and in accordance with the conditions of operations specified and in accordance with operating manuals, if any. b) In cases of normal wear and tear of the parts to be specifically mentioned by the Contractor in the offer.



#### 41.0 Time Schedule:

- 41.1 The basic consideration and the essence of the Contract shall be strict adherence to the time schedule for performing the specified works.
- 41.2 The Owner's requirements of completion schedule for the Works are mentioned in the accompanying Special Conditions of Contract.
- 41.3 The completion schedule as stated in the special conditions of contract shall be one of the major factors in consideration of the bids.
- 41.4 The owner reserves the right to request for a change in the work schedule during preaward discussions with successful bidder.
- 41.5 The successful bidder will be required to prepare detailed PERT Network/ detailed Bar chart and finalise the same with the owner as per the requirement of Clause no 42.0

#### 42.0 TIME – THE ESSENCE OF CONTRACT

- 42.1 The time and the date of completion of the Contract as stipulated in the Contract by the Owner without or with modifications, if any, and so incorporated in the Letter of Award, shall be deemed to be the essence of the Contract. The Contractor shall so organize his resources and perform his work as to complete it not later than the date agreed to.
- 42.2 The Contractor shall submit a detailed PERT network/bar chart within the time frame agreed consisting of adequate number of activities covering various key phases of the work such as design, procurement, manufacturing, shipment and field erection activities within fifteen (15) days of the date of Notification of Award. This network shall also indicate the interface facilities to be provided by the Owner and the dates by which such facilities are needed. The Contractor shall discuss the network so submitted with the Owner and the agreed network shall form part of the Contract documents. During the performance of the Contract, if in the opinion of the Engineer, proper progress is not maintained, suitable changes shall be made in the Contractor's operations to ensure proper progress without any cost implication to the Owner. The interface facilities to be provided by the Owner in accordance with the agreed network shall also be reviewed while reviewing the progress of the Contractor.
- 42.3 Based on the above agreed network/bar chart fortnightly reports shall be submitted by the Contractor as directed by the Engineer.
- 42.4 Subsequent to the finalization of the network, the Contractor shall make available to the Engineer a detailed manufacturing programme in line with the agreed Contract network.

Such manufacturing programme shall be reviewed, updated and submitted to the Engineer every month thereafter.

**43.0** The above bar charts / manufacturing programme shall be compatible with the Owner's computer environment and furnished to the Owner on such media as may be desired by the Owner.

#### 44.0 PENALTY FOR DELAY:

- 44.1 The tenderer should note that the completion time allowed for carrying out the work should be strictly observed. Any delay that may take place in supply and erection beyond Contractual cut off date stated as per stipulated delivery period shall be subject to the penalty at the rate of 1/2 % of the value of work executed after due date of completion per week with a ceiling of 10 % of the total contract value.
- 44.2 The penalty will be deducted from bills payable either against this contract or from any Bank Guarantee or any other amount payable under any other contract with the GETCO.
- 44.3 Tenderer shall have to supply all materials to match with the erection activities.

44.4 If the Contractor fails to successfully complete the commissioning within the time fixed under the Contract, the Contractor shall pay to the Owner as penalty a sum specified for each specified period of delay.

#### 45.0 DELAYS BY OWNER OR HIS AUTHORISED AGENTS

45.1 In case the Contractor's performance is delayed due to any act of omission on the part of the Owner or his authorized agents, then the Contractor shall be given due extension of time for the completion of the Works, to the extent such omission on the part of the Owner has caused delay in the Contractor's performance of the Contract.

Regarding reasonableness or otherwise of the extension of time, the decision of the Engineer shall be final.

45.2 In addition, the Contractor shall not be entitled to any claim whether demonstrable or reasonable compensation if such delays have resulted in any increase in cost

#### 46.0 Presentation of Bills

- 46.1 Monthly R.A Bills for erection 95% value of work executed in original with one copy shall be submitted to concerned EE (TR) for passing and processing for payment.
- 46.2 Balance 5% payment for erection shall be released only after finalization of material account and passing of final bill only. The contractor has to submit the final bill along with the material consumption statement and other required data of the work carried out within 3 months from the date of completion of work.
- 46.3 All the bills in accordance with the above clauses must be submitted with the following information:
  - a) Item wise work done during billing period.
  - b) Item wise cumulative work done.
  - c) Account for material consumed and balance stock.
- 46.4 For non-submission or part submission of above information, an additional 5% amount of the respective RA bill shall be withheld and shall only be released at the time of final bill.

#### CONTRACT SECURITY AND PAYMENTS

#### 47.0 PAYMENT

- 47.1 The payment to the Contractor for the performance of the works under the Contract will be made by the Owner as per the guidelines and conditions specified herein. All payments made during the Contract shall be on account payments only. The final payment will be made on completion of all Works and on fulfillment by the Contractor of all his liabilities under the Contract.
- 47.2 Currency of Payment: All payments under the Contract shall be in Indian Rupees only.

#### 48.0 Payment Schedule

Payment shall be as per contract price schedule agreed based on unit rate. The final price schedule shall be based on approved drawings & BOQ.

#### 48.1 **Application for Payment**

48.2 The Contractor shall submit application for the payment.

- 48.3 Each such application shall state claim amount and shall set forth in detail, in the order of the Payment Schedule, particulars of the Works including the Works executed at Site in the application and for the period covered since the last preceding certificate, if any.
- 48.4 Every interim payment certificate shall certify the Contract value of the Works executed upto the date mentioned in the application for the payment certificate, provided that no sum shall be included in any interim payment certificate in respect of the works that, according to the decision of the Engineer, does not comply with the Contract.

#### 48.5 Mode of Payment

- 48.6 The payment for the work executed, taxes and duties (whenever admissible) for erection portion of the Works shall be made direct to the Contractor by the Owner.
- 48.7 All payments under the Contract shall be made as stipulated in the Contract after signing the Contract Agreement. The payments linked with the dispatch of materials shall only be made after production of all dispatch documents as specified in the relevant Contract conditions, which will include the Material Inspection Clearance Certificate issued by the Owner. Progressive payments linked with erection shall only be made after the issue of certificates by the Engineer, one for the quantum of work completed and the other for the successful completion of quality check points involved in the quantum of work billed.

#### 49.0 DEDUCTIONS FROM CONTRACT PRICE

All costs, damages or expenses that the Owner may have paid, for which under the Contract the Contractor is liable or the Owner will claim any other retention award. All such claims shall be billed by the Owner to the Contractor regularly as and when they fall due. Such bills shall be supported by appropriate and certified vouchers or explanations, to enable the Contractor to properly identify such claims. Such claims shall be paid by the Contractor within thirty (30) days of the receipt of the corresponding bills and if not paid by the Contractor within the said period, the Owner may then deduct the amount, from any monies due or becoming due by him to the Contractor under the Contract or may be recovered by sections of Law or otherwise.

#### 50.0 Terms of Payment

50.1 The payment for erection & commissioning of transmission line shall be made only after execution of the contract documents/furnishing of Security Deposit and on execution of erection work.

#### 51.0 TAKING DELIVERY AND INSURANCE:

- 51.1 The contractor has to keep line materials in safe custody and transport to the respective sites and will be fully responsible for any damage to or loss of all materials at any stage during transportation or erection till taking over of the line by GETCO.
- 51.2 The Contractor has to open site store and ensure for safe custody of all the stored materials at his own cost.
- 51.3 The Contractor shall have total responsibility for the entire materials stored, loose, semi assembled and/or erected by him at site in his custody. The Contractor shall make suitable security arrangements at his own cost to ensure the protection of all materials, equipment and works from theft, fire, pilferage and any other damages and loss. It shall be the responsibility of the contractor to arrange for security till the works are finally taken over by the GETCO.
- 51.4 **STORAGE-CUM-INSURANCE**: -The contractor shall take suitable storage-cum-erection insurance cover at his cost to the extent of 100 % cost of line materials, which are required to complete then line. Contractor shall have to take comprehensive insurance policy against any loss, damage, theft, pilferage, fire etc. for the complete period of storage, erection and commissioning up to the time of taking over of the line by GETCO. The Contractor shall deal directly and pursue the claim with the Insurance Company and shall be responsible in regard to maintenance of all insurance coverage as well as for settlement of claim. The proof of insurance policy taken by the successful Contractor shall be furnished to Engineer-In-Charge. In absence of the above insurance policy, R.A. Bill payment will be with held.
- 51.5 In the event of any damage, theft, loss, pilferage, fire etc., Contractor will be responsible to lodge, pursue and settle all the claims with the Insurance Company for all items, materials and the GETCO shall be kept informed about it. Contractor shall replace the lost / damaged materials / items promptly irrespective of the settlement of the claims by underwriter and ensure that the work progress is as per agreed schedule. The loss, if any, such replacement will have to be borne by the Contractor and GETCO will not entertain any claim / representation in this regard. However it will be contractor's responsibility to insure the entire project till the line is taken over by the GETCO.

#### 52.0 Insurance:

The Bidder's insurance liabilities pertaining to the scope of Works are detailed out in Clauses titled Insurance Bidder's attention is specifically invited to these clauses. Bid price shall include all the costs in fulfilling all the insurance liabilities under the Contract.

- 52.1 The Contractor at his cost shall arrange, secure and maintain all insurance as may be pertinent to the Works and obligatory in terms of law to protect his interest and interests of the Owner against all perils detailed herein. The form and the limit of such insurance as defined herein together with the under-writer in each case shall be acceptable to the Owner. However, irrespective of such acceptance, the responsibility to maintain adequate insurance coverage at all time during the period of Contract shall be of Contractor alone. The Contractor's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. The insurance covers to be taken by the Contractor shall be in the joint name of the Owner and the Contractor. The Contractor shall be in regard to maintenance of all insurance covers. Further the insurance should be in freely convertible currency.
- 52.2 Any loss or damage to the equipment during handling, transportation, storage, erection, putting into satisfactory operation and all activities to be performed till the successful completion of commissioning of the equipment shall be to the account of the Contractor. The Contractor shall responsible for preference of all claims and make good the

damages / loss by way of repairs and / or replacement of the equipment, damaged / lost. The transfer of title shall not in any way relieve the Contractor of the above responsibilities during the period of Contract. The Contractor shall provide the Owner with copy of all insurance policies and documents taken out by him in pursuance of the Contract. Such copies of documents shall be submitted to the Owner immediately after such insurance coverage. The Contractor shall also inform Owner in writing at least sixty (60) days in advance regarding the expiry / cancellation and/or change in any of such documents and ensure revalidation, renewal etc., as may be necessary well in time.

- 52.3 The perils required to be covered under the insurance shall include, but not be limited to fire and allied risks, miscellaneous accidents (erection risks) workman compensation risks, loss or damage in transit, theft, pilferage, earth quake, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kinds, etc. The scope of such insurance shall be adequate to cover the replacement/reinstatement cost of the equipment for all risks up to and including delivery of goods and other costs till the equipment is delivered at Site. The insurance policies to be taken should be on replacement value basis and/or incorporating escalation clause. Notwithstanding the extent of insurance cover and the amount of claim available from the underwriters, the Contractor shall be liable to make good the full replacement/rectification value of all equipment/materials and to ensure their availability as per project requirements.
- 52.4 All costs on account of insurance liabilities covered under the Contract will be on Contractor's account and will be included in Contract Price, However, the Owner may from time to time, during the pendency of the Contract, ask the Contractor in writing to limit the insurance coverage, risks and in such a case, the parties to the Contract will agree for a mutual settlement, for reduction in Contract price to the extent of reduced premium amount. The Contractor, while arranging the insurance shall ensure to obtain all discounts on premium, which may be available for higher volume or for reason of financing arrangement of the project.
- 52.5 The clause entitled 'Insurance' covers the additional insurance requirements for the portion of the works to be performed at the Site.

#### 53.0 Contract Quality assurance:

- 53.1 The Bidder shall include in his proposal the Quality Assurance Programme containing the overall quality management and procedures which he proposes to follow in the performance of the Works during various phases as detailed in relevant clause of the General Technical Conditions.
- 53.2 At the time of Award of Contract, the detailed Quality Assurance Programme to be followed for the execution of the Contract will be mutually discussed and agreed and such agreed Programme shall form a part of the Contract.
- 53.3 The Bidder shall clearly specify the list of sub-vendors from whom the bought out items are being supplied. Such details shall be accompanied by their list of previous supplies made performance reports etc. However, in case of orders are placed, specific approval shall be obtained from the owner for the vendor-supplied materials. The quality assurance program shall be furnished for each material separately for approval.
- 53.4 Quality assurance program such as stringing chart, calibration of tools used for stringing, dimension of steel and aluminum cone before & after crimping, calibration of hydraulic machine.

#### 54.0 Erection Tools and Tackles:

The Bidder under a separate schedule, in his proposal shall include a list of all-special equipment tools & tackles etc. which he proposes to bring to site for the purpose of erection, handling, testing and commissioning including performance and guarantee tests of the equipment. However such tools tackles brought to the site for purpose of erection, handing testing & commissioning shall remain property of the contractor and can be taken back after completion of the work.



#### 55.0 Brand Names:

- 55.1 The specific reference in these specifications and documents to any material/equipment by brand name make or catalogue number shall be construed as establishing standards of quality and performance and not as limiting competition. However, Bidders may offer other similar material/equipment provided they meet the specified standard, design and performance requirements. The Bidder shall furnish adequate technical information about such alternative material equipment to enable the Owner to determine its acceptability. The Owner shall be the sole judge on the acceptability or otherwise of such alternatively material/equipment.
- 55.2 The bidder shall note that standards for workmanship material and equipment, and reference to brand name of catalogue numbers designed by the Owner in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand name and/or catalogue numbers in its bid, provided that it demonstrates to the Owner's satisfaction that the substitutions are substantially equivalent or superior to those designed in the Technical Specification.

#### 56.0 CONTRACT DOCUMENTS

- 56.1 The term Contract Documents shall mean and include the following, which shall be deemed to form an integral part of the Contract:
  - a) Invitation to Bid including letter forwarding the Bidding Documents, General Terms and Conditions of Contract and all other documents included under Part I and the Special Conditions of Contract.
  - b) Specifications of the equipment to be furnished and erected under the Contract as brought out in the accompanying Technical Specifications.
  - c) Contractor's Bid Proposal and the documents attached there to including the letters of clarifications thereto between the Contractor and the Owner prior to the Award of Contract except to the extent of repugnancy.
  - d) All the materials, literature, data and information of any sort given by the Contractor along with his bid, subject to the approval of the Owner /Consultant.
  - e) Letter of Award and any agreed variations of the conditions of the documents and special terms and conditions of Contract, if any.
- 56.2 In the event of any conflict between the above mentioned documents the matter shall be referred to the Chief Engineer whose decision shall be considered as final and binding upon the parties.

#### 57.0 USE OF CONTRACT DOCUMENTS AND INFORMATION

- 57.1 The Contractor shall not, without the Owner's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Owner in connection therewith, to any person other than a person employed by the Contractor in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for the purpose of such performance.
- 57.2 The Contractor shall not, without the Owner's prior written consent, make use of any document or information enumerated in various Contract documents except for the purpose of performing the Contract.
- 57.3 The Contractor shall not communicate or us in advertising, publicity, sales releases or in any other medium, photographs or other reproduction of the Works under this Contract, or descriptions of the site, dimensions, quantity, quality or other information, concerning the works unless prior written permission has been obtained from the Owner.

57.4 Any document, other than the Contract itself, enumerated in various Contract documents shall remain the property of the Owner and shall be returned (all copies) to the Owner on completion of the Contractor's performance under the Contract if required by the Owner.

#### 58.0 CONSTRUCTION OF THE CONTRACT

- 58.1 Notwithstanding anything stated elsewhere in the bid documents, the Contract to be entered into will be treated as a divisible Supply and Erection Contract. Award shall be placed on the successful Bidder as follows:
  - i) First Contract: For Ex-works supply of all equipment and materials
  - ii) Second Contract: For providing all other services like inland transportation, insurance for delivery at site, unloading, storage, handling at site, installation, testing and commissioning including performance testing in respect of all the equipment material supplied under the "First Contract" and any other equipment / materials given by the owner for transport from owner's stores, insurance, unloading storage handling at site installation testing & commissioning.
- 58.2 In case of divisible supply and erection Contract, or where the Owner hands over his equipment to the Contractor for executing, then the Contractor shall at the time of taking delivery of the equipment/dispatch documents be required to execute an Indemnity Bond in favour of the Owner in the form acceptable to the GETCO for keeping the equipment in safe custody and to utilize the same exclusively for the purpose of the said Contract. Samples of proforma for the Indemnity Bond will be furnished during award of Contract.
- 58.3 The Contract shall in all respects be construed and governed according to Indian Laws.
- 58.4 It is clearly understood that the total consideration for the Contract(s) has been broken up into various components only for the convenience of payment under the Contract(s) and for the measurement of deviations or modifications under the Contract(s).

#### 59.0 JURISDICTION OF CONTRACT

59.1 The laws applicable to the Contract shall be the laws in force in India. The Courts of Vadodara shall have exclusive jurisdiction in all matters arising under this Contract.

#### 60.0 EXECUTION OF CONTRACT:

- 60.1 The Owner, after the issue of the Letter of Award to the Contractor, will send one copy of the final agreement to the Contractor for his scrutiny and approval.
- 60.2 The Agreement, unless otherwise agreed to, shall be signed within 30 days of the acceptance of the Letter of Award, at the office the Owner at Vadodara on a date and time to be mutually agreed. The Contractor shall provide for signing of the Contract, Performance Guarantee, appropriate power of attorney and other requisite materials. In case the Contract is to be signed beyond the stipulated time, the Bid Guarantee submitted with the Proposal will have to be extended accordingly.
- 60.3 The Agreement will be signed in copies to be specified and the Contractor shall be provided with one signed original and the rest will be retained by the Owner.
- 60.4 The Contractor shall provide free of cost to the Owner all the Engineering data, drawings, and descriptive materials submitted with the bid including soft copy, to form a part of the Contract immediately after issue of Letter of Award.
- 60.5 Subsequent to signing of the Contract, the Contractor at his own cost shall provide the Owner with copies of agreement within fifteen (15) days after the signing of the Contract.

#### 61.0 ENFORCEMENT OF TERMS

61.1 The failure of either party to enforce at any time any of the provisions of this Contract or any rights in respect thereto or to exercise any option therein provided, shall in no way be construed to be a waiver of such provisions, rights or options or in anyway to affect the validity of the Contract. The exercise by either party of any of its rights herein shall not preclude or prejudice either party from exercising the same or any other right it may have under the Contract.

#### 62.0 COMPLETION OF CONTRACT

62.1 Unless otherwise terminated under the provisions of any other relevant clause, this Contract shall be deemed to have been completed on the expiry of the guarantee period as provided for under the clause entitled 'Guarantee'

#### 63.0 REPLACEMENT OF DEFECTIVE PARTS AND MATERIALS

- 63.1 If during the performance of the Contract, the Engineer shall decide and inform in writing to the Contractor that the Contractor has manufactured any equipment, material or part of equipment unsound and imperfect or has furnished any equipment inferior to the quality specified, the Contractor on receiving details of such defects or deficiencies shall at his own expense within seven (7) days of his receiving the notice, or otherwise, within such time as may be reasonably necessary for making it good, proceed to alter, reconstruct or remove such works and furnish fresh equipment/materials upto the standards of the specifications. In case, the Contractor fails to do so, the Engineer may on giving the Contractor seven (7) days notice in writing of his intentions to do so, proceed to remove the portion of the works so complained of and at the cost of the Contractor perform all such Works or furnish all such equipment/ material provided that nothing in this clause shall be deemed to deprive the Owner of or affect any rights under the Contract which the Owner may otherwise have in respect of such defects and deficiencies.
- 63.2 The Contractor's full and extreme liability under this clause shall be satisfied by the payment to the Owner of extra cost, of such replacement procured including erection as provided for in the Contract, such extra cost being the ascertained difference between the price paid by the Owner for such replacements and the Contract Price by portion for such defective equipment/materials/works and repayments of any sum paid by he Owner to the Contractor in respect of such defective equipment/material. Should the Owner not so replace the defective equipment/materials the Contractor's extreme liability under this clause shall be limited to repayment of all sums paid by the Owner under the Contract for such defective equipment/materials.

