



L&T Construction

Power Transmission & Distribution

CIN No. L99999MH1946PLC004768

Website: www.lntec.com

LTCD/PT&D/Phojal/15-10,

04th Mar 2015

To,
HP Power Transmission Corporation Limited,
Barowalias House, Khalini,
Shimla-171002, Himachal Pradesh.

Kind Attn: - Mr. Harish Kapoor, Dy. General Manager (Contracts)

Sub: Regarding Submission of Claim for additional Supply & Erection Activities

- Ref: 1) LOA No-HPPTCL/DGMC/L&T-SUPPLY/2013-6855-61 dated 08-03-2013,
2) LOA No-HPPTCL/DGMC/L&T-ERECTION/2013-6862-68 dated 08-03-2013,
3) Our Letter Reference No- LTCD/DLRO/HPPTCL/Phojal/093 dated 29-04-2014
4) Our Letter Reference No- LTCD/DLRO/HPPTCL/Phojal/115 dated 28-08-2014
5) Our Letter Reference No- L TCD/PT & D/Phojal/14-57 dated 13-10-2014
6) Our Letter Reference No- L TCD/PT & D/Phojal/14-56 dated 23-08-2014
7) Our Letter Reference No- LTCD/DLRO/HPPTCL/Phojal/055 dated 10-03-2014
8) Our Letter Reference No- LTCD/DLRO/HPPTCL/Phojal/101 dated 29-05-2014
9) Our Letter Reference No- LTCD/DLRO/HPPTCL/Phojal/106 dated 30-06-2014
10) Our Letter Reference No- LTCD/DLRO/HPPTCL/Phojal/0025A dated 09-12-2013
11) Our Letter Reference No- L TCD/PT & D/Phojal/14-34A dated 15-02-2014
12) Our Letter Reference No- LTCD/DLRO/HPPTCL/Phojal/14-35 dated 17-02-2014

Dear Sir,

With reference to above captioned subject, we hereby wish to submit our final Claim for additional Supply & Erection Activities as per attached annexure which were not in L&T Scope / Not available in BOQ. Details summary of the claims are:

- | | |
|--|-----------------|
| 1) Erection Activities: - | Rs. 6968088.6/- |
| 2) Change in Quantity (Supply of Items): - | Rs. 625318/- |
| 3) New Items (Supply of Items):- | Rs. 7652673.9/- |

So you are requested to accord your approval for the above additional claim.

Thanking you and assuring you of our best attention always.

Larsen & Toubro Limited, Construction, Power Transmission & Distribution
Mount Poonamallee Road, Manapakkam, P. B. No. 979, Chennai - 600 089, INDIA
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L&T House, N. M. Marg
Ballard Estate
Mumbai -400 001, INDIA

(L&T Construction is a business brand of Larsen & Toubro Limited)



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Yours faithfully

For Larsen & Toubro Limited
PT&D (Domestic)

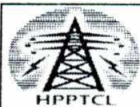
(D.K.Ghosh)

Enclosure:- Annexure for additional Supply and Erection Activities is attached.

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H. P. POWER TRANSMISSION CORPORATION LIMITED
(A State Government Undertaking)
Barowalias House, Khalini, Shimla - 171002
Phone No.: 0177 – 2623406; FAX No.: 0177 – 2620227

LOA HPPTCL /33/220 kV Phojal/L&T/2013-6655-66 Dated 08.03.2013 (First Contract) (New items)

LOA HPPTCL /33/220 kV Phojal/L&T/2013-6862-68 Dated 08.03.2013 (Second Contract) even no. for Addl. Work 5656-63 dated 28.12.2013 Erection of Extra Work.

Summary of L & T claim

Sr.No.	Description	Annexure	Amount
1	Additional Qty. Supplied	I	7652674
2	Substituted Items	II	625318
3	Erection Activities	III	6968089
	TOTAL		15246081

Say Rs. 1,52,46,081/- One Crore Fifty Two Lacs, Forty Six Thousand Eighty One only.



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Additional Qty. Supplied

Annexure I

LOA HPPTCL /33/220 kV Phojal/L&T/2013-6655-66 Dated 08.03.2013 (First Contract) (New items)

DETAIL OF NEW ITEMS INVOLVED AT PHOJAL SUB STATION AND FINANCIAL IMPLICATION THEREOF

SUPPLY OF MATERIAL											Claimed by Firm			
S. No.	Description of items	As Per Actual (Approv. By Design)		Cost of Equipment/Material by M/s L & T						REMARKS/ APPROVED	Dispatch Instruction issued	LT Claim		
		Qty.	Unit	Unit rate	ED	CST	F&I	L&T (Overhead, Engineering Charges and Margin on above Item) @10% in SF6 Air Bushing and @ 20% in Neutral formation	Total Units Price				Grand Total	
		4	NO.	750000	92700	16854	16830	87638.4	964022.4	3856089.6	Copy of P.O. is Annex. W.O. NO. E4977PO3000079 L& T submitted commercial proposal vide letter NO. LTCD/DLRO/Phojal/002 5A Dt. 09.12.2013			
	SF6 / Air Bushing 1 including erection									3856089.6			3856089.6	
2	Neutral Formation (Supply Part)													
	33 kV XLPE, Cu Cable 1C X 2.1 1000 sq. mm	210	mtr.	11000	1360	247	0	2521.36	15128.2	3176912	Copy of P.O. is Annex. W.O. NO. E4977PO4000112	Vol.XIV/2014- 5462-66 dt.22.11.2015 CP 189		
	220 kV Inter Connector to suit 4" IPS AL Tube on Main way, 2xMoose ACSR on Branch Way	2	Nos	1840	190	41	480	510.00	3060.0	6120	Copy of P.O. is Annex. .P.O. NO. E4977PO4000103			3176911

