



Web: - www.hpptcl.com

HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD.

(A State Govt. Undertaking)

Regd. Office: Himfed Bhawan, New ISBT Road, Panjari, Shimla-171005

Ph.: 0177-2831283, 2831284 FAX:-0177-2831284

(CIN): U40101HP2008SGC030950

(GSTIN): 02AACCH1548M1ZP

HPPTCL /F&A/REC/Karian & Phoal/ 2019-20-

Dated: 19/06/2019.

To

The Chief Project Manager,
M/S Rural Electrification Corporation Ltd.
Pt. Padam Dev Complex, Ph-2, the Ridge,
Shimla-1(H.P.)

Subject: CONSTRUCTION OF 220/33 kV GIS SUBSTATION AT KARIAN AND PHOJAL ALONG WITH ASSOCIATED LINES.

Ref: 1. Scheme Code REC/PO/HP-TD-TRM-295-210-3781.
2. No. REC/PO/HP-TD-TRM-295-210-3781/2013-14/1385-91 Dated: 11.03.2014.

Dear Sir,

Refer to above, the revised scheme for the construction of 220 KV D/C Transmission Line from Phoal to Patlikul along with 220/33 kV 80/100 MVA GIS Sub-station Phoal, Distt. Kullu and construction of 220kV D/C Transmission Line from Karian-Rajera and 220/33 kV GIS Substation at Karian against the original scheme code: 3781 is enclosed herewith for seeking the additional loan of Rs 40 Cr. from M/S REC Ltd.

This is for kind information and necessary action in the matter, please.

Yours faithfully

Dy. General Manager (Finance)
HPPTCL, Shimla-05

CC:

1. P.S. to the Managing Director, HPPTCL, Himfed Bhawan Shimla-05.
2. P.S to the Director (Projects), HPPTCL, Himfed Bhawan Shimla-05.
3. General Manager (Projects), HPPTCL, Himfed Bhawan Shimla-05.
4. Dy. General Manger (Projects), HPPTCL, Kullu & Chamba Zone.

Dy. General Manager (Finance)
HPPTCL, Shimla-05



H.P Power Transmission Corporation Limited

(A State Govt. Undertaking)

Regd. Office: Himfed Bhawan, New ISBT Road, Panjari, Shimla-171005
Phone-0177-2831283, 2831284 FAX:-0177-2831284 Web:-www.hpptcl.com
(CIN): U40101HP2008SGC030950
(GSTIN):02AACCH1548M1ZP

NO:-HPPTCL/Revised Scheme/Phozal/F-44/2018-5346-50 Dated:- 27-07-18

15-01-19

To

✓ The Rural Electrification Corporation Ltd.
Pt. Padam Dev Complex, Ph-2, The Ridge,
Shimla-1(H.P.)

Subject:- Revised Scheme for the C/O 220 KV D/C Transmission Line from Phozal to Patlikul amounting to Rs.16.81 Crore and C/o 33/220 kV 80/100 MVA GIS Sub-station Phozal, Distt. Kullu amounting to Rs. 76.82 Crore: Scheme Code REC/PO/HP-TD-TRM-295-210-3781.

Reff: No. REC/PO/HP-TD-TRM-295-210-3781/2013-14/1385-91 Dated: 11.03.2014.

Sir,

Revised scheme for the construction of 220 KV D/C Transmission Line from Phozal to Patlikul along with C/o 33/220 kV 80/100 MVA GIS Sub-station Phozal, Distt. Kullu against the original scheme code : 3781 is enclosed for obtaining the revised sanction of the competent authority please.

D.A. - Two No. Schemes.

Yours faithfully,

G.M. (Projects),
HPPTCL, Himfed Bhawan,
Panjari, Below old MLA Quarters,
Shimla-05, (H.P.)

Copy forwarded to the following for information:-

1. The P.S. to Managing Director HPPTCL, Himfed Bhawan, Shimla -05 for kind information of worthy Managing Director please.
2. The PS to Director (Projects), HPPTCL, Himfed Bhawan, Shimla-05 for kind information of worthy Director (Projects) Please.
3. The AGM, HPPTCL Transmission Line Design Office, Anu, Distt. Hamirpur, H.P.
4. The DGM HPPTCL, Chamba & Kullu for information.

G.M. (Projects),
HPPTCL, Himfed Bhawan,
Panjari, Below old MLA Quarters,
Shimla-05, (H.P.)