#### 64.0 PATENT RIGHTS AND ROYALTIES

Royalties and fees for patents covering materials, articles, apparatus, devices, equipment or processes used in the works shall be deemed to have been included in the Contract Price. The Contractor shall satisfy all demands that may be made at any time for such royalties or fees and he alone shall be liable for any damages or claims for patent infringements and shall keep the Owner indemnified in that regard. The Contractor shall, at his own cost and expense, defend all suits or proceedings that may be instituted for alleged infringement of any patents involved in the Works, and, in case of an award of damages, the Contractor shall pay for such award. In the event of any suit or other proceedings instituted against the Owner, the same shall be defended at the cost and expense of the Contractor who shall also satisfy/comply with any decree, order or award made against the Owner. But it shall be understood that no such machine, plant, work, material or thing has been used by the Owner for any purpose or any manner other than that for which they have been furnished and installed by the Contractor and specified under these specifications. Final payment to the Contractor by the Owner will not be made while any such suit or claim remains unsettled. In the event any apparatus or equipment, or any part thereof furnished by the Contractor, is in such suit or proceedings held to constitute infringement, and its use is enjoined, the Contractor shall at his option and at his own expense, either procure for the Owner, the right to continue the use of said apparatus, equipment or part thereof, replace it with non-infringing apparatus or equipment or modify it, so it becomes non-infringing.

#### 65.0 DEFENCE OF SUITS

If any action in court is brought against the Owner / Engineer / an officer / agent of the Owner, for the failure, omission or neglect on the part of the Contractor to perform any acts, matters, covenants or things under the Contract, or for damage or injury caused by the alleged omission or negligence on the part of the Contractor, his agents, representatives or his Sub-Contractors, or in connection with any claim based on lawful demands of Sub-Contractors, workmen, suppliers or employees, the Contractor shall in all such cases indemnify and keep the Owner, the Engineer and / or his representative, harmless from losses, damages, expenses or decrees arising such action.

#### 66.0 LIMITATION OF LIABILITIES

The final payment by the Owner in pursuance of the Contract shall mean the release of the Contractor from all his liabilities under the Contract. Such final payment shall be made only at the end of the Guarantee/Warranty period, and till such time as the Contractual liabilities and responsibilities of the Contractor, shall prevail. All other payments made under the Contract shall be treated as on-account payments. The aggregate liabilities are limited up to the total contract value.

#### 67.0 ENGINEER'S DECISION

- 67.1 In respect of all matters which are left to the decision of the Engineer including the granting or with-holding of the certificates, the Engineer shall, if required to do so by the Contractor, give in writing a decision thereon.
- 67.2 If, in the opinion of the Contractor, a decision made by the Engineer is not in accordance with the meaning and intent of the Contract, the Contractor may file with the Engineer, within fifteen (15) days after receipt of the decision, a written objection to the decision. Failure to file an objection within the allotted time will be considered as an acceptance of the Engineer's decision and the decision shall become final and binding.
- 67.3 The Engineer's decision and the filing of the written objection thereto shall be a condition precedent to the right to request arbitration. It is the intent of the Agreement that there shall be no delay in the execution of the works and the decision of the Engineer as rendered shall be promptly observed.

#### 68.0 POWER TO VARY OR OMIT WORK

- 68.1 No alterations, amendments, omissions, suspensions or variations of the Works (hereinafter referred to as 'variation') under the Contract as detailed in the Contract Documents, shall be made by the Contractor except as directed in writing by the Engineer, but the Engineer shall have full powers subject to the provisions hereinafter contained, from time to time during the execution of the Contract, by notice in writing to instruct the Contractor to make such variation without prejudice to the Contract. The Contractor shall carry out such variation and be bound by the same conditions as far as applicable as though the said variations occurred in the Contract Documents. If any suggested variations would, in the opinion of the Contractor, if carried out, prevent him from fulfilling any of his obligations or guarantees under the Contract, he shall notify the Engineer thereof in writing and the Engineer shall decide forthwith whether or not, the same shall be carried out and if the Engineer confirms his instructions, the Contractor's obligations and guarantees shall be modified to such an extent as may be mutually agreed. Any agreed difference in cost occasioned by any such variation shall be added to or deducted from the Contract Price as the case may be.
- 68.2 In the event of Engineer requiring any variation, a reasonable and proper notice shall be given to the Contractor to enable him to work his arrangement accordingly, and in cases where goods or materials are already prepared or any design, drawings or pattern made or work done as per the contract requires to be altered, a reasonable and agreed sum in respect thereof shall be paid to the Contractor.

- 68.3 In any case in which the Contractor has received instructions from the Engineer as to the requirement of carrying out the alterations or additional or substituted work which either then or later on, will in the opinion of the Contractor, involve a claim for additional payment, the Contractor shall immediately and in no case later than thirty (30) days, after receipt of the instructions aforesaid and before carrying out the instructions, advise the Engineer to that effect. But the Engineer shall not become liable for payment of any charges in respect of any such variations, unless the instructions for the performance of the same shall be confirmed in writing by the Engineer.
- 68.4 If any variation in the Works results in reduction of Contract Price, the parties shall agree, in writing, so to the extent of any change in the price, before the Contractor proceeds with the change.
- 68.5 In all the above cases, in the event of a disagreement as to the reasonableness of the said sum, the decision of the Engineer shall prevail.
- 68.6 Notwithstanding anything stated above in this clause, the Engineer shall have the full power to instruct the Contractor, in writing, during the execution of the Contract to vary the quantities of the items or groups of items in accordance with the provisions of clause entitled 'Change of Quantity' in section GCC. The Contractor shall carry out such variations and be bound by the same conditions as though the said variations occurred in the Contract Documents. However, the Contract Price shall be adjusted at the rates and the prices provided for the original quantities in the Contract.

#### 69.0 ASSIGNMENT AND SUB-LE TTING OF CONTRACT

- 69.1 The Contractor may, after informing the Engineer and getting his written approval, assign or sub-let the Contract or any part thereof other than for raw material, for minor details or for any part of the plant for which makes are identified in the Contract. Suppliers of the equipment not identified in the Contract or any change in the identified suppliers shall be subjected to approval by the Engineer. The experience list of equipment vendors under consideration by the Contractor for this Contract shall be furnished to the Engineer for approval prior to procurement of all such items/equipment. Such assignment/sub-letting shall not relieve the Contractor of any obligation, duty or responsibility under the Contract. Any assignment as above, without prior written approval of Engineer, shall be void.
- 69.2 For components/equipment procured by the Contractor for the purposes of the Contract, after obtaining the written approval of the Owner, the Contractor's purchase specifications and enquiries shall call for quality plan to be submitted by the suppliers along with their Proposals. The quality plans called for from the Vendors shall set out, during the various stages of manufacture and installation, the quality practices and procedures followed by the Vendors' quality control organization, the relevant reference document/standard used, acceptance level, inspection documentation raised, etc. Such quality plans of the successful vendors shall be discussed and finalized in consultation with the Engineer and shall form a part of the Purchase Order/Contract between the Contractor and the Vendor. Within three weeks of the release of the Purchase Orders/Contracts for such bought out items/components a copy of the same without price details but together with detailed purchase specifications, quality plans and delivery conditions shall be furnished to the Engineer by the Contractor.

#### 70.0 CHANGE OF QUANTITY

70.1 During the execution of the Contract, the Owner reserves the right to increase or decrease the quantities of items under the Contract but without any change in unit price or other terms & conditions. Such variations unless otherwise specified in the accompanying GCC and/or Technical Specifications, shall not be subjected to any limitation for the individual items but the total variations in all such items under the Contract shall be limited to the extent of 15%(Fifteen Percent) of the contract price by way of suitable amendment to the contract.

- 70.2 The Contract price shall accordingly be adjusted based on the unit rates available in the Contract for the change in quantities as above. The base unit rates, as identified in the Contract shall however remain constant during the currency of the Contract. In case the unit rates are not available for the change in quantity, the same shall be subjected to mutual agreement.
- **70.3** As this is an erection & commissioning of transmission line contract, Design will be done by the contractor and get it approved from SE (TR) if required for foundation which is not available at no extra cost to the GETCO. Responsibility of material will be that of the contractor.

#### 71.0 PACKING, FORWARDING AND SHIPMENT

- 71.1 The Contractor, wherever applicable, shall after proper painting, pack and crate all equipment in such a manner as to protect them from deterioration and damage during rail and road transportation to the Site and storage at the Site till the time of erection. The Contractor shall be held responsible for all damages due to improper packing.
- 71.2 The Contractor shall notify the Owner of the date of each shipment from his works, and the expected date of arrival at the Site for the information of the Owner.
- 71.3 The Contractor shall also give all shipping information concerning the weight, size and content of each packing including any other information the Owner may require.
- 71.4 The following documents shall be sent by registered post to the Owner within three days from the date of shipment, to enable the Owner to make progressive payments to the Contractor: -

Application for payment in the standard format of the Owner Invoice Packing list Pre-dispatch clearance certificate, if any Test Certificate, wherever applicable Insurance Certificate

71.5 The Contractor shall prepare detailed packing list of all packages and containers, bundles and loose materials forming each and every consignment dispatched to Site.

The Contractor shall further be responsible for making all necessary arrangements for loading, unloading and other handling right from his works up to the Site and also till the equipment is erected, tested and commissioned. He shall be solely responsible for proper storage and safe custody of all equipment.

#### 72.0 COOPERATION WITH OTHER CONTRACTORS AND CONSULTING ENGINEERS

The Contractor shall agree to cooperate with the Owner's other Contractors and Consulting Engineers and freely exchange with them such technical information as is necessary to obtain the most efficient and economical design and to avoid unnecessary duplication of efforts. The Engineer shall be provided with 3 copies of all correspondence addressed by the Contractor to other Contractors and Consulting Engineers of the Owner in respect of such exchange of technical information, wherever needed.

#### 73.0 NO WAIVER OF RIGHTS

Neither the inspection by the Owner or the Engineer or any of their officials, employees, or agents nor any order by the Owner or the Engineer for payment of money or any payment for or acceptance of, the whole or any part of the Works by the Owner or the Engineer, nor any extension of time, nor any possession taken by the Engineer shall operate as a waiver of any provision of the Contract, or of any power herein reserved to the Owner or any right to damages herein provided nor shall any waiver of any breach in the Contract be held to be a waiver of any other or subsequent breach.

# 74.0 CERTIFICATE NOT TO AFFECT RIGHT OF OWNER AND LIABILITY OF THE CONTRACTOR.

No interim payment certificate of the Engineer, nor any sum paid on account by the Owner, nor any extension of time for execution of the Works granted by the Engineer shall affect or prejudice the rights of the Owner against the Contractor or relieve the Contractor of his obligation for the due performance of the Contract, or be interpreted as approval of the Works done or of the equipment furnished and no certificate shall create liability for the Owner to pay for alterations, amendments, variations or additional works not ordered, in writing, by the Engineer or discharge the liability of the Contractor for the payment of damages whether due, ascertained, or certified or not or any sum against the payment of which he is bound to indemnify the Owner, nor shall any such certificate nor the acceptance by him of any sum paid on account or otherwise affect or prejudice the rights of the Owner against the Contractor.

#### 75.0 PROGRESS REPORTS

During the various stages of the work in pursuance of the Contract, the Contractor shall at his own cost submit periodic progress reports as may be reasonably required by the Engineer with such materials as, charts, net-works, photographs, test certificates, etc. Such progress reports shall be in the form and size as may be required by the Engineer. The monthly progress report shall be submitted in MS project indicating various activities mention in completion schedule.

#### 76.0 TAKING OVER

Upon successful completion of all the tests to be performed at Site on equipment furnished and erected by the Contractor, the Engineer shall issue to the Contractor a Taking Over Certificate as a proof of the final acceptance of the equipment. Such certificate shall not unreasonably be withheld nor will the Engineer delay the issuance thereof on account of minor omissions or defects, which do not affect the commercial operation and/or cause any serious risk to the equipment. Such certificate shall not relieve the Contractor of any of his obligations which otherwise survive, by the terms and conditions of the Contract after issue of such certificate. In the event of completion of pre commissioning tests carried out jointly, if tenderization of the substation is prevented for reasons not attributable to the successful bidder, the Preliminary Acceptance Certificate shall be given within 30 days of pre commissioning tests.

#### 77.0 TRANSFER OF TITLE

- 77.1 Transfer of title in respect of equipment and materials supplied by the Contractor to GETCO pursuant to the terms of the Contract shall pass on to GETCO with negotiation of dispatch documents.
- 77.2 This Transfer of Title shall not be construed to mean the acceptance and the consequent "Taking Over" of equipment and materials. The Contractor shall continue to be responsible for the quality and performance of such equipment and materials and for their compliance with the specifications until "Taking Over" and the fulfillment of guarantee provisions of this Contract.
- 77.3 This Transfer of Title shall not relieve the Contractor from the responsibility for all risks of loss or damage to the equipment and materials as specified under the clause entitled "Insurance" of this Section.

#### 78.0 LIABILITY FOR ACCIDENTS AND DAMAGES

Under the Contract, the Contractor shall be responsible for loss or damage to the plant until the successful completion of commissioning as defined else where in Bid document.

#### 79.0 DEMURRAGE, WHARFAGE, ETC.

All demurrage, wharfage and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the Contractor.

#### 80.0 FORCE MAJEURE

- 80.1 Force majeure is herein defined as any cause which is beyond the control of the Contractor or the Owner as the case may be, which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affects the performance of the Contract, such as:
  - a. Natural phenomena, including but not limited to floods, droughts, earthquakes and epidemics;
  - b. Acts of any Government, domestic or foreign, including but not limited to war, declared or undeclared, priorities, guarantees, embargoes.

Provided either party shall within fifteen (15) days from the occurrence of such a cause notify the other in writing of such causes.

80.2 The Contractor or the Owner shall not be liable for delays in performing his obligations resulting from any force majeure cause as referred to and/or defined above

The date of completion will, subject to hereinafter provided, be extended by a reasonable time even though such cause may occur after Contractor's performance of obligation has been delayed due to other causes.

#### 81.0 SUSPENSION OF WORK

- 81.1 The Owner reserves the right to suspend and reinstate execution of the whole or any part of the Works without invalidating the provisions of the Contract. Orders for suspension or reinstatement of the Works will be issued by the Engineer to the Contractor in writing. The time for completion of the works will be extended for a period equal to duration of the suspension.
- 81.2 Any necessary and demonstrable cost incurred by the Contractor as a result of such suspension of the works will be paid by the Owner, provided such costs are substantiated to the satisfaction of the Engineer. The Owner shall not be responsible for any liabilities if suspension or delay is due to some default on the part of the Contractor or his Sub-Contractor.

#### 82.0 CONTRACTOR'S DE FAULT

82.1 If the Contractor shall neglect to execute the works with due diligence and expedition or shall refuse or neglect to comply with any reasonable order given to him, in writing by the Engineer in connection with the works or shall contravene the provisions of the Contract, the Owner may give notice in writing to the Contractor to make good the failure, neglect or contravention complained of. Should the Contractor fail to comply with the notice within thirty (30) days from the date of serving the notice, then and in such case the Owner shall be at liberty to employ other workmen and forthwith execute such part of the works as the Contractor may have neglected to do or if the Owner shall think fit, without prejudice to any other right he may have under the Contract to take the work wholly or in part out of the Contractor's hands and re-contract with any other person or persons to complete the works or any part thereof and in that event the Owner shall have free use of all Contractor's equipment that may have been at the time on the Site in

connection with the works without being responsible to the Contractor for fair wear and tear thereof and to the exclusion of any right of the Contractor over the same, and the Owner shall be entitled to retain and apply any balance which may otherwise be due on the Contract by him to the Contractor, or such part thereof as may be necessary, to the payment of the cost of executing the said part of the Works or of completing the Works as the case may be. If the cost of completing of works or executing part thereof as aforesaid shall exceed the balance due to the Contractor shall pay such excess. Such payment of excess amount shall be independent of the liquidated damages for delay which the Contractor shall have to pay if the completion of works is delayed.

- 82.2 In addition, such action by the Owner as aforesaid shall not relieve the Contractor of his liability to pay liquidated damages for delay in completion of Works.
- 82.3 Such action by the Owner as aforesaid the termination of the Contract under this clause shall not entitle the Contractor to reduce the value of the Contract Performance Guarantee nor the time thereof. The Contract Performance Guarantee shall be valid for the full value and for the full period of the Contract including guarantee period.

### 83.0 TERMINATION OF CONTRACT ON OWNER'S INITIATIVE

- 83.1 The Owner reserves the right to terminate the Contract either in part or in full due to reasons other than those mentioned under clause entitled 'Contractor's Default'. The Owner shall in such an event give fifteen (15) days notice in writing to the Contractor of his decision to do so.
- 83.2 The Contractor upon receipt of such notice shall discontinue the work on the date and to the extent specified in the notice, make all reasonable efforts to obtain cancellation of all orders and Contracts to the extent they are related to the work terminated and terms satisfactory to the Owner, stop all further sub-contracting or purchasing activity related to the work terminated, and assist Owner in maintenance, protection, and disposition of the works acquired under the Contract by the Owner. In the event of such a termination the Contractor shall be paid compensation, equitable and reasonable, dictated by the circumstances prevalent at the time of termination.
- 83.3 If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partners dies then unless the Owner is satisfied that the legal representatives of the individual Contractor or of the proprietor of the propriety concern and in the case of partnership, the surviving partners, are capable of carrying out and completing the Contract the Owner shall be entitled to cancel the Contract as to its in-completed part without being in any way liable to payment of any compensation to the estate of deceased Contractor and/or to the surviving partners of the Owner that the legal representatives of the deceased Contractor or surviving partners of the Contractor's firm on account of the cancellation of the Contract shall be final and binding on the parties. In the event of such cancellation the Owner shall not hold the estate of the deceased Contractor and/or the surviving partners of the deceased Contractor and/or the surviving partners of the deceased Contractor and/or the surviving partners of the deceased Contractor's firm cannot carry out and complete the Contract shall be final and binding on the parties. In the event of such cancellation the Owner shall not hold the estate of the deceased Contractor and/or the surviving partners of the Contractor's firm liable to damages for not completing the Contract.

### 84.0 FRUSTRATION OF CONTRACT

84.1 In the event of frustration of the Contract because of supervening impossibility in terms of Section 56 of the Indian Contract Act, parties shall be absolved of their responsibility to perform the balance portion of the Contract, subject to provisions contained in subclause 84.3 below.

- 84.2 In the event of non-availability or suspension of funds for any reasons, whatsoever (except for reason of willful or flagrant breach by the Owner) and/or Contractor then the works under the Contract shall be suspended. Furthermore, if the Owner is unable to make satisfactory alternative arrangements for financing to the Contractor in accordance with the terms of the Contract within three months of the event, the parties hereto shall be relieved from carrying out further obligations under the Contract treating it as frustration of the Contract.
- 84.3 In the event referred to in sub-clauses 84.1& 84.2 above the parties shall mutually discuss to arrive at reasonable settlement on all issues including amounts due to either party for the work already done on quantum merit\_ basis which shall be determined by mutual agreement between the parties.

### 85.0 GRAFTS AND COMMISSIONS ETC.

Any graft, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner(s), agent(s), officer(s), director(s), employee(s) or servant(s) or any one on his or their behalf in relation to the obtaining or to the execution of this or any other Contract with the Owner, shall in addition to any criminal liability which it may incur, subject the Contractor to the cancellation of this and all other Contracts and also to payment of any loss or damage to the Owner resulting from any cancellation. The Owner shall then be entitled to deduct the amount so payable from any monies otherwise due to Contractor under the Contract.

### 86.0 SETTLEMENT OF DISPUTES

- 86.1 Any dispute(s) or difference(s) arising out of or in connection with the Contract shall, to the extent possible, be settled amicably between the parties.
- 862 If any dispute or difference of any kind, whatsoever, shall arise between the Owner and the Contractor, arising out of the Contract for the performance of the Works whether during the progress of the Works or after its completion or whether before or after the termination, abandonment or breach of the Contract, it shall, in the first place, be referred to and settled by the Engineer, who, within a period of thirty (30) days after being requested by either party to do so, shall give written notice of his decision to the Owner and the Contractor.
- 86.3 Save as hereinafter provided, such decision in respect of every matters so referred shall be final and binding upon the parties until the completion of the Works and shall forthwith be given effect to by the Contractor who shall proceed with the Works with all due diligence, whether he or the Owner requires arbitration as hereinafter provided or not.
- 86.4 If after the Engineer has given written notice of his decision to the parties, no claim to arbitration has been communicated to him by either party within thirty (30) days from the receipt of such notice, the said decision shall become final and binding on the parties.
- 86.5 In the event of the Engineer failing to notify his decision as aforesaid within thirty (30) days after being requested as aforesaid, or in the event of either the Owner or the Contractor being dissatisfied with any such decision, or within thirty (30) days after the expiry of the first mentioned period of thirty days, as the case may be, either party may require that the matters in dispute be referred to arbitration as hereinafter provided.