Additional Qty. supplied in Sub Station Phojal

	Terminal Connector on 33kV Neutral Bushing of Transformer to suit 4" IPS AL Tube (Rigid type)	3	Nos	1480	152	33	386	410.21	2461.3	7384	Vol.XIV/2014-5257-61 dt.11.11.2014 CP 174	
	Terminal Connector on 33kV BPI to Suit 4" IPS AL Tube(Rigid/Slide Type)	5	Nos	1190	123	26	310	329.83	1979.0	9895		
	Terminal Connector on 4" IPS AL Tube to Suit 2 No. 33kV Cable Terminations	4	Nos	2290	236	51	597	634.72	3808.3	15233		
	Terminal Connector on 4" IPS AL Tube to Suit 1 No. 33kV Cable Termination	2	Nos	1145	118	25	299	317.36	1904.2	3808		
	Terminal Connector on 33kV Horizontal Mounted BPI to suit 75x12mm GS Flat.	4	Nos	1080	111	24	282	299.35	1796.1	7184		
	Pad Type Compression Clamp to suit 2xMoose ACSR & 75x12mm GS Flat	2	Nos	410	42	9	107	113.64	681.8	1364		
	Pad Type Compression Clamp to suit 2xMoose ACSR & 4" IPS AL Tube	2	Nos	1310	135	29	342	363.10	2178.6	4357		
	Corona bell to Suit 4" IPS AL Tube	7	Nos	740	76	16	193	205.11	1230.6	8615		
	Rigid Spacer to Suit 2xMoose ACSR Conductor with 250mm sub conductor spacing	5	Nos	510	53	11	133	141.36	848.1	4241		
	Sub Total									68201		68201
	Tee Connector To Suit 2 x Moose ACSRConductor in all ways	2	Nos	1720	177	38	140	415.02	2490.1	4980	Copy of P.O. W.O. NO. E4977PO4000115	

Additional Qty. supplied in Sub Station Phojal

33kV Outdoor Cable Termination Kit to suit 1Cx1000sqmm Cu XLPE Cable	10	Nos.	3515		70	19	720.93	4325.6	43256		
33kV Indoor Cable Termination Kit to suit 1Cx1000sqmm Cu XLPE Cable	6	Nos.	3235		65	18	663.50	3981.0	23886		
Sub Total									72122		72122
33kV Single Tension string hardware assembly without turn buckle for Twin 'Moose' ACSR	1	Nos.	14256	1762	320	4227	4113.11	24678.7	24679	Copy of P.O. is Annex . NO. E4977PO4000118 Dt. 25.11.2014 Vol.XIV/2014-5462-66 dt.22.11.2014 CP 189	
33kV Single Tension string hardware assembly with turn buckle for Twin 'Moose' ACSR	1	Nos.	12528	1548	282	3715	3614.55	21687.3	21687		
ACSR Moose Conductor	40	mtr					0.00	812.0	32480		
75 X 12 mm GS Flat	15	mtr	450	56	10	159	134.99	809.9	12149		
150 NB Pole Structure (as per drawing)	5	Nos.	12500	1545	281	4423	3749.68	22498.1	112490	Annex. P.O. NO. E4977PO4000105 Dt. 02.09.2014	
Sub Total									124639		124639
5500 mm long 4" IPS Tube	3	Nos.	12000		240	8640	4176.00	25056.0	75168	Annex. P.O. NO. E4977PO4000104 Dt. 02.09.2014	Vide- Vol- XIV/2014-5282-86 Dated 18.11.2014 CP-184
2000 mm long 4" IPS Tube	2	Nos.	7000		140	5040	2436.00	14616.0	29232		
Sub Total									104400		104400
11 kV Disc Insulator	10	Nos.					0.00	3753.0	37530		Vide- Vol- XIV/2014-5257-61 Dated 11.11.2014 CP-174
33 kV BPI	11	Nos.	4500	556	101		1031.46	6188.8	68077	Annex. P.O. NO. E4977PO4000114 Dt. 15.09.2014	
Sub Total									105607		68077

Additional Qty. supplied in Sub Station Phojal

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Substituted/change in Qty.

Annexure II

LOA HPPTCL /33/220 kV Phojai/L&T/2013-6655-66 Dated 08.03.2013 (First Contract) (change in Qty.)