Deviation of Scheme CODE No. 3761

S.No.	Particulars	Unit	As per Original Sanction			Proposed deviation approved			Final Amount For Approval		Deviation
			Qty	Rate (in Rs. Lakhs)	Amt (in Rs. Lakhs)	Qty	Rate as Per award (in Rs. Lakhs)	Amt (in Rs. Lakhs)	Amt (in Rs. Lakhs)	Amt (in Rs. Lakhs)	
1	Construction of 220/33 kV GIS Pooling Substation Palchan	No.	1	5535.19	5535.19	-	-	-	-	-	
1(a)	Construction of 220/33 kV GIS Pooling Substation Fozal	No.	0	-	-	1	4189.73	4189.73	7681.88	3492.15	
2	Construction of 220/33 kV GIS Pooling Substation Karian	No.	1	4797.17	4797.17	1	2829.48	2829.48	3656.36	826.88	
3	Construction of 220 kV S/C Line on D/C towers from Palchan to Allian Dhungan (Prini, AD Hydro Switchyard)	Km	10.384	203.043	2108.40	-	-	-	-	-	
3(a)	Construction of 220 kV S/C Line on D/C towers from Fozal to Allian Dhungan (Prini, AD Hydro Switchyard)	Km	-	-	-	6.0	115.248	691.488	1681.49	990.002	
4	Construction of 220 kV D/C Line from Karian to Rajera (FGCIL Switchyard)	Km	3.5	111.98	391.93	3.5	158.59	555.07	876.5	321.435	
5	Extra Civil Works in 220/33 kV GIS Karian and 220 kV S/C transmission line from Karian-Rajera.	Jobs	-	-	-	-	-	-	703.83	703.83	
	G.Total			5112.193	7297.498512		7293.048	8265.763	14600.06	6334.297	



H.P. Power Transmission Corporation Ltd.

(A State Govt. Undertaking)

HPPTCL Zone Sarabai, (Bhunter), Distt. Kullu. (H.P). 175125.

Telefax: 01902- 265157, Email: dgmkullu.hpptcl@gmail.com.

Head Office: Himfed Building Panjari (New ISBT Road) Shimla-171005

www.hpptcl.com, Telefax: 0177-2831227 & 2853271.

No. HPPTCL/DGMS/DB-1/2017-498-99

Dated. 3-11-2017

To

✓ The General Manager (Project)
HPPTCL, Himfed Building, Panjari,
Shimla-5.

Subject: Revised schemes.

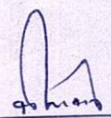
Sir,

Jai Hind.

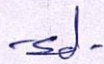
Following two number revised schemes are sent herewith for further necessary action at your end please.

- a) C/O 220 kV D/C Transmission line from Phozal to Patlikul amounting to Rs. 16.81 crore.
- b) C/O 33/220 kV 80/100 MVA GIS sub-station Phozal Distt Kullu amounting to Rs. 76.82 Crore.

Encls. As Stated in Duplicate.


(Er. K. K. Kapil)
AGM (P)

CC: The Sr. Manager PIU Sarabai Bhunter Distt. Kullu w. r. t. the details as received from his office please.


(Er. K. K. Kapil)
AGM (P)

M.D.	
Dir. (Plg & C)	✓
Dir. (Proj)	✓
GM (C&D)	✓
GM (Proj)	✓
A.G.O. (Plg)	
Sr. Manager (PIU)	



DGM (P)
15/11/17
Sr. Manager

HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LIMITED

Name of Scheme: Revised Scheme for the Construction of 220/ 33kV, 80/100 MVA GIS Substation Phojal.

Report

History: - A&A and ES of the Scheme for the Construction of 33/220 kV Substation at Phojal, under HPPTCL Division Sarabai, was accorded vide A&A ES No- HPPTCL/ PRJ/ Estimate/ 2010-229-31, dated 10-04-2012 to the tune of Rs. 62.25 Crore.