### 87.0 ARBITRATION

87.1 All disputes or differences in respect of which the decision, if any, of the Engineer has not become final or binding as aforesaid shall be settled by arbitration in the manner hereinafter provided. **MD of the company is the final authority.** 

- a. The arbitration shall be conducted by three arbitrators, one each to be nominated by the Contractor and the Owner and the third to be appointed as an umpire by both the arbitrators in accordance with the Indian Arbitration Act. If either of the parties fails to appoint its arbitrator within sixty (60) days after receipt of a notice from the other party invoking the Arbitration clause, the arbitrator appointed by the party invoking the arbitration clause shall become the sole arbitrator to conduct the arbitration.
- b. The arbitration shall be conducted in accordance with provisions of Indian Arbitration Act 1996 or latest amendment thereof.
- 87.2 The decision of the majority of the arbitrators shall be final and binding upon the parties. The arbitrators may, from time to time with the consent of all the parties enlarge the time for making the award. In the event of any of the aforesaid arbitrators dying, neglecting, resigning or being unable to act for any reason, it will be lawful for the party concerned to nominate another arbitrator in place of the outgoing arbitrator.
- 87.3 The arbitrator shall have full powers to review and/or revise any decision, opinion, direction, certification or valuation of the Engineer in accordance with the Contract, and neither party shall be limited in the proceedings before such arbitrators to the evidence or arguments put before the Engineer for the purpose of obtaining the said decision.
- 87.4 No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him as being called as a witness or giving evidence before the arbitrators on any matter whatsoever relevant to the dispute or difference referred to the arbitrators as aforesaid.
- 87.5 During settlement of disputes and arbitration proceedings, both parties shall be obliged to carry out their respective obligations under the Contract.

### 87.6 Termination of Contract:

In case of contractor fails to deliver the stocks or any consignment thereof within contractual period of delivery or in case the stores are found not in accordance with prescribed specification and/or the approved sample, the GETCO shall exercise its discretionary power either:

- 87.7 To recover, from the contractor as agreed, by way of penalty clause above, or
- 87.8 To purchase from elsewhere after giving due notice to the contractor on account and at the risk of the contractor for such stores not so delivered or other similar description without canceling the contract in respect of the consignment not yet due for delivery or

### 87.9 To cancel the contract.

In the event of the risk purchase of stores of similar description, the opinion of the GETCO shall be final. In the event of action taken under clause above, the contractor shall be liable to pay for any loss which the GETCO may sustain on that account, but the contractor shall not be entitled to have any saving on such purchases made against default.

The decision of the GETCO shall be final as regards to the acceptability of stores supplied by the contractor and the GETCO shall not be required to give any reason in writing or otherwise at any time for rejection of the stores.

### 88.0 RECONCILIATION OF ACCOUNTS

The Contractor shall prepare and submit every two months, a statement covering payments claimed and the payments received vis-à-vis the works executed, for reconciliation of accounts with the Owner. The Contractor shall also prepare and submit a detailed account of Owner Issue materials received and utilized by him for reconciliation purpose in a format to be discussed & finalized with the Owner before the award of Contract.



### 89.0 LABOUR LAWS:

- 89.1 Persons below the age of 18 years shall not be employed for the work. No female worker shall be employed in the night shift between 07.00 p.m. and 06.00 a.m. next day.
- 89.2 Contractor shall maintain a valid labour license under the contract Labour (Regulation and abolition) Act for employing necessary manpower required by him. In the absence of such license, the contract shall be liable to be terminated without assigning any reason thereof.
- 89.3 The Contractor shall at his own expenses comply with all labour laws and keep the GETCO indemnified in respect thereof. Some of the major liabilities under various labour and industrial laws which the Contractor shall comply with are as under:
  - i) Payment of contribution by way of Employer's Contribution towards provident Fund, Family Pension Scheme, Deposit Linked Insurance Scheme, Administrative charges, etc. at the rates made applicable from time to time by the Government of Gujarat / Government of India or other Statutory Authority.
  - ii) Payment of deposit in respect of each contract labour at the rate of Rs. 30/- or later prevailing rate with the Office of Commissioner of Labour as per the Contract Labour (Regulation and Abolition) Act.
  - iii) License fee as prescribed under the Contract Labour (Regulation and Abolition) Act and Rules framed there under depending upon the number of workmen.
  - iv) Paid leave facility and wages as per the provision of the Factories Act at the rate of one day for every 20 days of working.
  - v) Identity cards as prescribed under the Factories Act with photo affixed thereto, for identification.
  - vi) Payment of retrenchment compensation, Notice Pay and other liabilities as per Industrial Dispute Act. Any payment to the Contractor's employee arising out of any claim of disputes under the Industrial Disputes Act 1947 or any other Labour Laws.
  - vii) Payment of compensation in case of accidental injury.
  - viii) Provision of crèche if the female laborers employed are more than 30.
  - ix) Maternity Leave as per the provisions of the Maternity Benefit Act.

The above are some of the major liabilities of the Contractor in addition to other liabilities prescribed under the various labour laws, in force from time to time, from Statutory Authorities like State Government/ Government o India, which the Contractor shall have to comply with.

### 89.1 PROVIDENT FUND AND FAMILY PENSION SCHEME:

The Contractor shall submit along with his bills (month wise) a statement regarding deduction against employees Provident Fund and Family Pension Scheme in respect of each concerned employee. Provident Fund and Family pension Scheme at the rate of 18% (or at the rate made applicable by the Government from time to time of the wages. The Contractor's contribution and his workers contribution towards Provident Fund and Family Pension Scheme shall be deposited by the Contractor with Regional Provident Fund Commissioner, Ahmedabad.

### 89.2 DEPOSIT LINKED INSURANCE SCHEME

The contractor shall have to deposit 1/2 % of the wages in respect of employees who is a member of the Provident Fund, as the contribution to the Deposit Linked Insurance Scheme with Regional Provident Fund Commissioner, Ahmedabad.

### 89.3 ADMINISTRATIVE CHARGES:

Administrative charges for maintaining Provident Fund Account shall be deposited by the Contractor with Regional Provident Fund Commissioner, Ahmedabad at the rates applicable.

### 89.4 PAID LEAVE FACILITY:

Paid Leave Facility at the rate of one day for every twenty days worked by the Contract Labour, shall be provided by the Contractor to his workers. He shall maintain Leave Records, Leave Cards, for individual labour that shall be duly verified, approved and certified by the authorized Officer of the GETCO.

# 89.5 WORKMAN'S COMPENSATION FUND AND EMPLOYER'S LIABILITY INSURANCE:

The contractor shall cover all his employees under workmen's compensation fund and under the liability insurance. The purchaser shall not be responsible for any payments of compensation to the workers/supervisor of the contractor for fatal or non-fatal accidents during the pendency of the contract.

**89.6** The contractor shall employ adequate number of experienced skilled at site for daily supervision and for maintenance of various registers and records required under the law and contract. No payment for supervision shall be admissible.

### 89.7 CONTRCTOR TO INDEMNIFY THE GETCO:

The Contractor shall Indemnify the GETCO and every member officer and employees of the GETCO also, Engineer-in-Charge and his staff against all actions, proceedings, claims, demands, costs and expenses whatsoever, arising out of or in connection with the matters referred herein above elsewhere and against all actions, proceedings, claims, demands, costs and expenses which may be made against the GETCO or Government for or in respect of performance of his obligation under the contract documents. The GETCO shall not be liable for intervention of authority Government for or in respect of performance of or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or his Sub-Contractor and the contractor shall indemnify and keep indemnified the GETCO against all claims, demands, proceedings, cost, charges and expenses whatsoever in respect thereof or in relation thereto.

### 89.8 WORKMEN'S COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

Insurance shall be affected for all the Contractor's employee engages in the performance of this contract. If any of the work is sublet, the Contractor shall required the Sub-Contractor to provide workmen's employer's liability insurance for the latter's employees, such employees shall be covered under the Contractor's Insurance.

### 89.9 WAGES TO BE PAID & TIME OF PAYMENT ETC. BY THE CONTRACTOR

- a) The Contractor shall pay minimum wages per day to his Labours/ Workers as per rates fixed under the minimum wages act. The wages of every Contract Labour employed by him under this contract shall also be paid by him before the expiry of 7<sup>th</sup> day of the last day of the month in respect of the wages are payable (i.e. wages of a month have to be paid by him in the first week of the next month). Any default will result in cancellation of contract forthwith or else the contractor shall be punishable to the extent of Rs. 100/- per each day or as per the prevailing rules of labour laws.
- b) The Contractor shall give his Telephone Number and Address to the GETCO, so that, in case of labour trouble etc. the Contractor can be contacted. The Contractor shall arrange to have his office outside the factory work premises and the Contractor shall arrange to have his office outside the factory work premises and the Contractor shall keep himself present throughout the working hours.

### 89.10 REGISTRATION WITH PROVIDENT FUND OFFICE

- I) The separate P.F. code issued from P.F. commissioner is required to be taken by contractor.
- ii) If the contractor does not possess separate P.F. code number of RPFC, his tender will not be considered for acceptance.
- iii) The contractor should mention separate P.F. code number allotted by RPFC, along with the tender.

### PART - I (B) (ECC) ERECTION CONDITIONS OF CONTRACT

### 1.0 GENERAL

- 1.1 The following shall supplement the conditions already contained in other parts of these specifications & document and shall govern the portion of the work of this Contract to be performed at Site.
- 1.2 The Contractor upon signing of the Contract shall, nominate a responsible officer as his representative at Site suitably designated for the purpose of overall responsibility and coordination of the works to be performed at Site. Such person shall function from the Site office of the Contractor during the pendency of Contract.

### 2.0 REGULATION OF LOCAL AUTHORITIES AND STATUTES

- 2.1 The Contractor shall comply with all the rules and regulations of local authorities during the performance of his field activities. He shall also comply with the Minimum Wages Act, 1948 and the Payment of Wages Act (both of the Government of India) and the rules made there under in respect of any employee or workman employed or engaged by him or his Sub-Contractor. He shall abide by labour laws.
- 2.2 All initial registration and statutory inspection fees, if any, in respect of his work pursuant to this Contract shall be to the account of the GETCO. Should any such inspection or registration need to be re-arranged due to the fault of the Contractor or his Sub Contractor, the additional fees to such inspection and/or registration also shall be borne by the Contractor.

### 3.0 OWNER'S LIEN ON EQUIPMENT

The Owner shall have lien on all equipment brought to the Site for the purpose of erection, testing and commissioning of the equipment to be supplied & erected under the Contract. The Owner shall continue to hold the lien on all such equipment throughout the period of Contract. No material brought to the Site shall be removed from the Site by the Contractor and/or his Sub-Contractors without the prior written approval of the Engineer.

### 4.0 ACCESS TO SITE AND WORKS ON SITE

- 4.1 Suitable access to and possession of the Site shall be afforded to the Contractor by the Owner in reasonable time.
- 4.2 The works so far as it is carried out on the Owner's premises, shall be carried out at such time as the Owner may approve and the Owner shall give the Contractor reasonable facilities for carrying out the works.
- 4.3 In the execution of the works, no person other than the Contractor or his duly appointed representative, Sub- Contractor and workmen, shall be allowed to do work on the Site, except by the special permission, in writing of the Engineer or his representative.

### 5.0 CONTRACTOR'S SITE ESTABLISHMENT

The Contractor shall at all times keep posted an authorized representative for the purpose of the Contract. Any written order or instruction of the Engineer or his duly authorized representative shall be communicated to the said authorized resident representative of the Contractor and the representative shall be available at a stated address for this purpose.



### 6.0 CO-OPERATION WITH OTHER CONTRACTORS

6.1 The Contractor shall co-operate with all other Contractors or tradesmen of the Owner, who may be performing other works on behalf of the Owner and the workmen who may be employed by the Owner and doing work in the vicinity of the Works under the Contract. The Contractor shall also so arrange to perform his work as to minimize, to the maximum extent possible, interference with the work of other Contractors and their workmen. Any injury or damage that may be sustained by the employees of the other Contractors and the Owner, due to the Contractor's work shall promptly be made good at the Contractor's own expense.

### 7.0 DISCIPLINE OF WORKMEN

The Contractor shall adhere to the disciplinary procedure set by the Engineer in respect of his employees and workmen at Site. The Engineer shall be at liberty to object to the presence of any representative or employee of the Contractor at the Site, if in the opinion of the Engineer such employee has misconducted himself or is incompetent or negligent or otherwise undesirable and then the Contractor shall remove such a person objected to and provide in his place a competent replacement.

### 8.0 CONTRACTOR'S FIELD OPERATION

- 8.1 The Contractor shall keep the Engineer informed in advance regarding his field activity plans and schedules for carrying-out each part of the works. Any review of such plan or schedule or method of work by the Engineer shall not relieve the Contractor of any of his responsibilities towards the field activities. Such reviews shall also not be considered as an assumption of any risk or liability by the Engineer or the Owner or any of his representatives and no claim of the Contractor will be entertained because of the failure or inefficiency of any such plan or schedule or method of work reviewed. The Contractor shall be solely responsible for the safety, adequacy and efficiency of plant and equipment and his erection methods.
- 8.2 The Contractor shall have the complete responsibility for the conditions of the Work-site including the safety of all persons employed by him or his Sub–Contractor and all the properties under his custody during the performance of the work. This requirement shall apply continuously till the completion of the Contract and shall not be limited to normal working hours.

### 9.0 PROGRESS REPORT

- 9.1 The Contractor shall furnish three (3) copies each to the Engineer of progress including if any, photographs of the work done at Site.
- 9.2 The monthly progress report detailing-out the progress achieved on all erection activities shall highlight comparison to the schedules. The report shall also indicate the reasons for the variance between the scheduled and actual progress and the action proposed for corrective measures, wherever necessary.
- 9.3 The monthly progress report shall be submitted in MS project indicating various activities mention in completion schedule.

### 10.0 MAN-POWER REPORT

10.1 The Contractor shall submit to the Engineer, on the first day of every month, a man hours schedule for the month, detailing the man hours scheduled for the month, skillwise and area-wise.

### 11.0 PROTECTION OF WORK

The Contractor shall have total responsibility for protecting his works till it is finally taken over by the Engineer. No claim will be entertained by the Owner or by the Engineer for any damage or loss to the Contractor's works and the Contractor shall be responsible for complete restoration of the damaged works to original conditions to comply with the specification and drawings.

### 12.0 EMPLOYMENT OF LABOUR

- 12.1 The Contractor will be expected to employ on the work only his regular skilled employees with experience of his particular work. No person below the age of eighteen years shall be employed.
- 12.2 All traveling expenses including provisions of necessary transport to and from Site, lodging, allowances and other payments to the Contractor's employees shall be the sole responsibility of the Contractor.
- 12.3 In case the Owner becomes liable to pay any wages or dues to Labour or any Government agency under any of the provisions of the Minimum Wages Act, Workmen Compensation Act, Contract Labour Regulation Abolition Act or any other law due to act of omission of the Contractor, the Owner may make such payment and shall recover the same from the Contractor's bills.

### 13.0 FACILITIES TO BE PROVIDED BY THE OWNER

### 13.1 Space

Land for Contractor's Store, Workshop etc.

- a) The Engineer shall at his discretion and for the duration of execution of the Contract make available at site, land for construction of Contractor's field office, workshop, stores, etc. required for execution of the Contract. Any such temporary construction shall be done by the Contractor at his cost.
- b) On completion of work the Contractor shall hand over the land duly cleaned to the Engineer. Until and unless the Contractor has handed over the vacant possession of land allotted to him for the above purpose, the payment of his final bill shall not be made.

### 13.2 Electricity:

The concerned EE (TR) shall apply for 11KV Transformer Center at the site of new Substation and for which concerned DISCOM shall erect the required line and install the transformer Center, for which, the cost is to be borne by GETCO. Subsequently, the Agency finalized for EPC contract by GETCO, shall apply for temporary connection to the concerned DISCOM Sub-Division paying required Service Charges and Deposit. Such temporary connections to be released on the name of EPC-Contractor on recommendation of the concerned EE (TR). The power so consumed shall be charged at the prevailing tariff rate

### 14.0 FACILITIES TO BE PROVIDED BY THE CONTRACTOR

### 14.1 Tools, tackles and scaffoldings

The Contractor shall provide all the construction equipments; tools, tackles and scaffoldings required for pre-assembly, erection, testing and commissioning of the equipment covered under the Contract. He shall submit a list of all such materials to the Engineer before the commencement of work at Site. These tools and tackles shall not be removed from the Site without the written permission of the Engineer.

### 14.2 First-aid

The Contractor shall provide necessary first-aid facilities for all his employees, representatives and workmen working at the Site. Enough number of Contractor's personals shall be trained in administering first-aid.

### 14.3 Cleanliness

The Contractor shall be responsible for keeping the entire area allotted to him clean and free from rubbish, debris etc. during the period of Contract. The Contractor shall employ enough number of personnel to keep the work area clean. Materials and stores shall be so arranged to permit easy cleaning of the area. In areas where equipment might drip oil and cause damage to the floor surface, a suitable protective cover of a flame resistant, oil proof sheet shall be provided to protect the floor from such damage.

#### 15.0 LINES AND GRADES

All the works shall be performed to the lines, grades and elevations indicated on the drawings. The Contractor shall be responsible to locate and lay-out the works. Basic horizontal and vertical control points will be established and marked by the Engineer at site at suitable points. These points shall be used as datum for the works under the Contract. The Contractor shall inform the Engineer well in advance of the times and places at which he wishes to do work in the area allotted to him so that suitable datum points may be established and checked by the Engineer to enable the Contractor to proceed with his works. Any work done without being properly located may be removed and/or dismantled by the Engineer at Contractor's expense.

#### 16.0 FIRE PROTECTION

- 16.1 The work procedures that are to be used during the erection shall be those, which minimize fire hazards to the extent practicable. Combustible materials, combustible waste and rubbish shall be collected and removed from the Site at least once each day. Fuels, oils and volatile or inflammable materials shall be stored away from the construction and equipment and materials storage areas.
- 16.2 All the Contractor's supervisory personnel and select number of workers shall be trained for fire fighting. Enough of such trained personnel must be available at the Site during the entire period of the Contract.

### 17.0 SECURITY

The Contractor shall have total responsibility for all equipment and materials in his custody/stores, loose, semi-assembled and/or erected by him at Site. The Contractor shall make suitable security arrangements ensure the protection of all materials, equipment and works from theft, fire, pilferage and any other damages and loss.

### 18.0 PRE-COMMISSIONING TRIALS AND INITIAL OPERATIONS

The pre-commissioning trials and initial operations of the equipment furnished and erected by the Contractor shall be the responsibility of the Contractor as detailed in relevant clauses of Technical Specifications. The Contractor shall provide, in addition, test instruments, calibrating devices, etc and labour required for successful performance of these trials. If it is anticipated that the above test may prolong for a long time, the Contractor's workmen required for the above test shall always be present at Site during such trials.

### 19.0 MATERIALS HANDLING AND STORAGE

- 19.1 All the equipment furnished under the Contract and arriving at Site shall be promptly received, unloaded, transported and stored in the storage spaces by the Contractor.
- 19.2 Contractor shall be responsible for examining all the shipment and notify the Engineer immediately of any damages, storage, discrepancy etc, for the purpose of Engineer's information only. The Contractor shall submit to the Engineer every week a report detailing all the receipts during the week. However, the Contractor shall be solely responsible for any shortages or damages in transit, handling and / or in storage and erection of the equipment at Site. Any demurrage, wharf age and other such charges claimed by the transporters, railways etc, shall be to the account of the Contractor.
- 19.3 The Contractor shall maintain an accurate and exhaustive record detailing out the list of all equipment materials received by him for the purpose of erection and keep such record open for the inspection of the Engineer in-charge.
- 19.4 All equipment shall be handled very carefully to prevent any damage or loss. The equipment stored shall be properly protected to prevent damage either to the equipment or to the floor where they are stored. The equipment from the store shall be moved to the actual location at the appropriate time so as to avoid damage of such equipment at Site.
- 19.5 All electrical panels, control gears, motors and such other devices shall be properly dried by heating before they are installed and energized. Motor bearings, slip ring, commutators and other exposed parts shall be protected against moisture ingress and corrosion during storage and periodically inspected.
- 19.6 All the electrical equipment such as motors, generators, etc. shall be tested for insulation resistance at least once in three months from the date of receipt till the date of commissioning and a record of such measured insulation values maintained by the Contractor. Such records shall be opened for inspection by the Engineer.
- 19.7 The consumable and other supplies likely to deteriorate due to storage must be thoroughly protected and stored in a suitable manner to prevent damage or deterioration in quality by storage.
- 19.8 All the materials stored in the open or dusty location must be covered with suitable weatherproof and flame proof covering material wherever applicable.
- 19.9 If the materials belonging to the Contractor are stored in areas other than those earmarked for him, the Engineer will have the right to get it moved to the area earmarked for the Contractor at the Contractor's cost.
- 19.10 The Contractor shall be responsible for making suitable indoor storage facilities to store all equipment, which require indoor storage. Normally, all the electrical equipment such as motors, control gears, generators, exciters and consumables like electrodes, lubricants etc. shall be stored in the closed storage space. The Engineer, in addition, may direct the Contractor to move certain other materials, which in his opinion will require indoor storage, to indoor storage areas, which Contractor shall strictly comply.