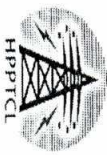
S. No.	AS PER BOQ				AS PER APPROVED				Reference of Design office /Dispatch Instruction	Remarks
	Description of item	Qty	Unit	Unit rate	Amount	Description of item	Qty	Unit	Unit rate	Amount
(A) Lighting Fixtures										
1	2X36W, Fluorescent Lamp in industrial reflector type fixture suitable for surface/pendant mounting	37	Nos.	1782	65934	2X28W, T5 type industrial through type fluorescent fixture with electronic ballast (Bajaj BTIV 228) with Lamp	60	Nos.	1782	106920
										Annexure-(a)
2	(New)	-	-	-	0	2X28W, T5 type fluorescent fixture corrosion proof fitted with electronic ballast (Bajaj BTIV 228) with Lamp	9	Nos.	1782	16038
										Corrosion proof/acid proof lighting fixtures not included in BOQ BOQ item rate M 3(a), CP-137
3	(New)	-	-	-	0	2X28W, T5 mirror optics type fixture (Bajaj BTIV 128) with Lamp	34	Nos.	1782	60588
										Mirror lighting fixtures not included in BOQ BOQ item rate M 3(a), CP-137
4	(New)	-	-	-	0	1X28W, T5 type industrial through type fluorescent fixture with electronic ballast (Bajaj BTIV 128) with Lamp	5	Nos.	1370	6850
										Not included in BOQ BOQ item rate M 7, CP-138

Proposal submitted with the same rate as per BOQ

5	Flood Light luminaire 2X400W HPSV with lamp	4	Nos.	7909	31636	Flood light fixture with 2X400W HPSV-T Lamp & control gear (Bajaj BJENF 24) with Lamp	6	Nos.	7909	47454	BOQ item rate M 5(a), CP-138
6	(New)	-	-	-	0	Flood light fixture with 1X400W HPSV-T Lamp & control gear (Bajaj BJENF 14) with Lamp	3	Nos.	5536	16608	Not included in BOQ. Current/prevaling market rate quoted by firm
7	1X70W HPSV, 240V AC industrial wall glass fixture for pendant mounting with control gear box	2	Nos.	1370	2740	1X70W HPSV 240AC industrial type fixture suitable for wall mounting with control gear (Bajaj BGEMF 17) with Lamp	12	Nos.	1370	16440	BOQ item rate M 5(a), CP-138
8	1X250W industrial metal halide luminaire	14	Nos.	1864	26096	1X250W Industrial type metal halide luminaries (Bajaj) BJHBBIS 250 MH) with Lamp	6	Nos.	1864	11184	BOQ item rate M 4(a), CP-138
9	(New)	-	-	-		10/20W CFL Fitting suitable for 220V DC source	18	Nos.	959	17262	Not included in BOQ. Current/prevaling market rate quoted by firm
10	(New)					40 W LED Solar Lighting System with Backup battery & Suitable pole Height					
	Sub-Total				126406					299344	
Claim submitted by L & T for fixture is Rs.299344/-											
(B) Clamps & Connectors-220KV											

1	Terminal connector on 26.66/33.33MVA Transformer SF6 to oil Bushing to suit GIS bus duct	4	Nos.	4458	17832	Expansion type terminal connectors to suit 3" IPS aluminium tube on transformer bushing (HA)	4	Nos.	4458	17832	BOQ item rate 5, CP-142 Comm. Proposal submitted by LTCD PT &D/Phojal/13-24 Date 09.12.2013. LTCD/DURO/HPTCL/Phojal /106 dated 30.06.2014. Approval of Erection Key Diagram by Design office Drg. No. 010222-E-IS-SY-ES-0101 DISPATCH INSTRUCTIONS VIDE: Vol XIII/2014-1558-62 dated 25.06.2014	1558-62 dated 25.06.2014
2	terminal connector on 245KV CVT to suit 1 or 2X moose/Zebra ACSR	6	Nos.	2962	17772	Terminal Connector to suit single Zebra ACSR on CVT (HA)	6	Nos.	2962	17772		
3	Terminal connector on wave trap to suit 1 or 2XMOOSE/Zebra ACSR	8	Nos.	2709	21672	Terminal Connector to suit single Zebra ACSR on SF6 air bushing (HA/VA)	6	Nos.	2709	16254		
4	Tee connector to suit 1 or 2XMOOSE/Zebra ACSR	12	Nos.	3413	40956	Tee connector to suit single Zebra ACSR to single Zebra ACSR	12	Nos.	3413	40956		
5	Terminal connector to suit 1 or 2XMOOSE/Zebra ACSR (New item)	-	-	-	0	PG Clamp to suit single Zebra ACSR to single Zebra ACSR	4	Nos.	2709	10836		
6	Terminal connector on wave trap to suit 1 or 2XMOOSE/Zebra ACSR	-	-	-	0	Rigid type terminal connector to suit 3" IPS aluminium tube on SF6 air bushing (HA)	4	Nos.	2709	10836		
Sub-Total					98232					114486		
(C) Clamps & Connectors-33KV												
1	Terminal connector 30KV lightning arrestor to suit 1 or 2XMOOSE/Wolf ACSR	18	Nos.	2818	50724	Terminal connector to suit twin Panther ACSR on isolator (HA)	12	Nos.	2818	33816	BOQ item rate 5, CP-142 Comm. Proposal submitted by LTCD PT &D/Phojal/13-24 Date 09.12.2013. LTCD/DURO/HPTCL/Phojal /106 dated 30.06.2014. Approval of Erection Key Diagram by Design office Drg. No. 010222-E-IS-SY-ES-0101 DISPATCH INSTRUCTIONS VIDE: Vol XIII/2014-1558-62 dated 25.06.2014	
2	Terminal connector 30KV lightning arrestor to suit 1 or 2XMOOSE/Wolf ACSR	-	-	-	0	Terminal connector to suit single Wolf ACSR on isolator (HA)	24	Nos.	2818	67632		
3	Terminal connector on cable sealing end to suit 2XMOOSE ACSR	4	Nos.	1552	6208	Tee connector to suit twin Panther ACSR to twin Panther ACSR	6	Nos.	1552	9312		
4	Terminal connector on cable sealing end to suit 2XMOOSE ACSR	-	-	-	0	Tee connector to suit twin Panther ACSR to single Panther ACSR	6	Nos.	1552	9312		
5	Terminal connector on cable sealing end to suit 2XMOOSE ACSR	-	-	-	0	Tee connector to suit Wolf ACSR to Wolf ACSR	24	Nos.	1552	37248		
6	Terminal connector on cable sealing end to suit 2XMOOSE ACSR	-	-	-	0	Terminal connector to suit single Panther ACSR on cable termination kit	12	Nos.	1552	18624		