Date of Energisation of the different Components of the Substation are as under:

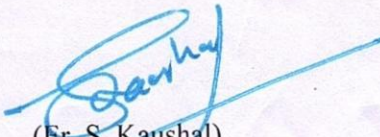
S.No	Name of the Component	Date of Energisation	Remarks
1	33kV GIS (Bay No-302,303,304,305,306,307,308,309 and 33 kV Double Bus Bar), 33kV Line bay Terminal equipment and 250 kVA, 33/.433 kV Station Transformer	06-10-2015	
2	33 kV GIS (Bay No-301), 33/220 kV Single Phase Power Transformer Bank and 220 kV GIS (Bay No-202, 203 and 220 kV DoubleBus bar)	21-10-2015	Power Transformers were Energised from LV Side.
3	220 kV GIS (bay No. 201 and bay No-205) and 220 kV Line bay Terminal equipments	23-10-2015	
4	33/220 kV , 26.66/33.33MVA Single Phase Power Transformer ad 220 kV GIS bay No-204	24-10-2015.	
5	220 kV D/C LILO Transmission Line and 220 kV GIS Substation Phojal	05-06-2016	Power Transformers were Energised from HV Side.

This Revised scheme has been made as per the actual expenditure and also covers Cost of Residential Complex Proposed at Phojal, 3% office contingency charges and 11% of Departmental Charges, Service tax on the Departmental Charges.

Method: -Departmentally/ through Contractors.

Rates: - As per Award

Cost: Rs. 76.82 Crore (Seventy-Six Crore and Eighty-two lakh only)


(Er. S. Kaushal)
Sr. Manager (Projects)

HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LIMITED

Name of Scheme: Revised Scheme for the Construction of 220 kV D/C Transmission Line from Phojal to Patalikulh.

REPORT

History: - A&A and ES of Construction of 220 kV D/C Transmission Line from Phojal to Patalikulh (LILO of AD hydro Transmission Line at Patalikulh) was accorded vide A&A ES No- HPPTCL/ PRJ/ Estimate/ 20107298-7302, dated 2-2-12 to the tune of Rs. 8.15 Crore.

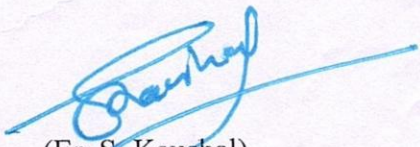
Date of Energisation of this transmission line is 05-06-2017

This Revised Scheme, to the Tune of Rs. 16.81 Crore (Rupees Sixteen Crore and eighty-one lakh only), has been prepared as per the actual expenditure incurred during the construction of this transmission line and it also covers 3% Contingency Charges and 11 % Departmental Charges.

Method: -Departmentally/ through contractors.

Rates: - As per Actual

Cost: Rs. 16.81 Crore (Rupees Sixteen Lakh and eighty-one Crore only)


(Er. S. Kaushal)
Sr. Manager (Projects)
HPPTCL, Sarabai



HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD.

Name of Scheme

Revised Scheme for the Construction of 220 kV, D/C Transmission Line from Phojal to Patlikal (LILO of AD Hydro Transmission Line at Patlikul)

MAIN ABSTRACT OF COST

S. No	Description	Sactioned Scheme			Revised Scheme		
		Unit	Qty	Rate (lakh)	Amount (Lakh)	Actual Qty	Rate (lakh) Amount (Lakh)
1	Cost of Preliminary/ Detailed Survey of Transmission line as per Annexure-A	Km	6	₹ 1.11	₹ 6.68	6.82	₹ 1.01 ₹ 6.87
2	Compensation for the Pvt. Land , Trees , crop and cost of forest land diversion as per Annexure-B	Ls	6	₹ 22.65	₹ 135.90	6.82	₹ 60.95 ₹ 415.57
3.a	Cost of supply as per Annexure-C	Km	6	₹ 59.09	₹ 354.55	6.82	₹ 69.37 ₹ 472.95
3.b	Entry tax paid on the Supply						
4.a	Cost of erection as per Annexure-D	Km	6	₹ 34.69	₹ 208.14	6.82	₹ 66.15 ₹ 451.04
4.b	Price variation paid on Erection Annexure-E						₹ 103.31
5	Total				₹ 705.27		₹ 1,455.88
6	Add 3 % contingency charges				₹ 21.16		₹ 43.68
7	Total				₹ 726.43		₹ 1,499.55
8	Add 11 % Departmental charges				₹ 79.91		164.95
9	Add 10.30 % service charges T				₹ 8.23		16.99
10	Total				₹ 814.57		₹ 1,681.49
		Say ₹ 8.15 Crore		say ₹ 16.81 Crore			

Er. Sanjay Kumar, J.E. (E)
H.P.T : Sarabai,
Bhuntar Kullu -H.P

Dy. Manager (Projects)
HPPTCL Division Sarabai
Bhuntar Distt. Kullu (H.P.)-175125

Er. Sanjay Kaushal
Sr. Manager (Project)
HPPTCL Division Sarabai
Bhuntar Distt. Kullu (H.P.)-175125

Er. K. K. Pillai
AGM (Projects)
HPPTCL Sarabai Zone
Distt. Kullu (175125)



HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD.