### 20.0 CONSTRUCTION MANAGEMENT

20.1 The field activities of the Contractors working at Site will be coordinated by the Engineer and the Engineer's decision shall be final in resolving any disputes or conflicts between the Contractor and other Contractors and the tradesmen of the Owner regarding scheduling and coordination of work. Such decision by the Engineer shall not be a cause for extra compensation or extension of time for the Contractor.

- 20.2 The Engineer shall hold weekly meetings of the Contractor at Site, at a time and place to be designated by the Engineer. The Contractor shall attend such meetings and take notes of discussions during the meeting and the decision of the Engineer and shall strictly adhere to those decisions in performing his works. In addition to the above weekly meeting, the Engineer may call for other meetings either with individual Contractors or with selected number of Contractors and in such a case the Contractors if called, will also attend such meetings.
- 20.3 Time is the essence of the Contract and the Contractor shall be responsible for performance of his works in accordance with the specified construction schedule. If at any time, the Contractor is falling behind the schedule, he shall take necessary action to make good for such delays by increasing his work force or by working overtime or otherwise accelerate the progress of the work to comply with the schedule and shall communicate such actions in writing to the Engineer, satisfying that his action will compensate for the delay. The Contractor shall not be allowed any extra compensation for such action.
- 20.4 The Engineer shall, however, not be responsible for provision of additional labour and/or materials or supply or any other services to the Contractor except for the coordination work between various Contractors if any at site.

### 21.0 FIELD OFFICE RECORDS

The Contractor shall maintain up to date copies of all drawings, specifications and other Contract Documents and any other supplementary data complete with all the latest revisions thereto. The Contractor shall also maintain in addition the continuous record of all changes to the above Contract Documents, drawings, specifications, and supplementary data, etc. effected at the field and on completion of his total assignment under the Contract shall incorporate all such changes on the drawings and other Engineering data to indicate as installed conditions of the equipment furnished and erected under the Contract. Such drawings and Engineering data shall be submitted to the Engineer in required number of copies.

### 22.0 CONTRACTOR'S MATERIALS BROUGHT TO SITE

- 22.1 The Contractor shall bring to Site all equipment, components, parts, materials, including construction equipment, tools and tackles for the purpose of the works under intimation to the Engineer. All such goods shall, from the time of their being brought vest in the Owner, but may be used for the purpose of the works only and shall not on any account be removed or taken away by the Contractor without the written permission of the Engineer. The Contractor shall nevertheless be solely liable and responsible for any loss or destruction thereof and damage thereto.
- 22.2 The Owner shall have a lien on such goods for any sum or sums which may at any time be due or owing to him by the Contractor, under, in respect of or by reasons of the Contract. After giving a fifteen (15) days notice in writing of his intention to do so, the Owner shall be at liberty to sell and dispose off any such goods, in such manner as he shall think fit and to apply the proceeds in or towards the satisfaction of such sum or sums due as aforesaid.
- 22.3 After the completion of the Works, the Contractor shall remove from the Site under the direction of the Engineer the materials such as construction equipment, erection tools and tackles, scaffolding etc. with the written permission of the Engineer.

### 23.0 PROTECTION OF PROPERTY AND CONTRACTOR'S LIABILITY

23.1 The Contractor shall be responsible for any damage resulting from his operations. He shall also be responsible for protection of all persons including members of public and employees of the Owner and the employees of other Contractors and Sub-Contractors and all public and private property.

### 24.0 INSURANCE

24.1 In addition to the conditions covered under the Clause entitled 'Insurance' in General Terms and Conditions of Contract, the following provisions will also apply to the portion of works to be done beyond the Contractor's own or his Sub-Contractor's manufacturing Works.

### 24.2 Workmen's Compensation Insurance

This insurance shall protect the Contractor against all claims applicable under the Workmen's Compensation Act, 1948 (Government of India). This policy shall also cover the Contractor against claims for injury, disability, disease or death of his or his Sub-Contractor's employee, which for any reason are not covered under the Workmen's Compensation Act, 1948. The liabilities shall not be less than:

Workmen's Compensation:As per statutory ProvisionsEmployee's liability:As per statutory Provisions

### 24.3 Comprehensive General Liability Insurance

The insurance shall protect the Contractor against all claims arising from injuries, disabilities, disease or death of members of public or damage to property of others, due to any act of omission on the part of the Contractor, his agents, his employees, his representatives and Sub-Contractors or from riots, strikes and civil commotion.

- 2.4.4 The hazards to be covered will pertain to all the works and areas where the Contractor, his Sub-Contractors, his agents and his employees have to perform work pursuant to the Contract.
- 24.5 The above are only illustrative list of insurance covers normally required and it will be the responsibility of the Contractors to maintain all necessary insurance coverage to the extent both in time and amount to take care of all his liabilities either direct or indirect, in pursuance of the Contract.

### 25.0 UNFAVOURABLE WORKING CONDITIONS

The Contractor shall confine all his field operations to those works, which can be performed without subjecting the equipment and materials to adverse effects during inclement weather conditions, like monsoon, storms etc. and during other unfavorable construction conditions. No field activities shall be performed by the Contractor under conditions, which might adversely affect the quality and efficiency thereof, unless special precautions or measures are taken by the Contractor in a proper and satisfactory manner in the performance of such Works and with the concurrence of the Engineer. Such unfavorable construction conditions will in no way relieve the Contractor of his responsibility to perform the Works as per the schedule.

### 26.0 PROTECTION OF MONUMENTS AND REFERENCE POINTS

The Contractor shall ensure that any finds such as relic, antiquity, coins, fossils, etc. which he may come across during the course of performance of his Works either during excavation or elsewhere, are properly protected and handed over to the Engineer. Similarly the Contractor shall ensure that the bench marks, reference points, etc, which are marked either with the help of Engineer or by the Engineer shall not be disturbed in any way during the performance of his Works. If any work is to be performed which disturbs such reference the same shall be done only after these are transferred to other suitable locations under the direction of the Engineer. The Contractor shall provide all necessary materials and assistance for such relocation of reference points etc.

### 27.0 WORK & SAFETY REGULATIONS

- 27.1 The Contractor shall ensure proper safety of all the workmen, materials, equipment & plant & belonging to him or to GETCO or to others, working at the Site. The Contractor shall also be responsible for provision of all safety notices and safety equipment required both by the relevant legislations and the Engineer, as he may deem necessary.
- 27.4 All equipment used in construction and erection by Contractor shall meet Indian/International Standards and where such standards do not exist, the Contractor shall ensure these to be absolutely safe. All equipment shall be strictly operated and maintained by the Contractor in accordance with manufacturer's Operation Manual and safety instructions and as per Guidelines/rules of GETCO in this regard.
- 27.5 Periodical examinations and all tests for all lifting/hoisting equipment & tackles shall be carried-out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated Laws/Rules in force from time to time. A register of such examinations and tests shall be properly maintained by the Contractor and will be promptly produced as and when desired by Engineer or by the person authorized.
- 27.6 The Contractor shall provide suitable safety equipment of prescribed standard to all employees and workmen according to the need.
- 27.8 The Contractor shall provide safe working conditions to all workmen and employees at the Site including safe means of access, railings, stairs, ladders, scaffoldings etc. The scaffoldings shall be erected under the control and supervision of an experienced and competent person. The Contractor only shall use good and standard quality of material.
- 27.9 The Contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the Owner / other Contractors under any circumstances, whatsoever, unless expressly permitted in writing to handle such fuses, wiring or electrical equipment
- 27.10 Before the Contractor connects any electrical appliances to any plug or socket belonging to the other Contractor or Owner, he shall:
  - a. Satisfy the Engineer that the appliance is in good working condition;
  - b. Inform the Engineer of the max. current rating & voltage of the appliances;
  - c. Obtain permission of the Engineer detailing the sockets to which the appliances may be connected.
- 27.11 The Engineer will not grant permission to connect until he is satisfied that;
  - a. The appliance is in good condition and is fitted with suitable plug;
  - b. The appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.
- 27.12 No electric cable in use by the Contractor/Owner will be disturbed without prior permission. No weight of any description will be imposed on any cable and no ladder or similar equipment will rest against or attached to it.
- 27.13 No repair work shall be carried out on any live equipment. The equipment must be declared safe by the Engineer and a permit to work shall be issued by the Engineer before any repair work is carried out by the Contractor. While working on electric lines/equipment, whether live or dead, suitable type and sufficient quantity of tools will have to he provided by the Contractor to electricians/workmen/officers.
- 27.14 In case any accident occurs during the construction/ erection or other associated activities undertaken by the Contractor thereby causing any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the Contractor provide medical facility / treatment & to promptly inform the same to the Engineer in prescribed form and also to all the authorities envisaged under the applicable laws.

- 27.15 The Engineer shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipment. In such cases, the Contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove shortcomings promptly. The Contractor after stopping the specific work can, if felt necessary, appeal against the order of stoppage of work to the Engineer within 3 days of such stoppage of work and decision of the Engineer in this respect shall be conclusive and binding on the Contractor.
- 27.16 The Contractor shall not be entitled for any damages/compensation for stoppage of work due to safety reasons and the period of such stoppage of work will not be taken as an extension of time for completion of work and will not be the ground for waiver of levy of liquidated damages.
- 27.17 It is mandatory for the Contractor to observe during the execution of the works, requirements of Safety Rules which would generally include but not limited to following
- a) Each employee shall be provided with initial indoctrination regarding safety by the Contractor, so as to enable him to conduct his work in a safe manner.
- b) No employee shall be given a new assignment of work unfamiliar to him without proper introduction as to the hazards incident thereto, both himself & his fellow employees.
- c) Employees must not leave naked fires unattended. Smoking shall not be permitted around fire prone areas and adequate fire fighting equipment shall be provided at crucial location.
- d) There shall be a suitable arrangement at every work site for rendering prompt and sufficient first aid to the injured.
- j) Requirements of ventilation in underwater working to licensed and experienced divers, use of gumboots for working in slushy or in inundated conditions are essential requirements to be fulfilled.
- 27.18 The Contractor shall follow and comply with all GETCO Safety Rules, relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment as may be prescribed from time to time without any demur, protest or contest or reservations. In case of any discrepancy between statutory requirement and GETCO Safety Rules referred above, the latter shall be binding on the Contractor unless the statutory provisions are more stringent.

a. Fatal injury or accident Causing death	Rs. 1, 00,000/- per person for death/	These are applicable
b. Major injuries or accident causing	Rs. 20,000/-	injury to any
25% or more permanent dia	ablamant nor norcor	noreon

- 25% or more permanent disablement per person person, to Workmen or employees whosoever.
- Permanent disablement shall have same meaning as indicated in Workmen's Compensation Act. The compensation mentioned above shall be in addition to the compensation payable to the workmen/employees under the relevant provisions of the Workmen's Compensation Act and rules framed there under or any other applicable laws as applicable from time to time. In case the Owner is made to pay such compensation then the Contractor is liable to reimburse the Owner such amount in addition to the compensation indicated above.

### 27.19 Penalty Clause for Accident:

1. In case if any safety related fatal Elect. / Mech. accident occurred to any employee of agency or outsider due to negligence or non-compliance of GETCO safety norms then in addition to the compensation and liability as per statutory requirement, contractor / agency shall be penalized as under:

Sr. No	Amount of Contract in Rs.	Penalty amount
1	Up to →1 Lac	Rs.5000/-
2	Above1 Lac to $\rightarrow$ 10 Lacs	Rs.25000/-
3	10 to→ 100 Lacs	Rs.100,000/-
4	> 100 Lacs	1.0 %

### 2. Reporting;

- 2.1 The contractor shall inform concerned Ex. Engineer Const/TR in writing within 24 hours of fatal/Non-fatal accident occurred to human being.
- 2.2 The GETCO investigating officer findings in to accident shall be final and binding to the contractor /Agency.
- 3. Safety Requirement:
- 3.1 Kick off Meeting exclusively for safety shall be done in each contract in presence of contractor's site in charge and supervisor. Safety document shall be handed over and vital safety norms and key points of safety related to project shall be explained and recorded for commitment by erection contractor.

Such records are mandatory for clearing first erection bill.

- 3.2 During site visit by GETCO official of Executive Engineer and above rank, the following checks during execution of work shall be covered.
- 3.21 Safety equipments available and utilize.
- (a) Helmet.
- (b) Safety belt.
- (c) Safety shoes.
- (d) Live line Voltage detector
- 3.2 2 Safety procedure adopted.
- (a) Permit to work
- (b) Earthing at the place of work.
- (c) Adequate supervision.
- 3.23 T & P physical Check. (Healthiness and Quality)
- (a) P.P.rope.

- (b) Wire rope and sling.
- (c) Earthing rod
- 3.3 If above-mentioned safety requirements found violated in any of the above three conditions shall attract penalty of Rs.1000/-per occasion. (Max.Rs.3000/--for violation of three conditions)
  - 3.4 During subsequent visit, if violation is found, then double penalty shall be deducted from the bill of the Contractor/Agency.
- 27.20 Safety guide lines for contractors during work on transmission line.
  - 1. The contractors must provide advance planning of work to concerned in charge of substation in writing.
  - 2. The list of workers / labour with name and address must be given to S/S in charge prior to commencement of work by the contractor.
  - 3. The copy of group insurance policy with list of name of workers covered.
  - 4. The list of T&P and safety equipment (PPE) having tested and checked by GETCO officials at site.
  - 5. The working procedure must be specified with timings of working hours indicating tea break & lunch break period.
  - 6. Before starting any work whether switch yard, on line or in colony "permit to allow to work" must be taken from control room in-charge.
  - 7. Utilizing Electrical / non-electrical equipment, safety rules must be implemented.
  - 8. All workers / labour & supervisors must use safety equipments (PPE) during the work.
  - 9. If the work is to be carried out on Sunday or public holiday, the necessary permission must be taken in advance, requesting in writing.
  - 10. Unwanted person including children of labour will not be allowed at working site / in the switchyard and in the prohibited area.
  - 11. Any electrical work or electrical connection to equipment for any other work must be carried out by certified electrician/wireman with adequate size of wire through MCB per i.e. rule. Ensure that all precautions are taken to prevent electrical accident, & the installation/connection is certified by Engineer in-charge.
  - 12. No work should be done during night hours unless & until it is required under certain circumstances with the approval next higher authority & all necessary arrangement of adequate lighting with safety precautions is made.
  - 13. Joint checking of line by In-charge, contractor & supervisor prior to commencement of work of any electrical/non-electrical work.
  - 14. Any power line crossing, river crossing & railway crossing or any other hazards must be discussed with workers by contractors in presence of Engineer in-charge.
  - 15. Contractors must submit list of works with name, qualification and experience who are engaged for line maintenance/rectification job.
  - 16. Line clear permit must be taken on power line crossing or passing nearby for safety of workers. This must be ensured by GETCO supervisor/in-charge of substation before the work.
  - 17. Contractors must arrange for Shelter and drinking water facility for the labours/workers engaged with the permission of S/S in charge

with the permission of S/S in charge.

### 28.0 CODE REQUIREMENTS

The erection requirements and procedures to be followed during the installation of the equipment shall be in accordance with the relevant Codes and accepted good engineering practice, the Engineer's drawings and other applicable Indian recognized codes and laws and regulation of the Government of India.



### PART - I (C) (SCC): SPECIAL CONDITIONS OF CONTRACT

### 1.0 General Particulars :

This part of the Bid Document relates to certain specific/special terms and conditions particular to the Contract. The provisions herein are to be read and understood in conjunction with the relevant provisions elsewhere in the General Conditions of Contract (GCC) and Erection Conditions of Contract (ECC). The intent of provisions herein are specific to this contract and are, in general, supplementary to related provisions under GCC and ECC. However, in certain provisions, which are contrary to those in GCC and ECC, the provisions in these Special Conditions of Contract will prevail.

### 2.0 Tender Fee:

The tender fee specified in notice inviting tender is payable by Demand Draft (DD) at BHARUCH drawn on any Scheduled Bank in favour of Gujarat Energy Transmission Corporation Ltd. Will be furnished in Cover-1 of Bid along with EMD (Bid Security).

### 3.0 Earnest Money Deposit (EMD) : (Ref.Cl.13.1 of GCC)

- (a) The estimated cost of Tender is more than Rs. 100 lacs, the 50 % of EMD by DD in favour of Gujarat Energy Transmission Corporation Ltd. on any Scheduled Bank in BHARUCH and Balance 50 % by Bank Guarantee from Bank specified in 3(c).
- (b) The estimated cost of tender less than Rs.1.0 Cr, the 100% of EMD by DD in favour of Gujarat Energy Transmission Corp. Ltd. on any Scheduled Bank in BHARUCH.
- (c) BG of following banks will be acceptable.
- a. All Public sector Banks i.e. Nationalized Bank
- b. Private Sector Banks authorized to undertake Government business which are,
- IDBI Bank / AXIS Bank / HDFC Bank / ICICI Bank
  - c. The Kalupur Commercial Co-operative Bank Ltd.

Payment by Cheque / Co-op Bank Guarantee/ Company Guarantee is not permissible.

# Validity Period: The offer should be valid for a minimum period of 180 days from the date of opening of Technical bid.

**4.0 Declaration by Bidder:** The Bidder shall sign the Declaration enclosed to this SCC and not furnishing the same will make the Bid invalid.

### 5.0 QUALIFYING REQUIREMENT

### 5.1 TECHNICAL & FINANCIALCRITERIA:

- The bidder should have erected transmission line including stringing of conductor & earth wire of 66 KV & above voltage class lines on tower for minimum 100 Route Kilometer Line in last 3 financial year.
- The bidder should have an annual turn over of minimum Rs. 1.0 Cr. over the one-year period ending on the dead line for bid submission. However, consortium for qualifying financial criteria of total turn over of Rs. 1.0 Cr. is permitted. One of the consortium members should qualify the above technical qualifications.
- The Bidder shall include all valid data & information in bid showing that bidder / consortium members are qualifying the above financial and technical qualifying criteria.
- In case of Consortium, the Consortium members shall have to submit power of attorney as per the proforma appended herewith at schedule.

### 6.0 Additional Documents:

Apart From various documents to be furnished along with the Bid as required in the GCC and ECC, the following documents/details are to be furnished by the Bidder:

- 1. Sales Tax / VAT / Service Tax Registration No. date/ issuing authority.
- 2. Details of Partners/Directors of the Firm/Company.
- 3. Experience Record and details of orders pending / executed for various utilities
- 4. 'A' class contractor's license with validation.
- 5. Solvency certificate from Bank (upto 20 % of Bid value).