7	Terminal coonector to suit 1CX630 sq. mm XLPE cable sealing end	6	Nos.	2962	17772	Terminal connector to suit single Wolf ACSR on cable termination kit	12	Nos.	2962	35544		
	Sub-Total				74704					211488		
	Total Claim for Clamps & Connectors (220 & 33 kV)									325974		
	Total Claim for Change in Qty.									625318		



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Erection Activities

Annexure III

LOA HPPTCL./33/220 kV Phojal/L&T/2013-6862-68 Dated 08.03.2013 (Second Contract) even no. for Addl. Work 5656-63 dated 28.12.2013 Erection of Extra Work.

Annexure - Erection A

Item	UOM	Qty	Supply Rate (Unit Rate Proposal as per BOQ Prices available)	Erection Rate (Unit Rate Proposal as per BOQ Prices available)	Total Amount Erection	Remarks
1						
3 mtr. Deep 200 mm Dia Bore hole with 175 mm casing using odex Method for treated/untreated earth pit for 40 mm GI Pipes and MS Rod in Nos.						L & T ref: L&T/EDRC-EI&C/010222/Ltr/035 Date 29.11.2013 regarding commercial proposal and REF: L & T P.O order No. /Bill Annexure- E4977BIL4000149
Cost of Bore hole	19 Nos.		84000		1596000	
Cost of Charcoal	19 Nos.		5400		102600	
Mobilisation charges	1 LS		20000		20000	
L&T (Overhead and Margin on above item) @20%	20%				343720	
Sub Total					2062320	
Add service tax @12.36					254902.752	
Sub Total Bore Hole					2317222.75	
2						
7.0 Cements concrete Roads including all types of crossings.						L & T submitted commercial proposal vide LTCD/PT&D/Phojal/14-56 Dated 23.08.2014 Drawing Approved by Design NO. 010222-C-15-CY-FL-1006
a) 5 mtr. Wide RCC Road	46.1 R M		12700		585470	
b) 3.5 mtr. Wide RCC Road	14 R M		5080		71120	
Sub Total					656590	

3	Civil Works for Zone V seismic area							L & T submitted commercial proposal vide letter no. LTCD/PT & D/Phojal/14-34A Dated 15.02.2014
	(Extra concrete and Reinforcement Steel consumption in all the buildings due to Height and Lump mass factors.)							
3.1	Control Room Building							
	a) Zone IV Structural M20 Theoretical consumption	184.722	Cu.M					
	b) PCC consumption	8.207	Cu.M					
	c) Excavation reqd.	319.97	Cu.M					
	d) Zone V M20 theoretical consumption	227.906	Cu.M					
	e) Total PCC consumption	10.338	Cu.M					
	f) Excavation reqd.	397.747	Cu.M					
	g) Zone V structural M20 excess consumption (theoretical)	43.184	Cu.M					
	h) Zone V PCC excess consumption	2.131	Cu.M					
	i) Zone V extra excavation	77.778	Cu.M					
3.2	33 KV GIS Building							
	a) Zone IV Structural M20 Theoretical consumption	28.496	Cu.M					
	b) PCC consumption	1.838	Cu.M					
	c) Excavation reqd.	103.246	Cu.M					
	d) Zone V M20 theoretical consumption	31.448	Cu.M					
	e) Total PCC consumption	2.394	Cu.M					
	f) Excavation reqd.	131.98	Cu.M					
	g) Zone V structural M20 excess consumption (theoretical)	2.952	Cu.M					
	h) Zone V PCC excess consumption	0.557	Cu.M					
	i) Zone V extra excavation	28.672	Cu.M					
3.3	220 KV GIS Building							

a) Zone IV Structural M20 Theoretical consumption	103.952	Cu.M					
b) PCC consumption	6.113	Cu.M					
c) Excavation reqd.	236.475	Cu.M					
d) Zone V M20 theoretical consumption	168.644	Cu.M					
e) Total PCC consumption	9.852	Cu.M					
f) Excavation reqd.	371.817	Cu.M					
g) Zone V structural M20 excess consumption (theoretical)	64.692	Cu.M					
h) Zone V PCC excess consumption	3.74	Cu.M					
i) Zone V extra excavation	135.342	Cu.M					
Sub Total Civil Works					2955365		
4 20 Cum Water Tank							
Excavation	63.248	Cum		525	33205.2	Commercial proposal submitted by M/s L & T wide LTCD/PT&D/Phojal/15-03 Dated 24.02.2015	
PCC 1:3:6	1.581	Cum		4604	7278.924		
RCC M25	20.978	Cum		7147	149929.766		
Reinforcement	1989.704	KG		64.011	127362.9427		
Sub Total Water Tank					317776.8327		
5 Lighting Fixture							
2x28W T5 Type Industrial Trough Type Fluorescent electronic ballast	Nos	60	1782	1840	110400	New Item; Unit Rate considered as per BOQ. S. No. M.3.a 2 x 36 Watts Fluorescent Lamp in Industrial Reflector type Fixtures suitable for surface/pendent mounting CGL caf Ref. IBA1424EB	
2x28W T5 Type Fluorescent Fixture, Totally Enclosed Corrosion Proof Fitted with Electronic ballast	Nos	9	1782	1840	16560		New Item; Unit Rate considered as per BOQ. S. No. M.3.a
2x28W T5 FTL Mirror Optics Type Fixture	Nos	34	1782	1840	62560		New Item; Unit Rate considered as per BOQ. S. No. M.3.a