Name of
Scheme

Construction of 220 kV, D/C Transmission Line from Phojar to Patlikal (LILO of AD Hydro Transmission Line at Patlikul)

Cost of Preliminary/ Detailed Survey of 1 Km of 220kV Transmission line

S.NO	Description	Qty	Unit	As per sactioned Scheme		Revised Scheme (Annexure-F)
				Rate	Amount	
1	Carring Out Priliminary and detailed survey of 220kV D/C transmission line from Patlikul to Phojar, three alternate routes shall be surveyed and marked on SOI topo Sheet	1	Km	₹60,085.00	₹60,085.00	₹58,463.19
2	Submission of the profile sheets of the line routes for approval and carring out detailed survey therof	1	Km	₹13,437.00	₹13,437.00	₹10,817.54
3	Providing Stone marking pillers (Burjies) on the Tower Locations	1	Km	₹3,000.00	₹3,000.00	₹2,618.07
4	Preparation of the cases there of for abtaining forest clearance	1	Km	₹8,873.00	₹8,873.00	₹12,573.34
5	Preparation of the cases thereof for abtaining PTCC clearance	1	Km	₹7,605.00	₹7,605.00	₹0.00
6	Contouring of 20 Nos Tower Point	0.133	Hec	₹40,000.00	₹5,333.33	₹6,966.85
7	sub total(1 to 6)				₹98,333.33	₹91,438.99
8	Escalation @ 10% during 2010-11				₹9,833.33	
9	Sub- Total (7+8)				₹1,08,166.67	₹91,438.99
10	Add 3% Misc charges				₹3,245.00	₹9,362.57
11	sub total(9 +10)				₹1,11,411.67	₹1,00,801.55

Er. Sanjay Kumar, J.E. (E)
H.P.P.T.C. Ltd. Sarabai,
Bhuntar, Kullu -H.P

Dy. Manager (Projects)
HPPTCL Division Sarabai
Bhuntar Distt. Kullu (H.P.)-175125

Er. Sanjay Kaushal
Sr. Manager (Project)
HPPTCL Division Sarabai
Bhuntar Distt. Kullu (H.P.)-175125



HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD.

Cost of Compensation for the Land , Trees , crops etc and cost of forest land diversion, for one Km of 220kV D/C transmission Line

S.No	Description	As per sanctioned Scheme	Revised Scheme (Annexure-F)	
		Amount for 1 Km	Amount for 6.818 Km	Amount for One Km
1	Compensation for tree cutting and afforestation	₹ 36,200.00		
4	NPV of Forest land required for ROW @ 10,00,000 per Hect and it assumed that 60% of the line will pass through the govt land.	₹ 21,00,000.00	4,02,41,029	59,02,175
2	Compensation for the Damage to crop under the line	₹ 86,600.00	13,16,151	1,93,041
3	Reallignment of the HT/LT Lines	₹ 42,200.00	0	-
5	Cost of Pvt Land Acquired for the transmission line	₹ 22,65,000.00	₹ 4,15,57,180.00	₹ 60,95,215.61
			10394061	15,24,502.93

Jay
Er. Sanjay Kumar, J.E. (E)
 H.P.P.T.C. Ltd. Sarabai,
 Bhuntar, Kullu - H.P.

Sar
Dy. Manager (Projects)
 HPPTCL Division Sarabai
 Bhuntar Distt. Kullu (H.P.)-175125

Sanjay
Er. Sanjay Kaushal
Sr. Manager (Project)
 HPPTCL Division Sarabai
 Bhuntar Distt. Kullu (H.P.)-175125



HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD.