# PART - I (D)

# COMMERCIAL TERMS AND CONDITIONS FOR DISMENTALLING AND RESTRINGING WORK:

### 2.1 SCOPE:

- 2.1.1 The work covered under this section consist of
  - i) Preparation of Sag tension charts and its approval from GETCO. Necessary details of spans and pole schedule of the transmission lines shall be handed over to the successful bidder along with the order. For 66 KV lines on 'H' frame structures preparation of sag tension chart is not required.
  - ii) Taking delivery of line material from the GETCO, checking them, transporting to contractor's stores and keeping in safe custody,
  - iii) To take suitable storage-cum-erection insurance,
  - iv) Distribution of all materials to erection site.
  - v) Strengthening of tower cross arms if required by fabricating and galvanizing of members and fixing it with required size and numbers of bolts, nuts at no extra cost to the Company.
  - vi) Removal / dismantling of old line material such as conductors, earth wire, insulators, hard wares conductor and earth wire accessories etc. Transporting the same to the Contractor's stores, clearing of work site and disposal of such dismantled material at no extra cost to the GETCO.
  - vii) Payment of old line material cost to the GETCO.
  - viii) Payment of compensation for tree cutting, crop damage, clearance of way leave, removal of obstructions, hindrances etc. by the successful Bidder.
  - ix) Providing and fixing of Number plates, Danger Plates, Phase plates and Circuit identification Plates for (D/C lines) to existing towers as per the given drawings appended with the specification.
  - x) Insulator hoisting, stringing of conductors/earth wire with providing jumpers etc. up to sub-station gantries at both ends and making LILO arrangement with one circuit in Live conditions where ever applicable.
  - xi) Maintaining of joint record of following activities:
    - a) Paving of drum numbers from location to location for ACSR conductor and earth wire.
    - b) Compression results before and after dead end joints & Mid span joints for conductor & earth wire including jumper cones.
    - c) Critical ground clearances.
  - xii) Guarantee of all the activities carried out from (i) to (xi) above for satisfactory operation & performance of the line

- 2.1.2 The successful contractor shall carry out all addition / alteration required to complete the line for commissioning at the same rates quoted in the offer for respective item. However, no items be executed for which prices are not covered in price schedule before specific approval of SE (TR)/ EE(TR)
- 2.1.3 The GETCO will supply insulators, Conductor & earth wire hardware's, accessories, conductor, earth wire, etc required for stringing of transmission line.
- 2.1.4 All works shall be carried out in accordance with the revised and latest provisions under Indian Electricity Act and Rules made there under.
- 2.1.5 All the tools required during completion of lines shall be arranged by the contractor at his own cost. The contractor shall only be responsible for any damage to and / or loss of his tools.
- 2.1.6 Quantities of various activities are to be executed by the contractor at the rates accepted by the GETCO in the A/T. In case of any deviation in length of line, resulting into an increase in which event the field officer shall obtain prior approval of the SE (TR) BHARUCH and excess quantity shall be paid only at the accepted rate of the A/T / as per tender specification.
- 2.1.7 The work beyond contractual ceiling amount shall be done only after Approval from the GETCO.

### 2.2 EARNEST MONEY DEPOSIT : Ref. Cl. 3.0 of PART – I (C) (SCC)

- 2.2.1 Bidders have to pay EMD at the rate of 1% of the value of line erection work + 2% of the value of payment of cost of old line materials along with the tender. **Cheques are not accepted. Corporate Bank Guarantee not allowed.**
- EMD of the unsuccessful tenderers will be returned after placement of the order with the successful tenderer and when the tenderer returns the original receipt of the EMD together with the advanced stamp receipt to the Ex. Engineer(TR) BHARUCH (R&M-PL) of the GETCO.
- If the Tenderer fails to supersribe / indicate on the envelope containing bid, the
  details of EMD deposited by him, GETCO shall not accept any responsibility and offer shall be rejected / shall not be opened and shall be returned to the bidder.

No interest will be allowed on amount of EMD paid.

### 2.3 SECURITY DEPOSIT:

2.2.4

- 2.3.1 The successful tenderer has to pay security deposit within 30 days of receipt of order.
- 2.3.2 The successful tenderer will be required to pay an amount equivalent to 10% of the value of the order as a Security Deposit for satisfactory execution of the Contract. Such Security Deposit will be payable either in DD / Bank guarantees. Bank Guarantees from Scheduled /Nationalized Banks will be acceptable if the amount of security deposit payable exceed Rs. 50000/- The Bank Guarantees furnished/submitted, they should have a clear one time validity till the completion of the order in all respect and up to the expiry of the Warrantee period from the date of completion of work. Bank Guarantee for interim period will not be allowed. If by any reasons the contract period is extended then contractor should undertake to renew the Bank Guarantee at least one month before the expiry of the validity failing which GETCO will be at liberty to encash the same.

- 2.3.3 The successful tenderer will be required to pay an amount equivalent to 10% of the order value as a Security Deposit out of which 5% will be paid in cash immediately on receipt of work order and balance 5% will be deducted from 1<sup>st</sup> RA bill.
- 2.3.4 CORPORATE BANK GUARANTEES NOT ALLOWED & CHEQUES ARE NOT ACCEPTED.
- 2.3.5 GETCO has discontinued the registration of contractors as class A, B, C and as such it will not be applicable for the current tender under issue and all successful contractor has to pay S.D. as stated in clause No.2.3.2 /2.3.3.

### 2.4 PREPARATION OF SAG TENSION CHARTS.

- 2.4.1 The route of the line shall be as per the drawings/pole schedule given by the GETCO.
- 2.4.2 Before commencing the work, you will get from the Engineer in charge of the works all the data that have been collected of the proposed route of transmission lines, which will be marked on blue prints and pole schedule where ever possible.
- 2.4.3. The Contractor shall have to prepare sag tension chart according to appended format only. The Contractor shall collect all required data / parameters of Transmission lines from Gujarat Energy Transmission Limited before preparation of Sag Tension charts.
- 2.4.4 Before commencing of stringing work, the contractor must obtain the approval of Sag Tension Chart showing final Sags and Tension for various temperature and spans from Chief Engineer (TR). Stringing work shall be executed strictly according to the approved sag tension chart only. Copy of Approved Sag Tension chart shall be submitted to CE (TR), concerned SE (TR) and EE (TR) for record and field use before execution of work.

### 2.5 TAKING DELIVERY AND INSURANCE:

- 2.5.1 The contractor has to take delivery of line materials from carriers / GETCO's Stores against Indemnity Bond and keep them in safe custody and transport to the respective sites and will be fully responsible for any damage or loss of all materials at any stage during transportation or stringing or taking over of the line by GETCO.
- 2.5.2 The line materials required for stringing work will be issued from the GETCO's Stores only after production of valid insurance policy by the Contractor.
- 2.5.3 The Contractor has to open site store nearby the route of the line and ensure for safe custody of all the stored materials at his own cost.
- 2.5.4 The Contractor shall have total responsibility for the entire materials stored, loose, semi assembled and/or erected / strung by him at site in his custody. The Contractor shall make suitable security arrangements at his own cost to ensure the protection of all materials, equipment and works from theft, fire pilferage and any other damages and loss. It shall be the responsibility of the Contractor to arrange for security till the works are finally taken over by the GETCO.
- 2.5.5 The contractor shall take suitable storage cum erection insurance cover for the entire project including all materials, which are required to complete the line. The per Kilometer cost of transmission line for arranging storage cum erection insurance is attached herewith as SCHEDULE 4, Part-A of section E-IV. You shall have to take line wise insurance policy against any loss, damage, theft, pilferage, fire etc. for the complete period of storage, erection and commissioning up to the time of taking

over of the transmission line by the GETCO, in the joint name of you and the Gujarat Energy Transmission Corporation Limited. The GETCO shall however, authorise you to deal directly and pursue the claim with the Insurance Company and you shall be responsible in regard to maintenance of all insurance coverage as well as for settlement of claim.

- 2.5.6 The premium paid to Insurance Company for this purpose shall be reimbursed by the GETCO to you at actual against submission of original documentary proof. You shall obtain competitive quotations for such insurance and shall take prior approval from the GETCO before taking the insurance.
- 2.5.7 In the event of any damage, theft, loss, pilferage, fire etc., you shall be responsible to lodge, pursue and settle all the claims with the Insurance Company for all items, materials and the GETCO shall be kept informed about it. You shall replace the lost / damaged materials / items promptly irrespective of the settlement of the claims by under writer and ensure that the work progress is as per agreed schedule. The loss, if any, such replacement will have to be borne by you and GETCO will not entertain any claim / representation in this regard. However it will be contractor's responsibility to insure entire project till the line is taken over by the GETCO.

### 2.6 **RIGHT OF WAY, WAY LEAVE, TREE CUTTING AND OTHER OBSTRUCTIONS**

- 2.6.1 All statutory clearances and permissions from various statutory bodies / Govt. authorities like forest Department, Railway, Aviation Authority, Maritime GETCO, National High Way Authority, right of way and way leave etc. wherever required along the entire route of the transmission line shall be arranged by the GETCO.
- 2.6.2 The successful bidder shall have to also arrange for Right of Way and tree clearance. The contractor should immediately clear any obstructions or hindrance from local villagers or the local authorities in the execution of the work so that there is no delay in execution/completion of various activities and awarded work is completed in the schedule completion period.
- 2.6.3 For clearances, permissions etc. from various authorities, the Contractor shall not remain contended by simply informing the GETCO, but shall invariably assist and arrange for personal follow up to overcome the difficulties in the interest of progress of the work.
- 2.6.4. The contractor shall instruct his labours and staff to use minimum area while doing the work where there are standing crops. No persons of the contractor should pick up any items from the standing crops or fruit. The contractor should take all possible steps to avoid or minimize damages to the standing crops.
- 2.6.5. For clearance of way leave permission/obstruction etc. The contractor is solely responsible including any payments required to be made thereof including that for crop compensation shall rest with the contractor.
- 2.6.6 Falling of trees, tree cutting and crop compensation thereof shall be organised and paid by the contractor. The cost of cutting the trees shall also be born by the contractor. GETCO's field officer shall render necessary helps for fixing the compensation through Horticulturist Department or other local revenue authority like Talati/Mantri/Sarpanch. The amount so to be paid shall also to be approved by the GETCO's field officer not below the rank of Executive Engineer in charge.
- 2.6.7. For necessary forest clearance, the processing will be done by the GETCO and the payment to the central government/state government for compensation of forest clearance will be paid by the GETCO as necessary.

- 2.6.8. It is the contractor's responsibility to take appropriate action for clearing way leave etc. as indicated above well in advance.
- 2.6.9 Payable per KM cost of cutting trees, crop compensation, way leave cost etc. to be born by the successful bidder as indicated in above clauses and is given in the schedule of prices in the bidding schedules appended herewith.

### 2.7 ACCESS TO LOCATIONS/USE OF PRIVATE ROAD/APPROACH ROAD TO SITE:

- 2.7.1 It will be the contractor's sole responsibility to take the materials up to the location in path way, temporary road, temporary bridge required will have to be provided by the contractor at his own cost. If, for any reasons the above is not feasible, the contractor at his own cost shall have to arrange transportation of line materials by head loads.
- 2.7.2 The contractor will be deemed to be very well familiar with the route of the transmission line before giving the offer. Notwithstanding the difficulties of terrain, location, approaches, way leave and other obstructions the price quoted for all the items covered in the tender shall not undergo any change at any stage or shall be granted by the GETCO for any special rates/consideration.
- 2.7.3. The Contractor shall have to make necessary arrangement/permission for use of private/forest/canals for transportation of materials, construction crew and tools at his own cost. Any charges levied by the concerned parties/authorities for use of such road etc. shall be born by the contractor.

### 2.8. REMOVAL/ DISMENTALLING OF OLD LINE MATERIAL:

- 2.8.1. Before commencing the stringing work conductors, Hardware, insulators hard wares and conductor/earth wire accessories of old line shall be removed from the existing tower / h-frame structures. Contractor shall check the towers / H-frames for its safety for execution of dismantling / stringing work.
- 2.8.2. In case of old D/C line above work including removal of earth-wire is to be carried out in Hot line conditions i.e. one circuit on D/C towers in live condition. The work is to be completed in given/arranged outage.
- 2.8.3 For dismantling and stringing of earth wire of 66 kv D/C lines, practical difficulties if any shall be resolved at the time of execution of work.
- 2.8.4. In case of S/C line above work is to be carried out in cold conditions during arranged / given outage.
- 2.8.5 Necessary tools and tackles shall be used for the safety of the erection crew as the work is to be carried out during hot line conditions.
- 2.8.6 Necessary precautions shall be taken by way of providing guys, rollers, etc for safety of towers and work shall be executed in such a way not causing any damage to tower cross arms or tower body or tower foundations
- 2.8.7. Any damage that may occur to existing tower / H-frames during stringing/dismantling work shall have to be made good by the contractor at no extra cost to the GETCO, including supply of towers / H-frame structures or part thereof, their foundations including excavation, erection, earthing etc. required for safety and satisfactory performance of the line. All such activities are to be carried out at no extra cost to the GETCO and in a schedule completion period. No extension in completion period shall be allowed on such account.

- 2.8.8. Dismantled / removed line material of old line shall be transported to contractors store by clearing the site and arranging their disposal at no extra cost to the GETCO.
- 2.8.9. Contractor has to pay cost of the old-line material that is to be retained by him as per the terms and conditions indicated in the tender specification.

### 2.9. STRENGTHENING OF CROSS ARMS:

- 2.9.1 The successful contractor has to arrange for strengthening of cross arms of the existing towers if required as per the instruction of the Engineer in charge. If members and bolts & nuts which are missing in the cross arm portion of the tower, shall be provided by the contractor at no extra cost to the GETCO.
- 2.9.2. No separate rate for quantity of such strengthening work shall be payable separately. Rates quoted for stringing of conductor shall be inclusive of such strengthening work.
- 2.9.3. Galvanised steel angles of requisite size and length shall be used for strengthening of cross arms duly fabricated by the contractor at no extra cost to the GETCO.

### 2.10 INSULATOR HOISTING AND STRINGING:

- 2.10.1 The rates for any type of stringing work, out of followings are indicated in Schedule-27
  - i) Stringing of one ground wire.
  - Ii) Stringing of single / double circuit line with 3/6 conductor/s.
  - lii) Hot line / cold line stringing of conductor.
  - IV) Silicon rubber / conventional anti fog insulator hoisting.
  - 2.10.2 The rates for stringing of conductors and ground wire for river crossings shall be on per KM basis only and shall be paid according to actual work done. In case special river crossing towers are suspension type the river crossing shall mean river crossing section considering the span from one anchor tower to the other end anchor tower i.e. Span between tension towers adjacent to river crossing towers. Where as if the special towers are tension type the special crossing shall mean span from special tower to special tower of other end.
  - 2.10.3 The rate of dismantling/stringing of single circuit on double circuit tower line for the work to be carried out with one circuit in live condition.
  - 2.10.4 The empty drums of conductor and earth wire shall be retained by the contractor and no recovery shall be made from the contractor on this account.
  - 2.10.5 **REVENUE LOSS:** The outages of the other crossing lines for stringing work should be planned in such a manner in consultation with the Engineer in charge of the work that minimum shut down of other power lines are required. Recovery against revenue loss to the GETCO due to time over run of the schedule outages, will be decided by MD (Tech.) and the amount if any, on the revenue loss account will be clubbed with penalty clause so that maximum liability towards recovery against revenue loss and penalty shall be limited to the extent of maximum of 10% of labour component of the contract i.e. erection part.

### 2.11. PROVIDING AND FIXING OF PLATES :

2.11.1 Number plates, danger plates (for appropriate voltage class), Circuit identification plates for double circuit tower lines shall be procured and supplied by the successful contractor as per the specification/drawing appended with this specification. Phase plates (set of three plates) i.e. Red, Yellow, Blue shall be procured and supplied by the successful contractor and fixing at all terminal towers, Major road crossing towers, Railway crossing towers, River crossing towers & EHV line crossing towers.

2.11.2 The contractor shall fix above accessories (Plates) on existing towers, removing old ones including supply of Bolts and Nuts, washers etc. required for fixing such plates to all the towers and "H" frame structures of old lines.

### 2.12 COMPLETION PERIOD:

- 2.12.1 The contractor is required to commence the various activities after the issue of order and confirmation of outage by the GETCO for particular line and shall complete the all activities in all respect as per completion period indicated in Schedule of Section E-IV. The specific non working period due to monsoon other than from 20<sup>th</sup> June to 20<sup>th</sup> Sept i.e. 3 months and stoppage due to any other specific reason resulting into delay in completion will be identified by the Supt. Engineer (TR), Gujarat Energy Transmission Corporation Limited, CO, BHARUCH.
- 2.12.2 Letter Of Intent shall be issued to the successful bidder and the successful bidder has to complete the preliminary activities including joint inspection with Gujarat Energy Transmission Corporation Limited field staff within 21 days from the date of issue of Letter Of Intent.
  - 2.12.3 Detailed technically and commercially cleared order shall be issued for each lot. The completion period in working months shall be reckoned from the date of intimation of confirmed outage for each line separately. Outage of lines covered under the contract shall be arranged and confirmed within 90 days of placement of order. Outage of other lines to execute work on particular line will be arranged simultaneously to avoid delay in work on daily basis. The contractor has to execute the work within the outage period. The contractor shall inform advance programme for execution of work to GETCO's concern officer well in advance for arranging outages of other power lines.
  - 2.12.4 During the execution of work, in case of stoppage of work is envisaged beyond 7 days, advance notice for demobilisation will be given by the GETCO. If the particular line is required to be taken in to service, the completion period will be extended by the break period plus 4 days extra for each such break towards mobilisation / demobilisation activities. Under no circumstances outage period will be extended.

### 2.13 **PENALTY FOR DELAY**:

- 2.13.1 The tenderer should note that the completion time allowed for carrying out the work should be strictly observed. Any delay that may take place in supply and erection beyond Contractual cut off date stated as per stipulated delivery period shall be subject to the penalty at the rate of ½ % of the value of work executed after due date of completion per week with a ceiling of 10 % of the total contract value.
- 2.13.2 The penalty will be deducted from bills payable either against this contract or from any Bank Guarantee or any other amount payable under any other contract with the GETCO.
- 2.13.3 Tenderer shall have to supply all materials to match with the erection activities.
- 2.13.4 If the Contractor fails to successfully complete the commissioning within the time fixed under the Contract, the Contractor shall pay to the Owner as penalty a sum specified for each specified period of delay.

### 2.14 PRICES:

- 2.14.1 Rates are to be quoted only on firm price basis and shall be valid for 15 months from the date of issue of order and there after if the work is delayed due to reasons solely attributable to the GETCO then the revised rates shall be mutually decided.
- 2.14.3 The prices accepted by the GETCO shall remain firm and valid till completion of the contract for the main order and for additional order / repeat order awarded if any.

- 2.14.4 No revision in prices once accepted in the order awarded shall be entertained / considered by the GETCO.
- 2.14.5 Unit rates quoted by the contractor and that accepted by the GETCO for the all items to be executed by the Contractor to complete the line work shall be applicable for the work to be executed on various types of normal towers. and tower with extensions up to 21 Mtrs. and all river crossings on special tower or pile foundations.

### 2.15 SALES TAX, VAT LEVIES AND DUTIES:

- 2.15.1 In accordance with the scope of the work, this is a labour contract for erection from the "Free Issue" materials; hence the Sales tax VAT shall not be leviable.
- 2.15.2 No extra duties, taxes, levies etc. is payable during the execution of work unless there is statutory change. The statutory change should not be construed to mean the interpretation of taxing authority from time to time. However amount due to statutory change shall be born by the GETCO.
- 2.15.3 In case of works contract value exceeding Rs. one crore, works contract tax shall be deducted at source at 2% of the net value payable as per the section 57(b) of the Gujarat Sales Tax Act of 1969 amended on 22.4.2002 / circular dtd. 01.06.02. However if contractor desires payment without deduction of 2% TDS, he has to obtain and produce certificate from competent authority of sales tax department to that effect.
- 2.15.4 If the value of materials supplied and used by the contractor in the execution of works contract is less then 10 % of the total value of works contract then it will be deemed to be an contract for labour only and therefore no works contract tax would be required to be deducted from the payment to be made.

### 2.16 INCOME TAX:

- 2.16.1 Income tax at source at the prevailing rate will be deducted from your bill in accordance with the provisions of Income tax Laws and to that effect a certificate will be issued to the Contractor.
- 2.16.2 The bidder will have to submit latest income-tax clearance certificate along with the offer.

### 2.17 TERMS OF PAYMENT:

- 2.17.1 Payment shall be made as under:
  - i) Up to 95% of the total value of the erection work done will be paid against monthly running account bills to be submitted to the Engineer-in-Charge of the TRANSMISSION CIRCLE concerned. The GETCO shall release the payment against RA bill with in a maximum period of 60 days on submission of bill by you to the Engineer in charge.
  - ii) Balance 5% payment due will be made at the end of 12 months from the date of handing over of the line or 18 months after completion of the line to the satisfaction of the Supt. Engineer (TR), BHARUCH at his absolute discretion whichever is earlier.
  - iii) If net payable amount is more than Rs 10.0 Lacs, payment will be released from corporate office.
- 2.17.2 The payment of above balance 5% amount due will be made only after a material account statement of items received and used or returned to stores is settled. Any discrepancy in the quantities will have to be made good by the contractor or deduction of its cost as per GETCO's ledger value or market value whichever is higher, plus 15% supervision charges will be made while settling the balance payment. This value of materials shall be prevailing on the date of submission of the final material account to

the GETCO.