1x28W T5 Type Industrial Trough Type, Electronic Ballast Fixtures	Nos	5	1370	2073	10365	New Item; Unit Rate considered as per BOQ S. No. M.7 1 x 70 W, HPSV 240 V, AC Industrial Wall Glass Fixture for pendant mounting with Control Gear Box
Flood Light Fixtures with 2x400W HPSV-T Lamp & Control Gear	Nos	6	7909	5183	31098	Item Available; BOQ S. No. M.5.a
Flood Light Fixtures with 1x400W HPSV-T Lamp & Control Gear	Nos	3	5536	3628	10884.3	New Item; 70% of Unit Rate considered as per BOQ S. No. M.5.a Flood light luminaire with 2x400 W HPSV/T+Lamp-Bajaj cat. BJE22 CA - R0
1x70W, HPSV 240 AC Industrial Type Fixture Suitable for Wall Mounting with control gear	Nos	12	1370	2073	24876	Item Available; BOQ S. No. M.7
1 x 250W Industrial Type Metal Halide Luminaries	Nos	6	1864	2073	12438	Item Available; BOQ S. No. M.4.a
10/20W CFL Fitting Suitable for 220kV DC Source	Nos	18	959	1451	26119.8	New Item; 70% of Unit Rate considered as per BOQ S. No. M.7 1x70W HPSV 240V, AC industrial well glass fixture for pendant mounting with control gear box G (BJDWI-70SV) for Transformer Area Lighting as
Sub Total Lighting Fixture					305301.1	
5 Clamps & Connectors-220kV Connectors						
Expansion type Terminal connector to suit 3"IPS Al. tube on Transformer Bushing (HA)	Nos	4	4458	3047	12188	Item Available; BOQ S. No. S. 220kV Terminal connector on 26.66/33.33 MVA Transformer SF6 to Oil bushing to suit GIS Bus Duct
Terminal connector to suit single 'Zebra' ACSR on CVT (HA)	Nos	6	2962	1536	9216	Item Available; BOQ S. No. S. 220kV Terminal connector on 245kV CVT to suit 1 or 2 xMOOSE / ZEBRA ACSR

Terminal connector to suit single 'Zebra' ACSR on SF6 Air Bushing (HA/VA)	Nos	6	2709	1359	8154	New Item; Unit Rate considered as per 220kV Terminal connector on Wave Trap to suit 1 or 2 x MOOSE / ZEBRA ACSR
Tee connector to suit single 'Zebra' ACSR to single 'Zebra' ACSR	Nos	12	3413	1846	22152	New Item; Unit Rate considered as per 220kV Tee connectors to suit 1 or 2 x MOOSE / ZEBRA ACSR on both ways
P.G. Clamp to suit single 'Zebra' ACSR to single 'Zebra' ACSR	Nos	4	2709	1359	5436	New Item; Unit Rate considered as per 220kV Terminal connector on Wave Trap to suit 1 or 2 x MOOSE / ZEBRA ACSR
Rigid type Terminal connector to suit 3"IPS Al. tube on SF6 Air Bushing (HA)	Nos	4	2709	1359	5436	New Item; Unit Rate considered as per 220kV Terminal connector on Wave Trap to suit 1 or 2 x MOOSE / ZEBRA ACSR
Sub Total					62582	
Clamps & Connectors-33kV Connectors					0	
Terminal connector to suit Twin 'Panther' ACSR on Isolator (HA)	Nos	12	2818	1079	12948	New Item; Unit Rate considered as per 33kV Terminal connector on 30kV Lightning Arrestor, to suit 1 or 2 X MOOSE / WOLF ACSR Conductor
Terminal connector to suit single 'Wolf' ACSR on Isolator (HA)	Nos	24	2818	1079	25896	New Item; Unit Rate considered as per 33kV Terminal connector on 30kV Lightning Arrestor, to suit 1 or 2 X MOOSE / WOLF ACSR Conductor
Tee connector to suit Twin 'Panther' ACSR to Twin 'Panther' ACSR	Nos	6	1552	905	5430	New Item; Unit Rate considered as per 33kV Terminal connector on Cable Sealing End to suit 2 X MOOSE ACSR Conductor
Tee connector to suit Twin 'Panther' ACSR to single 'Panther' ACSR	Nos	6	1552	905	5430	New Item; Unit Rate considered as per 33kV Terminal connector on Cable Sealing End to suit 2 X MOOSE ACSR Conductor