### 2.18 **PRESENTATION OF BILLS**:

- 2.18.1 Bills for 95% value of the erection work carried out during each calendar month as per above Clause shall be submitted in triplicate to Deputy Engineer / Ex. Engineer (TR), In charge of the works at the end of that particular month, who will in turn process the same and forward it to Executive Engineer (TR), In charge of the works, for necessary payment. These bills shall be serially numbered.
- 2.18.2 Bills for 5 % value of the erection work done as per above clause shall be submitted to Deputy Engineer (TR), in charge of the works, who will in turn process them and forward them to Executive Engineer (TR), In charge of the work for necessary payment. These bills shall be serially numbered.
- 2.18.3 The Contractor has to submit the final bill along with all required data of works carried out within 3 months from the date of commissioning of the line.
- 2.18.4 All the bills (in accordance with above Clauses) must be submitted with following information:
  - a) Item wise work done during billing period i.e., respective month.
  - b) Item wise cumulative work done.
  - c) Account for tower materials & bolts-nuts, accessories consumed and balance stock.
  - d) Account of cement consumed, wastage's and balance stock.
  - e) Account of line materials consumed, wastage's and balance stock.

For non-submission OR part submission of above information an additional 5 % amount of the respective R.A.Bill will be with held and released only at the time of final bill.

2.18.5 The copy of above indicated bills shall also be submitted S.E. (TR) BHARUCH – In charge of work and Chief Engineer (R&M & Planning), Gujarat Energy Transmission Corporation Limited, CO, Vadodara, for information record.

### 2.19 MATERIAL ACCOUNT:

- 2.19.1 On completion of the work, all surplus line materials etc. Shall be returned by the contractor to the stores of the GETCO, as per the instructions of the Engineer-in-charge of the works at no extra cost to the GETCO.
- 2.19.2 The contractor shall submit the complete materials account immediately after the work is completed and in any case not later than 3 months from the date of completion or handing over of the line, whichever is earlier.

### 2.20 WASTAGES:

2.20.1 The contractor shall make every effort to minimise the breakages, losses and wastage's of line materials etc. supplied "Free of Cost" by the GETCO for line erection work.

Sr. No.	ltem	% Wastages permitted (Maximum)	
i)	Conductor and earth wire.	1/2% (for jumpering, sister wire & sag).	
ii)	Conductor and earth wire.	1/2 % (for credit as scrap of cut-piece length (from 10 Mtrs. up to 30 Mtrs.)	
iii)	Conductor and earth wire.	2 % (for credit in pieces as good conductor from 30 Mtrs. to 100 Mtrs.).	

2.20.2 The maximum ceiling for wastages permitted is as under:

- 2.20.3 All the wastages are accountable except for items (i) of Clause No.2.20.2. The account of permissible wastages shall be maintained at site in the registers as prescribed by the Engineer-in-Charge of works, which will be subjected to periodical checking by purchaser's authorised representatives.
- 2.20.4 The account of wastages shall also be submitted on monthly basis (with running accounts bills) to the Engineer-in-Charge of works. The copy of R.A. Bill shall also be submitted to the Superintending Engineer (TR) BHARUCH and the Chief Engineer (R&M & Planning) of the GETCO.

### 2.21 TESTING OF LINE FOR SATISFACTORY OPERATION AND PERFORMANCE:

2.21.1 After completion of the work, as mentioned in Clause No. 2.1 - Scope of this Section, the contractor will ensure that all works connected with line have been completed correctly as per Indian Electricity Rules and procedure. Any extra cost involved due to incompleteness of work or bad workmanship found out subsequently, shall be set right forthwith by the contractor at his cost. The contractor shall arrange to hand over the complete line immediately on completion of the line.

### 2.22 PROGRESS REPORT:

2.22.1 Fortnightly progress reports in duplicate shall be forthnightly submitted to the Chief Engineer (TR), with a copy to Superintending Engineer (TR) BHARUCH, Ex. Engineer (TR) and Deputy Engineer (TR) In charge of works as per the format given below. The Contractor shall also maintain register.

Name of	Name of Line Description	Location No.		Conductor	Earth wire	Remark
Line		From	То	Kms.	Kms.	nemark

### 2.23 SITE VISIT:

2.23.1 The Engineer-in-Charge of the works or his representative will be free to visit the contractor's works, their site stores and erection site and also verify the purchaser's materials in the custody of the contractor, as and when required.

### 2.24 WARRANTY:

2.24.1 The executed work will be covered under warranty period against any defect arising from erection workmanship for a period of 24 months from the date of completion of line or 18 months from the date of handing over of the line to the satisfaction of Supt. Engineer (TR) BHARUCH, at his sole discretion, whichever is earlier.

### 2.25 QUANTITIES:

2.25.1 Quantities given in the tender are to be executed by the contractor at the rate accepted by the GETCO in the A/T. In case of any deviation/tower quantity / length of line, resulting in an increase in which event the field officer shall obtain prior approval of the Head Office and excess quantity shall be paid only at accepted rate of the A/T.

However work of stringing and dismantling of line conductor, earth wire is to be carry out in either hot line / cold line condition as per the actual site situation. Rate for the same will be applicable for hot line / cold line as per actual work done and as per tender rates.

## <u> PART - I (E)</u>

### COMMERCIAL TERMS AND CONDITIONS FOR PAYMENT OF COST OF OLD LINE MATERIAL:

### 2.1 SCOPE:

- 2.1.1 The work covers under this section consist of payment of old line material cost to the GETCO.
- 2.1.2 The payment of EMD along with tender
- 2.1.3 Collection of old line material on "As is where is "basis after dismantling from existing line. No complaint will be entertained in respect of quantity and quality as the payment is to be made by the successful bidder on per KM basis.

### 2.2 EARNEST MONEY DEPOSITE (EMD) : Ref. Cl. 3.0 of PART – I (C) (SCC)

- 2.2.1 Bidders have to pay EMD at the rate of 1% of the value of line erection work + 2% of the value of payment of cost of old line materials of lot/ lots quoted along with the tender. Cheques are not accepted. Corporate Bank Guarantee not allowed.
- 2.2.2 The tender not accompanied by EMD will not be considered and will be ignored and out rightly rejected.
- 2.2.3 If the bidder fails to accept// or fails to fulfill the conditions of tender, the GETCO will forfeit the amount of EMD.
- 2.2.4 The EMD so paid will be refunded to the Bidder on submission of original receipt of EMD paid together with advance stamp receipt to EE (TR) BHARUCH, if the GETCO does not accept their offer, and the contract is awarded to any other bidder.
- 2.2.5 No interest will be allowed on amount of EMD paid.
- 2.2.6 In case of successful bidder, the EMD paid will be kept as security deposit and will be refunded after completion of contract by the successful bidder in all respect and to the full satisfaction of Engineer in charge and SE (TR) BHARUCH.
- 2.2.7 In case of successful bidder fails to honour / execute the order for any reasons, the Earnest Money Deposit paid will stand forfeited to the GETCO and the work shall be executed and old line material shall be disposed off at the risk and cost of the contractor and the loss/damages, if any, that may incurred by the GETCO on this account will be recovered from the defaulter contractor.

### 2.3 DAMAGES TO THE GETCO'S PROPERTY:

2.3.1 The successful bidder shall compensate the GETCO for the damages caused to the GETCO's property or property / crop of the farmers while dismantling / removing of old line material from the erection site.

### 2.4 PAYMENT OF COST OF OLD LINE MATERIAL

2.4.1 In no case, the fresh line material for replacement shall be issued to the contractor prior to payment of amount of old line material cost as indicated hereunder:

- 2.4.2 Wherever, for the particular line, insulators or conductor or earth wire are not required to be replaced, the successful contractor shall be allowed to pay the cost of line material except cost of old insulator or conductor or earth wire as the case may be. Details line section where conductor and / or insulators and/or earth wire are already replaced by GETCO during last five years and are not required to be replaced as a scope of this tender is separately indicated in attached Annexure-I of Section-E-II-A on page no 30A.
- 2.4.3 The break up of per circuit KM cost (Rs. in Lacs) of the old line material excluding sales tax VAT i.e. for conductor (Deer/Moose, Zebra, Panther, Dog), Hard ware, insulators, hard-wares and accessories for conductor and earth wire i.e. GI scrap as dealer's goods is given in table-1.
- 2.4.4 Per KM cost indicated in table-1 are excluding of sales tax payable by the successful bidder as applicable from time to time on the material like ACSR conductor, GI Scrap (Dealer's goods) insulators etc and the final per KM cost of old line material be remitted/paid by the Bidder shall stand increased to the extent of sales tax component.

### 2.5 TERMS OF PAYMENT.

- 2.5.1 The successful bidder has to pay the cost of old line material for awarded line of particular lot in a phased manner in the office of the concerned Ex. Engineer (TR) in charge of the work within 21 days from the date of intimation of confirmed outage. The successful contractor has to pay the cost of old line material and sales tax VAT, applicable on various scrap material by way of "Demand Draft" only payable to Gujarat Energy Transmission Limited drawn on any schedule Bank payable at the office of concern Executive Engineer (TR).
- 2.5.2 The Bank Guarantee can be accepted against payment of cost of old line materials at the first instance and subsequently you shall have to pay the cost for balance portion of the line.

a)	Voltage	66kv	
b)	Working Condition	Hot / Cold	Cold
c)	Support	Tower	H-frame
1	ACSR Conductor size	Dog	Dog
2	Size of E / W	7 / 10	
3	Insulators, H / W & Accessories	As available on existing Transmission lines.	
		Rs. In lacs	Rs. In lacs
4	Cost of ACSR scraps conductors (3 Nos.)	1.417	0.887
5	Cost of galvanized Earth wire scrap	0.09	0
6	Cost of insulator scrap	0.035	0.063
		0.010	0.014
7	Cost of hardware & Accessories as GI scrap		
	Total	1.552	
9	Total W/O earth wire	1.462	0.964

BREAK UP PER KM. OF OLD LINE MATERIALS: (TABLE - 1)

# Note: For ACSR Conductor the basic Rate is Rs. 75,002.00 per MT for the coastal area lines. Depending on the size of conductor, Rate per ckt. kms. (i.e. S/C three phase ) can be arrived after considering unit weight.

- 2.5.3 The Bank Guarantee can also be used for subsequent lots provided you have deposited the value of the earlier lot of materials prior to getting new materials for subsequent lot.
- 2.5.4 In case of successful bidder fails to pay the said amount within the time limit; interest at the prevailing rate of 21% per annum will be recovered for the period of delay in the payment. However, this period shall not exceed one month.
- 2.5.5 For the transmission line having length less than 20 KM, if awarded to any contractor, they shall have to pay the entire cost of old line material with sales tax and other tax as applicable, within 21 days from the date of intimation of confirmed outage.
- 2.5.6 For the transmission lines having length of more than 20 KM if awarded to the Contractor, they shall have to pay the cost of old line material equivalent to cost of 20 KM of old line material along with applicable sales tax amount on various scrap material within 21 days from date of intimation of confirmed outage. You shall have to subsequently also pay the cost of old line material progressively equivalent to cost of 20 KMs of old line material or part thereof along with applicable sales tax amount immediately before issuance of new material till completion of particular line work. It means that at any time during the execution of work, the cost of 20 KMs of old line materials or part thereof shall remain with the GETCO.
- 2.5.7 The Bank Guarantee submitted will be return to the successful bidder on payment of finally payable amount of bank Guarantee for old-line material cost of 20 kms. or part thereof & not later than the completion period specified for a particular line.

### 2.6 SALES TAX / VAT :

- 2.6.1 Gujarat Sales tax / VAT or any other taxes as applicable from time to time till completion of work will have to be paid extra by the Successful bidder to the GETCO as per the rules for various items like ACSR conductor scrap, GI Scrap and insulators scrap etc. at the time of paying the cost of old line material on per KM cost basis as indicated in above clauses.
- 2.6.2 Present rate of GST / VAT payable by the successful bidder on various scrap items are as under:

1.	ACSR conductor Scrap (As non-ferrous metal)	-	4 % + 1 % Add. Tax
2.	Insulator scrap	-	12.5 % + 2.5 % Add. Tax
3.	GI Earth-wire scrap	-	4 % + 1 % Add. Tax
4.	Assorted GI Scrap (Hard wares and accessories)	-	4 % + 1 % Add. Tax

### PART - I (F) TECHNICAL PARTICULARS

### 3.1 SCOPE:

- 3.1.1 The work covered under this section consist of
  - i) Preparation of Sag tension charts and its approval from GETCO. Necessary details of spans and pole schedule of the transmission lines shall be handed over to the successful bidder along with the order. For 66 KV lines on 'H' frame structures preparation of sag tension chart is not required.
  - ii) Taking delivery of line material from the GETCO, checking them, transporting to contractor's stores and keeping in safe custody,
  - iii) To take suitable storage-cum-erection insurance.
  - iv) Distribution of all materials to erection site.
  - v) Strengthening of tower cross arms if required by fabrication and galvanising of members and fixing it with required size and numbers of bolts, nuts at no extra cost to the GETCO.
  - vi) Removal / dismantling of old line material such as conductors, earth wire, insulators, hard wares conductor and earth wire accessories etc. Transporting the same to the same to the Contractor's stores, clearing of work site and disposal of such dismantled material at no extra cost to the GETCO.
  - vii) Payment of old line material cost to the GETCO
  - viii) Payment of compensation for tree cutting, crop damage, clearance of way leave, removal of obstructions, hindrances etc by the successful Bidder
  - ix) Providing and fixing of Number plates, Danger Plates, Phase plates Circuit identification Plates (for D/C lines) to existing towers as per the given drawings appended with the specification.
  - x) Insulator hoisting, stringing of conductors / earth wire with providing jumpers etc. up to sub-station gantries at both ends and making LILO arrangement with one circuit in Live conditions where ever applicable.
  - xi) Maintaining of joint record of following activities:
    - a) Paving of drum numbers from location to location for ACSR conductor and earth wire.
    - b) Compression results before and after dead end joints & mid span joints for conductor & earth wire including jumper cones.
    - c) Critical ground clearances.
- xii) Guarantee of all the activities carried out from (i) to (xi) above for satisfactory operation & performance of the line.
- 3.1.2 The successful contractor shall carry out all addition / alteration required to complete the line for successful commissioning.
- 3.1.3 The GETCO will supply insulators, insulator-hard wares, conductor accessories, conductor, ground wire, ground wire accessories, etc. Required for stringing of transmission line

- 3.1.4 All works shall be carried out in accordance with the revised and latest provisions under Indian Electricity Act and Rules made there under.
- 3.1.5 All the tools required during completion of lines shall be arranged by the contractor at his own cost. The contractor shall only be responsible for any damage to and / or loss of his tools.
- 3.1.6 The contractor shall be fully responsible for completing all the above works till the complete line is taken over by the GETCO.
- 3.1.7 The method of stringing are not dealt with in detail but are left to the Contractor who shall exercise his own judgment with regards to actual handling of materials and in deciding upon the best methods to be adopted for all the activities keeping in view the safety of tower and erection crew.
- 3.1.8. The successful bidder shall carry out all the stringing works in accordance with the sag tension charts approved by the GETCO.

### 3.2 PREPARATION OF SAG TENSION CHARTS :

- 3.2..1 The route of the line shall be as per the drawings/pole schedule to be given by the GETCO.
- 3.2.2. The successful bidder shall also arrange visit of proposed line route jointly with GETCO's representative for important marks coming along the route and submit sag tension calculations for approval of Chief Engineer (R&M & Planning). The work shall be commenced only after approval of the same.
- 3.2.3. The Contractor shall have to prepare Sag tension chart according to appended format only. The Contractor shall collect all required data's / parameters of Transmission lines from Gujarat Energy Transmission Corporation Limited before preparation of Sag Tension charts.
- 3.2.4. Before commencing the work, you will get from the Engineer in charge of the works all the data that have been collected of the proposed route of transmission lines, which will be marked on blue prints and pole schedule where ever possible.
- 3.2.5 Before commencing of stringing work, the Contractor must obtain the approval of Sag Tension chart showing final Sags and Tension for various temperature and spans from Chief Engineer R&M & PLN). Stringing work shall be executed strictly according to the approved Sag Tension Chart only. Copy of Approved Sag Tension chart shall be submitted to CE(R&M & PLN).concerned SE (TR) and EE (TR) for record and field use.

### 3.3 TAKING DELIVERY AND INSURANCE :

- 3.3.1 The contractor has to take delivery of line materials directly from the GETCO's store. The line materials that will be issued by the GETCO will be in "as is where is " condition at the stores centre of the GETCO in that area during working hours of working days. The contractor will be fully responsible for any damage to or loss of all materials at any stage during transportation or stringing.
- 3.3.2 The line materials required for stringing work will be issued from the GETCO's Stores mentioned in Schedule–6, Part-A of Section-E IV to read with footnote indicated therein, only after production of valid insurance policy by the Contractor. No line materials for stringing shall be issued to the contractor in absence of valid insurance policy and payment of cost of old line materials.



- 3.3.3 The Contractor has to open site store nearby the route and ensure for safe custody of all the stored materials at his own cost.
- 3.3.4 The Contractor shall have total responsibility for all the materials stored, loose, semi assembled and/or erected by him at site in his custody. The Contractor shall make suitable security arrangements at his own cost to ensure the protection of all materials, equipment and works from theft, fire pilferage and any other damages and loss. It shall be the responsibility of the Contractor to arrange for security till the works are finally taken over by the GETCO.

### 3.4. RIGHT OF WAY, WAY LEAVE, TREE CUTTING AND OTHER OBSTRUCTIONS

- 3.4.1 All statutory clearances and permissions from various statutory bodies/Govt. authorities like Forest Department, Railway, Aviation Authority, Maritime GETCO, National Highway Authority, right of way and way leave etc. wherever required along the entire route of the Transmission lines shall be arranged by the GETCO.
- 3.4.2 The successful bidder shall have to also arrange for Right of Way and tree clearance. The contractor should immediately clear any obstructions or hindrance from local villagers or the local authorities in the execution of the work so that there is no delay in execution/completion of various activities and awarded work is completed in the schedule completion period.
- 3.4.3 For clearances, permissions etc. from various authorities, the Contractor shall not remain contended by simply informing the GETCO, but shall invariably assist and arrange for personal follow up to overcome the difficulties in the interest of progress of the work.
- 3.4.4. The contractor shall instruct his labours and staff to use minimum area while doing the work where there are standing crops. No persons of the contractor should pick up any items from the standing crops or fruit. The contractor should take all possible steps to avoid or minimize damages to the standing crops.
- 3.4.5. For clearance of way leave permission/obstruction etc. The contractor is solely responsible including any payments required to be made thereof including that for crop compensation shall rest with the contractor.
- 3.4.6 Falling of trees, tree cutting and crop compensation thereof shall be organised and paid by the contractor. The cost of cutting the trees shall also be born by the contractor. GETCO's field officer shall render necessary helps for fixing the compensation through Horticulturist Department or other local revenue authority like Talati-Mantri, Sarpanch. The amount so to be paid shall also to be approved by the GETCO's field officer not below the rank of Executive Engineer in charge of work.
- 3.4.7. For necessary forest clearance, the GETCO will do the processing and the payment to the central government/state government for compensation of forest clearance will be paid by the GETCO as necessary.
- 3.4.8. It is the contractor's responsibility to take appropriate action for clearing way leave etc. as indicated above well in advance.

### 3.5. ACCESS TO LOCATIONS/ USE OF PRIVATE / APPROACH ROAD TO SITE. :

3.5.1 It will be the contractor's sole responsibility to take the materials up to the location in path way, temporary road, temporary bridge required will have to be provided by the contractor at his own cost. If, for any reasons the above is not feasible, the contractor at his own cost shall have to arrange transportation of line materials by head loads.

- 3.5.2 The contractor will be deemed to be very well familiar with the route of the transmission line before giving the offer. Notwithstanding the difficulties of terrain, location approaches, way leave and other obstructions, the price quoted for all the items covered in the tender shall not undergo any change at any stage or shall be granted by the GETCO for any special rates/consideration.
- 3.5.3. The Contractor shall have to make necessary arrangement/permission for use of private/forest/canals for transportation of materials, construction crew and tools at his own cost. Any charges levied by the concerned parties/authorities for use of such road etc. shall be born by the contractor.

### 3.6. REMOVAL/DISMENTALLING OF OLD LINE MATERIAL :

- 3.6.1. Before commencing the stringing work conductors, earth wire, insulators hard wares and conductor/earth wire accessories of old line shall be removed from the existing tower.
- 3.6.2. In case of old D/C line above work including removal of earth wire is to be carried out in Hot line conditions i.e. one circuit on D/C towers in live conditions. The work is to be completed in given/arranged outage.
- 3.6.3. In case of S/C line above work is to be carried out in cold conditions in a arranged/given outage.
- 3.6.4 Necessary tools and tackles shall be used for the safety of the erection crew as the work is to be carried out during hot line conditions.
- 3.6.5 Necessary precautions shall be taken by way of providing guys, rollers, etc for safety of towers and work shall be executed in such a way not causing any damage to tower cross arms or tower body or tower foundations
- 3.6.6. Any damage that may occur to existing tower during stringing / dismantling work shall have to be made good by the contractor at no extra cost to the GETCO, including supply of towers or part thereof, their foundations including excavation, erection, earthing etc. required for safety and satisfactory performance of the line. All such activities are to be carried out at no extra cost to the GETCO and in a schedule completion period. No extension in completion period shall be allowed on such account.
- 3.6.7. Dismantled / removed line material of old line shall be transported to contractors store by clearing the site and arranging their disposal at no extra cost to the GETCO.
- 3.6.8 For dismantling and stringing of earth wire of 66 kv D/C lines, practical difficulties if any shall be resolved at the time of execution of work.