Tee connector to suit 'Wolf' ACSR to 'Wolf' ACSR	Nos	24	1552	905	21720	New Item; Unit Rate considered as per 33kV Terminal connector on Cable Sealing End to suit 2 X MOOSE ACSR Conductor
Terminal connector to suit single 'Panther' ACSR on Cable Termination Kit	Nos	12	1552	905	10860	New Item; Unit Rate considered as per 33kV Terminal connector on Cable Sealing End to suit 2 X MOOSE ACSR Conductor
Terminal connector to suit single 'Wolf' ACSR on Cable Termination Kit	Nos	12	2962	1536	18432	Item Available; BOQ S. No. 5. 33kV Terminal Connectors to suit 1C X 630sq.mm XLPE Cable sealing ends
					100716	
Aluminium Tube						
6500mm 3" IPS Aluminium Tub	Nos	1	12815	2750	2750	Rate has been taken as per Proposed Rate of 5500mm 4" IPS Aluminium Tube in Neutral Formation
5500mm 3" IPS Aluminium Tub	Nos	1	10578	2750	2750	
5000mm 3" IPS Aluminium Tub	Nos	1	9630	2750	2750	
3000mm 3" IPS Aluminium Tub	Nos	1	5990	2000	2000	Rate has been taken as per Proposed Rate of 2000mm 4" IPS Aluminium Tube in Neutral Formation
Sub Total					10250	
Sub Total for Clamps & connectors					173548	
5 Neutral Formation						
Power Clamps & Connectors						
220 kV Inter Connector to suit 4" IPS AL Tube on Main way, 2xMoose ACSR on Branch Way	Nos.	2		825	1650	Erection Unit Sales has been proposed lesser than Rate available in Erection BOQ(tem No.-5) Under Clamps & Connectors
Terminal Connector on 33kV Neutral Bushing of Transformer to suit 4" IPS AL Tube (Rigid type)	Nos.	3		825	2475	
Terminal Connector on 33kV BPL to Suit 4" IPS AL. Tube(Rigid/Slide Type)	Nos.	5		825	4125	

Terminal Connector on 4" IPS AL Tube to Suit 2 No. 33kV Cable Terminations	Nos.	4		825	3300	Erection Unit Sales has been proposed less than Rate available in Erection BOQ for New Items (Item No.- F.iii) Under 33 kV XLPE Cable
Terminal Connector on 4" IPS AL Tube to Suit 1 No. 33kV Cable Termination	Nos.	2		825	1650	
Terminal Connector on 33kV Horizontal Mounted BPI to suit 75x12mm GS Flat.	Nos.	4		825	3300	
Pad Type Compression Clamp to suit 2xMoose ACSR & 75x12mm GS Flat	Nos.	2		825	1650	
Pad Type Compression Clamp to suit 2xMoose ACSR & 4" IPS AL Tube	Nos.	2		825	1650	
Corona bell to Suit 4" IPS AL Tube	Nos.	7		500	3500	
Rigid Spacer to Suit 2xMoose ACSR Conductor with 250mm sub conductor spacing	Nos.	5		600	3000	
Tee Connector To Suit 2 x Moose ACSR Conductor in all ways	Nos.	2		825	1650	
Termination Kit						
33kV Outdoor Cable Termination Kit to suit 1Cx1000sqmm Cu XLPE Cable	Nos	10		5500	55000	
33kV Indoor Cable Termination Kit to suit 1Cx1000sqmm Cu XLPE Cable	Nos	6		5000	30000	Erection Unit Sales has been proposed less than Rate available in Erection BOQ for New Items (Item No.- F.ii) Under 33 kV XLPE Cable
Cable(Spare cable of 25meter is to be considered)						

33kV, 1cx1000 Sq.mm XLPE cu	Mtr	185		125	23125	Erection Unit Sales has been proposed lesser than Rate available in Erection BOQ for New Items (Item No.- F.i) Under 33 kV XLPE Cable
Hardware Fittings						
33kV Single Tension hardware for Twin Moose ACSR	Nos	2		3500	7000	Erection Unit Sales has been proposed lesser than Rate available in Erection BOQ(Item No.- S) Under Clamps & Connectors-220kV (220kV Suspension Hardware Assembly along with Insulators (220/33 kV side))
Conductor:						
ACSR Moose Conductor	Mtr	40		50	2000	Erection Unit Sales has been proposed lesser than Rate available in Erection BOQ(Item No.- S) Under Bus Bar Materials-Moose/Zebra/Wolf ACSR Conductor
IPS Aluminium Tube:						
5500mm Long 4" IPS Tube	Nos	3		2750	8250	
2000mm Long 4" IPS Tube	Nos	2		2750	5500	
Pole Structure						
150NB Pole structure(as per dr	Nos	5		15792	78960	Civil Activities for Neutral Foundation Work is attached and Per structure erection rate has been considered as Rs 1000
Insulator						
33 kV BPI	Nos	9		500	4500	
					242285	
Total Claim of Erection					6968088.68	



H.P. POWER TRANSMISSION CORPORATION LIMITED
(A State Government Undertaking)
BAROWALIAS HOUSE, KHALINI, SHIMLA-2
Ph:-0177-2626784, FAX:-2620227

Minutes of Meeting held with M/S L&T on 06th August 2014, in the chamber of Managing Director, HPPTCL, Barowalias House, Khalini, Shimla.

Title: - Discussion on pending issues at 400/220/66kV GIS Substation at Wangtoo & 220/33kV GIS Substation at Phoja.