### 3.7. STRENGTHENING OF CROSS ARMS :

- 3.7.1 The successful contractor has to arrange for strengthening of cross arms of the existing towers if required as per the instruction of the Engineer in charge.
- 3.7.2. Galvanised steel angles of requisite size and length shall be used for strengthening of cross arms duly fabricated by the contractor at no extra cost to the GETCO.

### 3.8. **PROVIDING AND FIXING OF PLATES:**

- 3.8..1 Number plates, danger plates (for appropriate voltage class), Circuit identification plates for double circuit tower lines shall be procured and supplied by the successful contractor as per the specification/drawing appended with this specification. Phase plates (set of three plates) i.e. Red, Yellow, Blue shall be procured and supplied by the successful contractor and fixing at all terminal towers, Major road crossing towers, Railway crossing towers, River crossing towers & EHV line crossing towers.
- 3.8..2. The contractor shall fix above accessories (Plates) on existing towers, removing old ones including supply of Bolts and Nuts, washers etc. required for fixing such plates to all the towers and "H" frame structures of old lines.

### 3.9 INSULATOR HOISTING:

- 3.9.1 Suspension insulator strings / Silicon rubber insulator / long rod insulators shall be used on all tangent type towers and tension insulator strings on all small, medium, large angle and dead end type tension towers. Technical particulars of insulator strings are appended herewith.
- 3.9.2 Insulators strings / Silicon rubber insulator / long rod insulators shall be assembled on ground. These shall be cleaned and examined for hair cracks, chips or defective glazing (not exceeding half centimeter square) and then hoisted by careful handling. The work will include fixings of all hard wares and fittings in their proper places.

### 3.10 STRINGING:

- 3.10.1 Before commencing of stringing work, contractor must obtain approval of sag tension charts (these shall have to be supplied by the contractor) showing final sags and tension for various temperature and spans. The stringing chart shall be prepared according to appended format only.
- The Contractor shall be responsible and will take care of proper handling of drums 3.10.2 from stores to site. Sufficient numbers of aluminum snatch blocks shall be used for paving out the ACSR/AAA Conductors. Necessary precautions shall be taken to avoid conductor rubbing on the ground by providing adequate ground roller, rollers on supports. Additional rollers shall also be provided to cross-thorny hedges, footing and other obstructions to avoid scratching of conductor. The conductor and ground wire shall be made to sag correctly as per stringing charts before they are finally transferred to the hard wares for conductors and to clamp for ground wire. No joint should be made at less than 30 meters from the tower end and no joint shall be permitted in Railway, River, road and other important crossings spans. There shall not be more than one joint in a span of each conductor. The sag GETCO, if used shall be adjusted to suit the sag indicated against actual temperature for an individual span. The thermometer shall be provided at the conductor point during the stringing work. Dynamometers shall be used in tensioning the conductors. All conductors shall be stressed to their maximum working load at the time of stringing, as per approved stringing charts.
- 3.10.3 The minimum clearance between the lowest point of conductor and ground shall not be less than required. All compression joints should be carefully made and a record of initial and final lengths of the joints jointly signed by Contractor and GETCO's representatives should be maintained. Check for sag should also be made at intervals when conductor is drawn up. Over stressing, causing damage to towers should be avoided. Care should be exercised not to over tension the conductor. Extra sag of 150 mm be allowed at all the important tension locations like Railway/River Crossings.

- 3.10.4 After being pulled the conductor/ground wire shall not be allowed to hang in the stringing sheaves for more than 72 hours, before being pulled to the specified sag. During the time the conductor / ground wire is on the stringing sheaves before sagging-in, it shall be ensured that the conductor / ground wire is not damaged due to wind, vibration, vehicles or other causes. Scaffolding should be used to cross the important roads and Railway Crossing for minimum interruption to traffic.
- 3.10.5 The conductor shall be pulled up to desired sag and left in serial stringing sheaves for at least one hour after which the sag shall be rechecked and adjusted, if necessary, before clipping in and transferring the conductors from the serial stringing sheaves to the suspension clamps.
- 3.10.6 Conductor shall be clamped within 24 hours of sagging. The sag will be checked in the larger spans of the section in case of sections up to eight spans and in one intermediate larger span also for section with more than eight spans.
- 3.10.7 The stringing sheaves, when suspended on the transmission structure for sagging, shall be so adjusted that the conductor will be on the sheaves at the same height as the suspension clamp to which it is to be secured.
- 3.10.8 The stringing of the ground wire shall be done in accordance with the stringing charts approved by the GETCO. The ground wire shall be strung to run continuously over the conductors. The ground wire shall be pulled, sagged and clamped-in from tension tower to tension tower before the phase conductors are pulled in that section. In case of double circuit line, stringing of ground wire shall be done in hot line condition i.e. one circuit on double circuit tower in live condition. For dismantling and stringing of earth wire of 66 kv D/C lines, practical difficulties if any shall be resolved at the time of execution of work.
- 3.10.9 All the line conductors shall be terminated at sub-station structures whose details shall be furnished by the GETCO at the appropriate time. The contractor shall fix strain insulators on the sub-station structures.
- 3.10.10 Armour rods and vibration dampers shall be fitted at each suspension tower before final clamping of conductor with Insulator strings. Vibration dampers shall be fitted at each tension tower after final clamping of conductor with insulator strings. Vibration dampers are to be fixed using aluminum tape with each clamping bolt and in correct vertical position in relation to conductor. Compression type joints are to be used for jointing of conductors. Each part connected with joints shall be perfectly cleaned by wire brush and properly greased before final compression. All the joints of conductors and earth wire shall be made in the best workmanship manner and shall be perfectly straight and having maximum possible strength.
- 3.10.11 Proper guys shall be provided to counter balance the paving out tension of conductor/ground wire at the tension locations, to avoid damage to towers and/or accident.
- 3.10.12 Stringing work shall mean, the activities of fixing of insulator and insulator hardware's, paving, jointing, tensioning, clamping with Armour-rod, providing dampers, repairing of conductors (if any) and fixing the conductor at tension hardware's etc. in hot line condition i.e. one circuit in live condition for double circuit line or stringing in cold condition for single circuit line.

#### 3.11 TESTING OF LINE FOR SATISFACTORY OPERATION & PERFORMANCE:

- 3.11.1 The Contractor after completion of work will ensure that all works connected with line have been completed. These works shall be done correctly as per Indian Electricity Rules and Procedures. Any extra cost involved due to incompleteness of work or bad workmanship found out subsequently shall be set right forth with by the Contractor at his cost..
- 3.11.2. After the work is completed in all respects, the line should be thoroughly patrolled and checked for continuity and clearances. The line should be meggered to check its insulation level. After-wards a written confirmation should be given to the Engineer in charge that the men, materials, tools and earthings (if any) are removed and the line is safe for charging. On charging the line, if it does not hold and trips, the contractor should arrange to patrol the line and find out the causes for the tripping and rectify the defect at no extra cost to the GETCO.

#### 3.12 **REGULATION OF LOCAL AUTHORITY.**

3.12.1 The GETCO shall, through out the continuance of the contract and in respect of all matters arising in the performance thereof, serve all notices and obtain consents, way leaves, approval and permission required in connection with the regulations and bye-laws of the local or other authority which shall be applicable to the works. However, the contractor shall obtain all the necessary licenses/permissions as per central/state/local statutory bodies at his cost. All works shall be executed in accordance with the Indian Electricity Rules, 1956 / IE Act 2003 and any statutory modifications thereof, wherever they are applicable, unless otherwise agreed to in writing by the GETCO.

#### 3.13 HANDING OVER OF LINE DOCUMENTS

- **3.13.1** On completion of all activities, the contractor has to furnish following information along-with technical details to concerned Executive Engineer in charge of the work in triplicate duly bound :-
  - 1) Approved copies of stringing charts.
  - 2) Details of spans and phase where mid span joint, repair sleeve used.
  - 3) Locations-wise type and numbers of insulators, insulator hard wares, earth wire hard wares, conductor accessories etc., provided.
  - 4) Separate detail of each crossing like road, river, railway, power line, P&T line, etc.
  - 5) Technical particulars of conductor/earth-wire used. (To be obtained from the GETCO)
  - 6) Details of compression type Dead end / Mid span joint for conductor and earth wire indicating dimensional details before and after compression.

#### 3.14. GENERAL

- 3.14.1 The Contractor shall ensure that at the end of each activity the surplus materials a immediately removed from the work-site to avoid loss and injury to the public.
- 3.14.2 The Contractor has to return all surplus materials issued by the GETCO after reconciliation of material account in good and useable conditions.

# PART – I (G) SCHEDULES SCHEDULE – 1

## PROFORMA FOR CONTRACT AGREEMENT (Non Judicial Stamp Paper of Rs. 100/-)

This Agreement is made at BHARUCH the\_\_\_\_\_ day of in the Christian Year Two thousand \_\_\_\_\_between M/s. of office) (address (hereinafter referred to as **"THE CONTRACTOR"** which expression shall unless excluded by or repugnant to the contract include its successors or permitted assigns) of the ONE PART and the Gujarat Energy Transmission Corporation Ltd, having their Head office at Vidyut Bhavan, Race Course, Baroda 390007 (hereinafter called "The GETCO" which expression shall unless excluded by or repugnant to the context include its successors or assigns) of the other part. WHEREAS the aforesaid GETCO has accepted the tender of the aforesaid contractors for as per GETCO's Order No. hereinafter called "the works" and more particularly described and enumerated or referred to in the specification, terms and conditions prescribed in the order letter, covering letter and other letters and schedule of price which for the purpose of identification have been signed by Shri on behalf of the contractors and by ----------- on behalf of the GETCO, a list whereof is made out in the Schedule hereunder written and all of which said documents are deemed to form part of this contract and included in the expression "The works" wherever herein used, upon the terms and subject to the conditions hereinafter mentioned. AND WHEREAS THE GETCO has accepted the tender of contractors for the construction of the said works for the sum of Rs. \_\_\_\_\_ Rupees \_) upon the terms and subject to the conditions herein mentioned. NOW THIS AGREEMENT WITNESSESS AND IT IS HEREBY AGREED AND DECLARED THAT. 1. The contractors shall do and perform all works and things in this contract mentioned and described or which are implied therein or this contract, and in consideration of the due provision, executions, supply and completion of the works agreed to by the contractor as aforesaid the GETCO do hereby covenant with the contractor to pay all the sums of moneys as and when they become due and payable to the contractors under the provisions of the contract. Such payment to be made at such times and in such manner as is provided by the contract.

2. The conditions and covenants stipulated here-in-before in this contract are subject to and without prejudice to the rights of the GETCO to enforce penalty for delays and / or any other rights whatsoever including the right to reject and cancel on default or breach by the contractor of the conditions and the covenants as stipulated in the general conditions, specifications, forms or tender schedule etc. attached with GETCO's Order No.

The contract value, extent of supply & erection works, delivery dates, specifications and other relevant matters may be altered by mutual agreement and if so altered shall not be deemed or construed to mean or apply to affect or alter other terms and conditions of the contract and the general conditions and the contract so altered or revised shall be and shall always be deemed to have been subject to and without prejudice to said stipulation.

# SCHEDULE

List of documents forming part of the contract:

- 1. GETCO's Tender Specification No. \_\_\_\_\_ and contractor's offer opened on dated \_\_\_\_/\_\_\_/
- 2. GETCO order No. Dtd. \_\_\_ / \_\_\_ /
- 3. Contractor's acceptance of order vide letter No. \_\_\_\_\_.
- 4. Contractor's Partnership Deed dtd.
- 5. Contractor's Power of Attorney / GETCO Resolution authorising person to sign on behalf of Firm.

In witness whereof the parties hereto have set their hands and seals this day and month, year first above written.

 Signed, sealed and delivered by (Signature with name, Designation and official seal) For and behalf of M/s. \_\_\_\_\_\_ (Signature) Address: \_\_\_\_\_\_

In the presence of (Full Name, Address and Sigr	natures) (Signature)
ii)	- (Signature)
Signed, sealed and delivered by	
(Signature with name, Designation and official se for and on behalf of Gujarat Energy Transmis Transmission Circle, BHARUCH.	,
In the presence of name, full addressed and (1)	Signature:
(2)	

2)

### **INDEMNITY BOND**

(Non Judicial Stamp Paper of Rs. 100/-)

KNOW ALL MEN BY THESE PRESENTS that we, Messers

(hereinafter called "the Contractor" which expression shall, where the context so admits, include their heirs, executors, administrators and legal representatives, successors and permitted assigns) are hereby held and firmly bind unto the Gujarat Energy Transmission Corporation Ltd (hereinafter called "the GETCO" which expression shall, where the context so admits, include its successors and assigns) to refund the full amount of materials supplied by the GETCO under the terms and conditions of A/T No. dated against any loss damage or deterioration of whatsoever nature occurs to said materials supplied by the GETCO and which are in the custody of the contractor at their works site, on behalf of the GETCO, at (name of line) and / or if any of the said materials, when inspected by any officer authorized by the GETCO in this behalf, is found to be damaged, lost, deteriorated in quality or quantity, the contractor hereby agrees to bind himself to indemnity and at all times keep indemnified the GETCO against all loss, damage and deterioration to the any material supplied by the GETCO during his custody and shall pay in cash on demand from the GETCO within 30 days the market value of such materials which is lost, damaged or deteriorated in full to the GETCO and shall also hereby authorise the GETCO to deduct the said sum from any sum due to the contractor or any sum which may at any time become due to the contractor under the above referred contract or any other contract entered into by the contractor with the GETCO.

AND WHEREAS the contractors do hereby agree to be responsible for the safe custody and protection and preservation of the said materials against all risks, excluding war risks and against loss, damage and deterioration of whatsoever nature in respect of the said materials while it remains in the custody and possession of the contractor.

AND WHEREAS the said materials shall at all times be open for inspection by any officer authorized by the GETCO. Now the conditions of the above written bond are such that the contractor shall pay the full amount forthwith to the GETCO in the event of loss, damage or deterioration or whatsoever except due to circumstances arising out of war in respect of the materials supplied by the GETCO and shall fully and effectually indemnify and keep indemnified to the GETCO against such loss, damage and deterioration.

The contractor shall keep the said materials open at all times for inspection by the officers authorised by the GETCO and produce at anytime when demanded.

THE WITNESS WHERE OF: We the

Said M/S

(Signature of contractor)

(Seal of Firm)

hereto signed at \_\_\_\_\_

this day \_\_\_\_\_

In the presence of

1. \_\_\_\_\_ Name \_\_\_\_\_

\_\_\_\_\_address \_\_\_\_\_

2	Name	
	address	

(Signature)

(Signature)

## ON RECENT STAMP PAPER OF Rs.100/=

To, Executive Engineer (TR) B/G No. Gujarat Energy Transmission Corpn. Ltd., **Issuing date:** MAKTUMPUR. BHARUCH - 392012.

Expiry date: Amount:

# **BANK GUARANTEE** (For Execution of Contract & Performance Guarantee)

We, \_\_\_\_ (name of the Bank and address of the branch giving the Bank Guarantee), having our registered office (Regd. Office of Bank) at hereby agree unequivocally and unconditionally to pay within 48 hours on demand in writing from the Gujarat Energy Transmission Corporation Ltd., or any Officer authorized by it in this behalf any amount up to and not exceeding Rs.\_\_\_\_\_only (amount in words) Rs. only to the said Gujarat Energy Transmission Corporation Ltd., on behalf of (name and address of the firm). who M/s. have entered into a contract for the supply/works specified below :

A/T No. dated

This agreement shall be valid and binding on this Bank up to and inclusive of \_\_\_\_\_ (mention here the date of validity of Bank Guarantee) and shall not be terminable by notice or by change in the constitution of the Bank or the firm of Suppliers or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variation or alteration made, given, conceded or agreed, with or without our knowledge or consent, by or between parties to the said within written contract.

NOTWITHSTANDING any thing contained herein:

- i) Our liability under this Bank Guarantee shall not exceed Rs.\_\_\_\_\_ only. (Rs. \_\_\_\_\_ in words)
- This Bank Guarantee shall be valid upto dt.\_\_\_\_\_ (date of ii) expiry)

Place:

Date:

Round seal & Signature of Bank Officer

# PARTY TO TAKE NOTE PLEASE BEFORE SUBMITTING THEIR BANK GUARANTEES

- 1. A/T no. and date to be written on every page, of Bank Guarantee & its Extension.
- 2. If B/G amount is more than Rs.50, 000/- , kindly take sign of two bank officer with their respective Employee code no.
- 3. Valid Confirmation letter of the concerned Bank in an approved format should be attached with every Bank Guarantee & its Extension.
- 4. Stamp paper should be valid & recent one and date of issuing of stamp paper should not be beyond six months, in any case.
- 5. Round seal and signature of two Bank officers should be affixed on every B/G paper.

# SCHEDULE - 4

## BANK GUARANTEE EXTENSION FORMAT

(To be executed on non-judicial stamp paper of Rs.20/-)

(Name and address of the Bank issuing the Bank Guarantee extension.)

Place:

Date:

Seal of Bank

Signature of authorised Authority of Bank

# DETAILS OF REPRESENTATIVE

Details of Human Resources available with the bidder for the successful performance of contract.

# Name of the Bidder:

Sr. No.	Designation	Name	Qualifi- cation.	Professional experience & details of work carried out	Remarks
1	2	3	4	5	6
1)	Project Manager				
2)	Engineer-in-Charge of site work.				
3)	Site Engineer				
4)	Number of Skilled Employees. (Only Nos.)				
5)	Number of unskilled Employees. (Only Nos.)				

Signature of Authorised Representative Company/Agency

NAME:\_\_\_\_\_

STATUS:\_\_\_\_\_

Details of plant and equipment available on hand with the bidder for use on this work.

# Name of the bidder : \_\_\_\_\_

Sr. No.	Name of Equipment	No.of Units	Kind & make	Capacity	Year of Mfg. & Condition	Present Location	Remarks
1	2	3	4	5	6	7	8
-							

Signature of Authorized Representative Company/Agency

NAME:\_\_\_\_\_

STATUS:\_\_\_\_\_

Details of orders executed by the bidder of various Transmission lines.

Period: (During last FIVE Years.)

STRINGING OF TRANSMISSION LINE ON TOWERS UPTO & ABOVE 66 KV CLASS ONLY

Sr. No	Order No./Date	Description of work	Order Qty.	Order Amount
1	2	3	4	5

Name of Order placing authority	Completion date as per order	Date of commence - ment of work	Date of actual Completion of work
6	7	8	9

Note: Certificate for satisfactory work completion from competent authority of GETCO/ organization who placed the order should be invariably attached with this schedule.

Signature of Authorised Representative Company/Agency

NAME:\_\_\_\_\_

STATUS:\_\_\_\_\_

# FINANCIAL CAPABILITY

Sr. No.	Details	Amount Rs.in lacs	Remarks
1	2	3	4
1.	Solvency		A scheduled Banker's Certificate of present solvency is attached.
2.	Annual turnover for last five years.		
3.	Price of the single biggest job carried out.		

Signature of Authorised Representative Company/Agency

NAME:\_\_\_\_\_

STATUS:\_\_\_\_\_

# STRINGING CAPACITY

# Based on available manpower, tools-tackles, machinery and financial resources, our stringing capacity is as under:

Sr. No.	Name of activity	Unit	Capacity per Annum per gang	No. of Persons per gang.
1.	Preliminary and check Survey including profiles.	Km.		
2.	Stringing	Km.		

Signature of Authorised Representative Company/Agency

NAME: \_\_\_\_\_

STATUS: \_\_\_\_\_

SEAL / STAMP

# LATEST INCOME-TAX CLEARANCE CERTIFICATE

# DETAILS OF PARTNERS / DIRECTORS WITH THEIR ADDRESS

Name of bidder:

Sr. No.	Designation	Name	Residence (address & Phone)	Working Place (address & Phone)
1	2	3	4	5
1)				
2)				
3)				
-				

Signature of Authorised Representative Company/Agency

NAME:\_\_\_\_\_

STATUS: \_\_\_\_\_

SEAL / STAMP

**MEMORANDOM / ARTICLE** 

**OF ASSOCIATION** 

**OR CONSTITUTION OF FIRM** 

WITH THE NAMES OF

PARTNERS / DIRECTORS.