The said meeting was attended by the following:-

HPPTCL	L&T
1. Er. S L Sharma, MD	1. Mr. D Chatterjee, COH - Operations
2. Er. S K Sharda, Director (P&C)	2. Mr. Vishal Jindal - Project Coordinator
3. Er. K S Attri, Director (Projects)	
4. Er. S S Dehal, GM (Project)	
5. Er. Vijai Dogra, GM (C&D)	
6. Er. Harish Kapoor, DGM (Contracts)	
7. Er. Kaushalesh Kapoor DGM (Projects)	

Following points were discussed and agreed upon:-

400/220/66kV GIS Substation at Wangtoo

- 1. Handing Over of Land:** - L&T raised the issue that the site for construction of Sub-Station has not been handed over to L&T till date. HPPTCL told that they have got Stage-II approval for forest clearance for the project and the Land will be handed over to L&T within another 15 days.
- 2. Issuance of PAC/EDEC Certificates:** - L&T told that PAC & EDEC Certificates are required for the procurement/manufacturing activities as per the request submitted to HPPTCL on 19.12.13. HPPTCL agreed to issue the Certificates at the earliest. As requested L&T will submit the revised application (soft / Hard Copy) with latest vendor approvals by 12.08.14.
- 3. Revision in PV Formula for Transformers:** - L&T told that the PV formula as mentioned in the contract is of the year 2001 but latest formula is as per circular of year 2009. L&T requested for issuance of Contract Amendment for the same. HPPTCL requested to submit the revised application with reasoning and they will confirm the same on merit basis.
- 4. Transportation of Transformers:** - L&T told that the minimum carriage able weight of transformer with multi axle trailer & traction unit is 170 MT and this may not be able to transport via Sholtung - Steel Arch bridge before Wangtoo with payload capacity of 70 MT & Bailey Bridge after Wangtoo - near Surgeshaft site - with payload capacity of 35 MT and requested for solution. HPPTCL suggested L&T to submit the proposal for 4 number of single phase 66.67 MVA (appx) Transformer in place of 2 number of 100 MVA (220/66/33kV) three Phase transformer. However L&T shall check the feasibility of accommodating these 4 nos. transformers in space of 2 nos. of 100 MVA 3ph transformer & financial implication and shall revert back with the outcome.
- 5. Addition of PV Clause for supply Items:** - L&T requested to amend the order with PV for supply of all items as the project has already been delayed by the reasons attributed to Client. HPPTCL requested us to present the case and will decide through their internal meeting on merit basis.
- 6. Contract amendment for change in terms & conditions for Advance from "Interest Bearing" to "Interest Free":** - L&T requested to amend the order for change in terms for advance as the project has already been delayed by the reasons beyond the control of L&T. HPPTCL expressed their inability in accepting the same.

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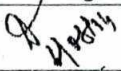
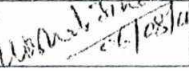
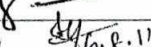
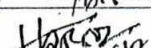
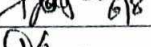
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220/33kV GIS Substation at Phojal.

7. **Time Extension:** - L&T told that they have submitted the request for Time extensions without levy of LD vide their letter LTCD/DLRO/HPPTCL/PHOJAL/110 dated 18.07.2014 (copy handed over to HPPTCL). HPPTCL told that the same shall be considered after completion of Project and the entire recovered amount will be released based on its merit.
8. **Contract amendment for Variation in Quantity & Extra Items, Civil & Structural design change as per seismic Zone-V & Rate approval for Bore Hole Earthing (19 nos.) :** - L&T requested for issuance of contract amendment for the same. HPPTCL requested L&T to submit with backup and come for joint discussion for finalisation with prior intimation from the Director (P) and Director (P&C).

Meeting ended with vote of thanks to the chair.

HPPTCL	Sign	L&T	Sign
Er. S L Sharma, MD		Mr. D Chatterjee, COH - Operations	
Er. S K Sharda, Director (P&C)		Mr. Vishal Jindal - Project Coordinator	
Er. K S Attri, Director (Projects)			
Er. S S Dehal, GM (Project)			
Er. Vijai Dogra, GM (C&D)			
Er. Harish Kapoor, DGM (Contracts)			
Er. Kaushalesh Kapoor DGM (Projects)			

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HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LIMITED

No. HPPTCL/DGM & HEAD/Phosal/L & T/2013- 358-6
To

Dated: 27/05/13

Dy. General Manager (Projects),
HPPTCL, Barowalias House,
Khalini, Shimla-171002(HP).

Sub: Minutes of meeting held between Himachal Pradesh Power Transmission Corporation Ltd. and M/s L&T regarding 220/33KV GIS Substation at Phojal Distt. Kullu (Earlier Palchan).

Sir,

Enclosed find herewith a copy of Minutes of meeting held in the office of undersigned at Hamirpur w.e.f. 27.05.2013 to 30.05.2013, between representatives of Himachal Pradesh Power Transmission Corporation Ltd. and M/s L&T regarding 220/33KV GIS Substation at Phojal Distt. Kullu (Earlier Palchan) for your information and further necessary action at your end please.

Encl: As above.

Yours faithfully,

[Signature]
DGM & Head Trans. Designs,
HPPTCL, Anli, Hamirpur (HP).

Copy of above is forwarded to the following for information, please:-

1. The General Manager (Contracts & Designs), HPPTCL, Barowalias House, Khalini, Shimla-171002.
2. M/S L & T Construction Power Transmission & Distribution, Mount Poonamallee Road, Monapakkam, P. B. No. 979, Chennai-600089, INDIA.

Encl: As above.

[Signature]
DGM & Head Trans. Designs,
HPPTCL, Anli, Hamirpur (HP).