(TO BE SUBMITTED SEPARATELY WITH THE OFFER DULY SEALED AND SIGNED)

# ATTESTED COPY OF RESOLUTION OF THE PARTNERS / COMPANY/ AUTHORITY ACCEPTABLE BY LAW OF THE FIRM AUTHORISING A PARTICULAR PERSON TO SIGN TENDER AND RELATED DOCUMENTS ON BEHALF OF THE COMPANY.

# SCHEDULE - 14

# PROFORMA OF POWER OF ATTORNEY BY THE CONSORTIUM MEMBERS

(Non Judicial Stamp of Rs. 100/-)

# KNOW ALL MEN BY THESE PRESENTS THAT WE the partners whose details are given hereunder:

- 1. M/s (A company incorporated in the companies Act 1956// A Partnership Firm registered under the Indian Partnership Act 1932/ Proprietary ship concern solely owned, controlled and managed by etc.) having its registered office at (Complete address)
- 2. do -
- 3. do -

have formed a Consortium under the laws of (Name of Country) and having our Registered office/Head office/Office of Consortium Leader at (hereinafter called the Consortium which expression shall unless repugnant to the context or meaning thereof, include is successors, administrators and assigns) acting through M//s Being the Partner in charge do hereby constitute, nominate and appoint M/.s (Name of Leader) a Company incorporated under the Law of and having its registered / Head office at

As our duly constituted lawful Attorney (hereinafter call "Attorney" or "Authorised Representative" or Partner In charge or Leader of Consortium) to exercise all or any of the powers for and on behalf of the Consortium Members in regards to Specification No.

Lot No. the bids for which have been invited by Gujarat Energy Transmission Corporation Limited (herein after referred to as Gujarat Energy Transmission Corporation Limited or the "GETCO".)

- i) To submit proposal and participate in the aforesaid bid specification of the GETCO on behalf the "Consortium Members".
- ii) To negotiate with the Purchaser the terms and conditions for award of the Contract pursuant to the aforesaid Bid and to sign the Contract with the GETCO for and on behalf of the "Consortium Members".
- iii) To do any other act or submit any document related to the above.
- iv) To receive, accept and execute the contract for and on behalf of the "Consortium Members".

v) In the event of an order placed on M/s. \_

The work shall be executed by all the members as per Bidding Documents and as per the schedule hereunder :

Sr. No.	Completion Schedule	Name of line & Kms.	Name of Bidder / Member of Consortium

## **Schedule of Completion**

The work of the line to be executed by the Consortium Members will be directly executed by the individual members to the GETCO and payments will also be made by the GETCO directly against individual invoices raised by them. The GETCO will make payment directly to the concerned consortium member.

- vi) The GETCO may place only one order on the Leader of Consortium incorporating the names of all the Consortium Members and schedule of completion against each member, We confirm that commitments made and liabilities incurred by the Leader shall be binding on all the Consortium Members and all of us shall be jointly and severally responsible for the faithful execution of the contract and discharge the liabilities jointly and severally.
- vii) In the event of award of contract, we the Consortium members shall be liable jointly and severally for the execution of the contract in accordance with the contract terms and in accordance with specifications and within the schedule time.
- viii) The leader of Consortium is hereby authorized to incur liabilities and receive instructions for and on behalf of any and all the consortium members and entire execution of the contract.
- Ix) In the event of any default in executing contract, that is in execution of work in accordance with specifications and within the schedule time by any Member/Members of Consortium, the remaining other members shall accept the liability and execute the contract in full as provided in Clause vii of this agreement.
- x) We all the members of the consortium agree and undertake that in the event of any change in the Consortium of any Consortium Member the rights and obligations of the Consortium shall continue to be in full force without any effect thereof.

xi) We, all the members of consortium undertake that we shall not cancel or amend this agreement unilaterally and without the consent of Gujarat Energy Transmission Corporation Limited and such consent will be obtained in writing. We also undertake that this agreement will be duly registered in any Registrar's office located in.

It is already understood that the Partner in charge (Leader) shall ensure performance of the Contract (s) and if one or more Partner (Member) fail to perform their respective portions of the Contract(s) the same shall be deemed to be a default by all the Members.

It is expressly understood that this Agreement shall remain valid binding and irrevocable till completion of the Warranty period in terms of the Contract.

The Consortium Members hereby agree and undertake to ratify and confirm all the whatsoever the said Attorney/Authorized Representative Leader quotes in the bid, negotiates and signs the Contract with the Purchaser and or proposes to act on behalf of the Consortium Members by virtue of this Power of Attorney/Agreement and the same shall bind the Consortium Members as if done by itself.

IN WITNESS THEREOF the Members constituting the Consortium as aforesaid have executed these presents on this day of under the Common Seal(s) of their companies.

For and on behalf of the Members of Consortium.

The common seal of the above Consortium Members. The common seal has been affixed there unto in the presence of

Witness.

	1. Signature Name Designation Occupation
2.	Signature Name Designation Occupation



# **DETAILS OF HUMAN RESOURCES**

Details of the human resources available with the bidder for the successful performance of the contract.

# Name of the Bidder: \_\_\_\_\_

Sr. No.	Designation	Name	Qualification	Professional experience & details of works carried out.	Remark
1	Works Manager				
2	Marketing Manager				
3	Design Manager				
4	Quality Control Manager				
5	Number of Skilled Employees				
6	Number of unskilled Employees				

Signature of Authorised Representative

Company / Agency

NAME:\_\_\_\_\_

STATUS: \_\_\_\_\_

# SCHEDULE – 16 ERECTION CAPACITY

The detail must be submitted in following format: -

Sr. No.	Name of activity	Unit	Capacity per Annum per gang	No. Of Persons per gang.
1	2	3	4	5
1.	Preliminary and check Survey including profiles.	Km.		
2.	Foundation a)	Nos.		
	b)	Cu. M.		
3.	Tower erection	Nos.		
4.	Stringing	Km.		

Signature of Authorised Representative

\_\_\_\_\_

Company / Agency

NAME: \_\_\_\_\_

STATUS: \_\_\_\_\_\_

# ACKNOWLEDGEMENT FOR ACCEPTANCE OF ORDER

(TO BE SUBMITTED ON THE LETTER HEAD OF THE FIRM)

Reference No	Date
To The Executive Engineer (TR.) Gujarat Energy Transmission Corpo MAKTUMPUR, BHARUCH - 392012.	oration Limited
Sub:	
Ref: A/T No. :	

We hereby acknowledge, agree and accept your A/T under reference above with the terms and conditions mentioned therein.

(Signature of Authorised Representative Company/Agency)

NAME: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

Name of tendering Company

Note: To be signed by authorised person on behalf of the Firm.

# **SCHEDULE -18**

Tender for Supply of \_\_\_\_\_

Tender No. TR/

Due On:

Firms Letter Head

Due On:

# <u>CERTIFICATE – "A"</u>

I / We	authorised signatory of
M/s	hereby Certify that
M/s	is not related with
other firms who have submitted tend	ers for the same items under this
inquiry / Tender.	

Seal of the Firm	Signature of the Tenderer
Place:	With Designation.

Date:

# **DELIVERY ORDER:**

## **BY HAND DELIVERY**

To,

Sub: Replacement of Conductor, Insulator, Earth wire etc. i.e. strengthening of 66 kv transmission lines on towers / 'H' frame structures. Payment of old line materials thereof.

Dear Sir

The Sales Tax Form No	against	% Gujarat sales Tax
Plus% Addl Tax C Form B	Bearing No.	
	Dtd	With 4% CST
amount is accepted strictly at ou	ur risk and cost. The	e Party's C.S.T. No. is

You have submitted BG / paid the sum of Rs.\_\_\_\_\_ (Rupees

\_\_\_\_\_) towards cost of old line materials with Tax vide this Office Money Receipt No. \_\_\_\_\_\_ dtd. \_\_\_\_\_. You are now requested to collect scrap of Conductor / Insulators / Earth wires / G.I. Hardware as per following format .

Sr.	Item	Unit	Unit Qty.			Rate	Value	GST	GST	Total Amt.
No.	nem	Onit	Gry.	(Rs.)	(Rs.)	%	Amount.	Rs.		
1	Conductor Scrap	KM.	20							
2	Earthwre Scrap.	KM.	20							
3	Insulator Scrap.	KM.	20							
4	Hardware & Accessories Scrap.	KM.	20							
	Total									
LOC	LOC Nos :									

You will have to produce above original money receipt for the verification of concern Officer at the time of delivery of materials.

Yours faithfull

signed before me

E E (TR) For Chief Engineer (Tr.)

Attested Signature of E E (TR)

Party's Authorised Representative

Copy F W C S to :

1. CE(TR),

Gujarat Energy Transmission Corporation Limited, CO, Vadodara.

- 2. SE(TR), GETCO, Circle Office BHARUCH.
- 3. AO , Trans. Circle Office , BHARUCH

Copy to:

- 1. Divisional Accountant, Division Office,
- 2. Deputy Engineer (TR), TR. S/Dn. , \_\_\_\_\_

Bank Guarantee / Money Receipt for payment made for old line materials and Material Requisition No. & Date of material having delivered to the party may also be intimated to this office immediately. It may also be certified that the party while removing the materials has caused / not caused any damage to the GETCO's property.

Sr.No.	Details	Confirmation (Tick √ any one)
1	Firm's details as per "Annexure –1"	YES / NO
2	Performance certificates as per "Annexure-5"	YES / NO
3	Certificate of Important Instruction & certificate-A	YES / NO
4	GETCO's technical specification duly signed and with seal of firm.	YES / NO
5	Guaranteed Technical particulars submitted in GETCO's Performa only.	YES / NO
6	ANNEXURE - 'X'	YES / NO

# I / WE, confirm that following documents are attached with the technical bid of the offer.

# Seal of the Firm

# Signature of the Tenderer

Date:

# NOTE: ALL THE DOCUMENTS SHOULD BE PROPERLY FILLED AND SHOULD BE GIVEN FLAG MARKING FOR IDENTIFICATION.

# ANNEXURE - 1 DETAILS OF THE FIRM

N	AME OF THE FIRM:	
Α		
1	Address of Registered Office	
2	Contact Personal	
3	Designation	
4	Residential Address	
5	Phone Nos. (Office and Residential)	
6	Fax No.	
7	Telegraphic code	
В		
1	Address of works	
2	Contact Personal	
3	Designation	
4	Residential Address	
5	Phone Nos. (Office and Residential)	
6	Fax No.	
7	Telegraphic code	

# **ANNEXURE - 2**

# DETAILS OF THE EXPERIENCE FOR ERECTION WORK IN LAST FIVE YEARS FROM THE DUE DATE OF TENDER:

Sr. No	Name of Transmi ssion line	Order reference no. & Date	Order value	Length of line	Date of completion	Order fully executed Yes/No	Status if order under execution
Α	GUJARA	T Energy 1	ransm	ission Co	orporation L	td., GETC	0:
1)							
2)							
3)							
4)							
5)							
B	OTHER S	STATE ELE	CTRIC	TY BOA	RD:	I	
1)							
2)							
3)							
4)							
5)							
5) <b>C</b>	PRIVATE	FIRMS:	•				
1)							
2)							
3)							
4)							
5)							

# ANNEXURE – 3

# LIST OF PERFORMANCE CERTIFICATES SUBMITTED WITH THE TECHNICAL BID

SR NO	Name of the Authority by whom certificate is issued	Reference No. & Date	Details of items
1	2	3	4

# <u>ANNEXURE-4</u>

Vendor must fill below details & place at the top of the Technical Bid.

2

:

2

:

- 1. PRICE [FIRM ONLY]
- 2. Service TAX : [IN PERCENTAGE] Please quote Service Tax Registration No. & Date. :
- 3. PENALTY TERMS AGREE (Please specify YES / No.)
- 4. SECURITY TERMS AGREE (Please specify YES / No.)
- 5. P.B.G. TERMS AGREED (Wherever applicable) : (P.B.G. – Performance Bank Guarantee)
- 6. PAYMENT TERMS AGREE (Please specify YES / No.)
- 7. Work involved :
- 8. TELEPHONE NOS. & FAX NO. :
- 9. AUTHORISED PERSON OF THE FIRM :
- 10. NAME OF THE PROPRIETOR, PARTNERS, DIRECTORS [AS THE CASE MAY BE], ALONG WITH ADDRESS, TELEPHONE, FAX NO. Etc.
- 11. If Vendor Registration is Done : (Please Furnish the details of Vendor Registration No.)

# Conductor and Earth wire Parameters for 220 kv transmission lines.

Sr. No.		Description	Conductor	Earthwire
1)	Mate	rials	ACSR "Zebra" CONDUCTOR	GALV. STEELWIRE
2)	Size	& stranding	54/3.18mm-AL+ 7/3.18mm -ST	7/3.15mm
3)	Ultim	ate Tensile strength	130.32 KN	56.017 KN
4)	Weig	ht	1621 Kg. / Km	428 Kg. / Km
5)	Over	all diameter	28.62 mm	9.45 mm
6)	Area	of cross-section	484.5 mm^2	54.57 mm^2
7)	Maxi	mum working Tension at :		
	i)	32 Deg. C with full wind	3950 Kg.	1285 Kg.
	ii)	0 Deg. C with 2/3 <sup>rd</sup> full wind	4360 Kg.	1315 Kg.
8)		mum sag under maximum erature and no Wind ition.	9.240 Mtr. at 75 deg.C.	7.500 Mtr. at 75 deg.C.
9)	Modu	ulus of elasticity	7000 Kg / mm ^2	1.933 x 10 <sup>6</sup> Kg/mm^2
10)	Co-e	fficient of linear expansion.	19.3 x 10 <sup>-6</sup> / Deg. C.	11.5 x 10 <sup>-6</sup> / Deg. C.
11)	Norm	nal span	350 Mtrs.	350 Mtrs.

# Conductor and Earth wire Parameters for 132 kv transmission lines.

Sr. No.		Description	Conductor	Earthwire
1)	Mate	rials	ACSR "Panther" CONDUCTOR	GALV. STEELWIRE
2)	Size	& stranding	30/3.00mm-AL+ 7/3.00mm -ST	7/3.15mm
3)	Ultim	ate Tensile strength	89.22 KN	56.017 KN
4)	Weig	ht	976 Kg. / Km	428 Kg. / Km
5)	Over	all diameter	21.00 mm	9.45 mm
6)	Area	of cross-section	261.2 mm^2	54.57 mm^2
7)	Maxi	mum working Tension at	:	
	i)	32 Deg.C with full wind	2800 Kg.	1420 Kg.
	ii)	0 Deg.C with 2/3 <sup>rd</sup> full wind	3050 Kg.	1480 Kg.
8)		mum sag under mum temperature and lind condition.	8.260 Mtr. at 75 deg.C.	7.500 Mtr. at 75 deg.C.
9)	Modu	ulus of elasticity	8000 Kg / mm ^2	1.933 x 10 <sup>6</sup> Kg/mm^2
10)		fficient of linear nsion.	17.8 x 10 <sup>-6</sup> / Deg. C.	11.5 x 10 <sup>-6</sup> / Deg. C.
11)	Norm	nal span	350 Mtrs.	350 Mtrs.

# Conductor and Earth wire Parameters for 66 kv transmission lines.

Sr. No.	Description		Conductor	Earthwire	
1)	Materials		ACSR "Dog" CONDUCTOR	GALV. STEELWIRE	
2)	Size	& stranding	7/4.72mm-AL+ 7/1.57mm -ST	7/3.15mm	
3)	Ultim	ate Tensile strength	32.47 KN	56.017 KN	
4)	Weig	ht	394 Kg. / Km	428 Kg. / Km	
5)	Over	all diameter	14.15 mm	9.45 mm	
6)	Area of cross-section		118.8 mm^2	54.57 mm^2	
7)	Maxi	mum working Tension at :			
	i)	32 Deg.C with full wind	1225 Kg.	1130 Kg	
	ii)	0 Deg.C with 2/3 <sup>rd</sup> full wind	1330 Kg.	1210 Kg.	
8)	Maximum sag under maximum temperature and no Wind condition.		5.610 Mtr. at 75 deg.C.	4.840 Mtr. at 75 deg.C.	
9)	Modulus of elaasticity		8000 Kg / mm ^2	1.933 x 10 <sup>6</sup> Kg/mm^2	
10)	Co-efficient of linear expansion.		19.8 x 10 <sup>-6</sup> / Deg. C.	11.5 x 10 <sup>-6</sup> / Deg. C.	
11)	Norm	nal span	260 Mtrs.	260 Mtrs.	

# **Insulator Parameters:**

1)	Size	of discs	280 x 145 mm AND / OR 305 x 145 mm					
2)	2) Number of discs		220 kv Tr. line		132 kv Tr.line		66 kv Tr.line	
2)			Max	Min	Max	Min	Max	Min
	i)	Suspension string	16	14	11	9	6	5
	ii)	Tension string	17	15	12	10	7	6
3)	EMS	S Strength-KN						
		Suspension sc Insulator	90	90	90	90	90	90
	ii) Tension Disc insulator		120	120	120	120	90	90

Note : GETCO will issue either conventional antifog insulators / Silicon rubber insulators / Long rod insulators as per availability at the time of execution.

# MATERIALS

# Following material will be supplied by GETCO "free of cost" for stringing of transmission line:

- 1) Conductor, conductor accessories, earth wire, earth wire accessories.
- 2) Insulators, insulator hardware's.

# Following materials / equipments will be procured / arranged by the contractor for erection of transmission line:

- 1) Galvanized Cross arm members.
- 2) Various plates namely DP / NP / PP / CIP.
- 3) Other materials and tools-tackles required for dismantling and stringing activities and Profiling.

### COST OF TR. LINE FOR TAKING INSURANCE

Sr.		Unit	Qty.	Line Cond.	Cost of line for Insurance	
No.	Name of Line				Rate per KM in Rs.	Amount In Rs.
1	66 KV Bharuch-Haldarwa-Palej line no. 1 with E/W	KM	26	Hot	1150000	29900000
2	66 KV Bharuch-Haldarwa-Palej line no. 2 W/O E/W	KM	26	Hot	1150000	23300000

Signature of Authorized Representative Company/Agency

NAME:\_\_\_\_\_

STATUS:\_\_\_\_\_

# SCHEDULE OF PER KM LABOUR COST:

#### BREAK UP OF PER KM LABOUR COST FOR STRENGTHENING WORK:

a)	VOLTAGE	66	66 KV		
		COLD	НОТ		
b)	WORKING CONDITION	On "H" Frame	On Tower		
Sr. No	Item	Unit Rate Rs.	Unit Rate Rs.		
1		-	3000		
	Preparation of Sag Tension chart etc.				
2		4313	20700		
	Dismentalling of 3 Nos Conductors, insulators H/W, accessories etc.				
3		0	10500		
	Dismentalling of Earthwire, accessories etc.				
4		6900	39000		
	Stringing of Conductors (3 Nos)				
5	Stringing of earthwire	0	14850		
6		313	1350		
	Providing and fixing of NP/DP/PP/CIP				
7		10000	10000		
	Tree cutting/ Crop compensation/way leave cost etc.				
8			99400		
	Total Labour Cost per KM in Rs. With E/W				
		21526	74050		
9	Total Labour Cost per KM in Rs. W/O earthwire				

Signature	of	Authorized					
Representativ	Representative Company/Agency						
NAME:							

STATUS:		

# **Store Centres**

Sr. No.	Name of Line	Unit	Qty.	Line Cond.	Store centres
1	66 KV Bharuch-Haldarwa-Palej line no. 1 with E/W	KM	26.0	Hot	Bharuch / Haldarva
2	66 KV Bharuch-Haldarwa-Palej line no. 2 W/O E/W	KM	26.0	Hot	Bharuch / Haldarva

Signature of Authorized Representative Company/Agency

NAME:\_\_\_\_\_

STATUS:\_\_\_\_\_

# **COMPLETION PERIOD**

Sr. No.	Name of Line	Unit	Qty.	Line Cond.	Completion period working months from date of confirmed outage.
1	66 KV Bharuch-Haldarwa-Palej line no. 1 with E/W	KM	26	Hot	2 Months
2	66 KV Bharuch-Haldarwa-Palej line no. 2 W/O E/W	KM	26	Hot	2 Months

Signature of Authorized Representative Company/Agency

NAME:\_\_\_\_\_

STATUS:\_\_\_\_\_