Minutes of meeting held between Himachal Pradesh Power Transmission Corporation Ltd. and M/s L&T regarding 220/33KV GIS Substation at Phojal distt. Kullu (Ea.) in the office of DGM HPPTCL Hamirpur from 27.05.2013 to 30.05.2013

PARTICIPANTS:

- 1) A. C. Sandal (DGM & Head Trans. Designs), HPPTCL 1) Ramnik Arora (Engineering Manager), L&T
2) V. K Sharma (Sr. Manager), HPPTCL

Following points were discussed and are listed below:

1) Control Room Building Equipment layout: Drg. No. 010222-E-IS-CB-EL-0101

The Drawing has been discussed and approved by HPPTCL.

L & T explained that as per Contract there is no requirement of future expansion specified for the design of Control room building. However as per the present requirement of HPPTCL provision for the future expansion has been made in the approved drawing for which the increase of quantity shall be charged on actual quantity measured at site based on unit rate from HPPTCL.

2) 220/33KV GIS Substation Overall layout – plan and Section Drg. No. 010222-E-IS-SY-EL-0101

- a. HPPTCL explained that 26.66/33.33 MVA, 33/220kV Single Phase Power Transformer is having oil to air bushing as per transformer manufacturer design. Now in order to integrate with GIS bus duct and transformer bushing, SF6 to Air Bushings are required. HPPTCL asked L&T to provide additional cost for 4 No's of 220KV bushing from SF6 to air along with supporting structure which is presently not in the scope of L&T.

L&T would submit the commercial proposal for the same by 10/06/2013 and would take up procurement action on HPPTCL's confirmation.

- b. In order to expedite the site work, Location and size of Control room building are approved by HPPTCL and site work can be taken up by L&T.
- c. Transformer area along with 220KV GIS bus duct was put on hold by HPPTCL until the issue of SF6 to Air Bushing is resolved.
- d. Structure provided for 33K isolators to be avoided and isolators to be shifted /put on gantry of outgoing 33KV feeder.

L&T explained that it will have impact on structural weight of the towers and girders and foundation quantities of 33kv towers and it will have price implication. HPPTCL explained that as per Contract price schedule Annexure- ECW1-10 Steel structures for towers, beam, equipment shall be paid in kg.. Further, the increase of quantity in kg shall be paid by HPPTCL on actual quantity measured at site based on unit rate mentioned in Sr. no.Q-Supply portion and proportionate erection charges shall be paid in line contract price schedule.

- e. HPPTCL informed that all connecting Roads within the yard shall be 3.5 Mtrs wide except rail cum road.

L&T explained that as per Contract price schedule Annexure- ECW2 in civil works portion, 81RMtrs of 3.5 Mtrs wide road is considered and now as per revised layout the quantity of 92RMtrs of 3.5mtrs wide road is arrived. The increase of quantity shall be paid by HPPTCL on

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actual quantity measured at site based on unit rate mentioned in Sr. no. 7(b) in Annexure - ECW2 in Supply portion.

- f. HPPTCL informed that 5m wide Concrete Road cum rail track shall be extended up to proposed road shown on river side.

L&T explained that as per Contract price schedule Annexure- ECW2 in civil works portion, quantity of 41RMT of 5 Mtrs wide road is considered and now as per revised layout the quantity of RMT 88 of 5 mtrs wide road is arrived. The increase of quantity shall be paid by HPPTCL on actual quantity measured at site based on unit rate mentioned in Sr. no. 7(a) in Annexure -in EW2 Supply portion.

- g. 2 mtrs road is provided for the access of Control room building but as per contract 3.5 m wide road is mentioned. At present 3.5m wide road is not possible due to retailing wall proposed in that area.

L&T explained that as per Contract price schedule Annexure- ECW2 in civil works portion, there is no item for 2m wide road in the price schedule. It shall be claimed as an extra item in RMtr basis.

3) 220/33KV GIS Substation Lightning protection calculations and layout plan & Section Drq. No. 010222-E-IS-SY-LP-0101

The Drawing/ documents has been discussed and approved by HPPTCL.

L&T explained that as per Contract price schedule Annexure- SE in Supply portion. The BOQ is not matching with the Qty required as per layout. The increase of quantity shall be paid by HPPTCL on actual quantity mentioned in layout based on unit rate mentioned in Sr. no. P (a) Lightning protection and proportionate erection charges shall have to be paid in line with contract price schedule.

4. FOTE Equipment:

As per present scope, there are two 220KV outgoing transmission lines are involved, but as per revised amendment LOA one set of FOTE equipment is mentioned.

HPPTCL explained that this is LILLO line and one set of FOTE equipment is sufficient.

5. L&T requested HPPTCL to provide the approved drawings of 26.66/33.33 MVA, 33/220KV Single Phase Power Transformer and confirm the dimensions/ input required as mentioned in L&T's letter Ref:L&T/EDRC-EI&C/O10222/Ltr/004 Dated 16th May, 2013 & Ref:L&T/EDRC-EI&C/O10222/Ltr/006 Dated 21th May, 2013.

HPPTCL will provide the detail within one week time as Transformer drawings were put on hold due to interface issue between bus duct and transformer bushing.


A. C. Sandal
(OGM & Head Trans. Designs)
HPPTCL, Anu, Hamirpur


V. K. Sharma
(Sr. Manager)
HPPTCL, Anu, Hamirpur


RAMINIK ARORA
(Engg. Manager)
L&T, Delhi

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