Detail of the Annexure-A & B

S.NO	Description	As per Actual for 6.818Km of T/line.	As per Revised Scheme for 1 Km of Transmission Line.
A	Preliminary & detailed survey		
1	Carring Out Priliminary and detailed survey of 220kV D/C transmission line from Patlikul to Phojal, three alternate routes shall be surveyed and marked on SOI topo Sheet	398602	58463.18568
2	Submission of the profile sheets of the line routes for approval and carring out detailed survey therof	73754	10817.5418
3	Providing Stone marking pillars (Burjies) on the Tower Locations	17850	2618.069815
4	Prepration of the cases there of for abtaining forest clearance	85725	12573.33529
5	Prepration of the cases thereof for abtaining PTCC clearance	0	0
6	Contouring of 20 Nos Tower Point	47500	6966.852449
12	Misc charges	63834	9362.569669
B.	Compensation for the Pvt. Land , Trees , crop and cost of forest land diversion.		
1	Compensation for tree cutting and afforestation	40241029	5902174.978
2	NPV of Forest land required for ROW @ 10,00,000 per Hect and it asumed that 60% of the line will pass through the govt land.	0	0
3	Compensation for the Damage to crop under the line	1316151	193040.6278
4	Reallignment of the HT/LT Lines	0	0
5	Check survey:	42520	
Total		4,22,86,965	

Sanjay
Er. Sanjay Kumar, J.E. (E)
 H.P.P.T.C. Ltd. Sarabai,
 Bhuntar, Kullu -H.P

Sanjay
Dy. Manager (Projects)
 HPPTCL Division Sarabai
 Bhunter Distt. Kullu (H.P.)-175125

Sanjay
Er. Sanjay Kaushal
Sr. Manager (Project)
 HPPTCL Division Sarabai
 Bhuntar Distt. Kullu (H.P.)-175125



Name of
Scheme

HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD.

Construction of 220 kV, D/C Transmission Line from Phojal to Patlikal (LILO of AD Hydro Transmission Line at Patlikul)

Cost of Supply for one Km of 220kV Double Circuit Transmission Line with Zebra Conductor and OPGW

S.No	Description	Amount As per sanctioned Scheme for 12 Km Line		Amount as per Revised Scheme (As per Draft Engineers Account) for 6.818 Km of line	
		Ex- Works	F&I Charges	Ex- Works	F&I Charges
1	Tower and Tower Accessories	₹4,66,13,854.00	₹33,55,482.00	₹2,52,98,249.07	₹17,86,182.00
2	Conductor and OPGW	₹1,09,46,337.00	₹1,82,695.00	₹1,10,56,234.56	₹1,90,836.00
3	Disc Insulators 160/90kN	₹49,08,532.00	₹3,33,203.00	₹53,81,341.62	₹4,02,818.00
4	Hardware Fitting and Accessories	₹24,45,678.00	₹59,463.00	₹30,64,262.22	₹1,14,914.00
		₹6,49,14,401.00	₹39,30,843.00	₹4,48,00,088.00	₹24,94,750.00

Cost of total supply for 12 km of line (Ex works+F&I)

₹6,88,45,244.00

Cost of total supply for 6.818 km of line (Ex works+F&I)

₹4,72,94,838

Cost of Supply per Km

₹57,37,103.67

Cost of Supply per Km

₹69,36,761.22

Add 3 % Storage Charges

₹1,72,113.11

Total Cost of Supply Per Km

₹59,09,216.78

Er. Sanjay Kumar, J.E. (E)
H.P.P.T.C. Ltd. Sarabai,
Bhuntar, Kullu -H.P

Dy. Manager (Projects)
HPPTCL Division Sarabai
Bhuntar Distt. Kullu (H.P.)-175125

Er. Sanjay Kaushal
Sr. Manager (Project)
HPPTCL Division Sarabai
Bhuntar Distt. Kullu (H.P.)-175125



HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD.

Erection Charges for one Km of 220kV Double Circuit Transmission Line with Zebra Conductor and OPGW

S.No	Description	Amount As per Sanctioned Scheme for 12 Km of Line	Revised Scheme Amount.(As Per Draft Engineer's Account) for 6.818 Km Line
1	Foundation Work/stub setting	₹1,57,25,249.00	₹3,53,64,546.59
2	Erection of tower including fixing of accessories	₹45,82,764.00	₹30,76,510.63
3	Earting of Towers	₹83,209.00	₹38,380.56
4	Benching and the revetment work	₹1,86,77,070	₹54,32,621.74
5	Painting of Towers	₹54,945.00	₹3,198.38
6	Stringing and sagging of one no. OPGW	₹4,71,077.00	₹2,71,209.26
7	Stringing and sagging of ACSR Zebra Conductor for D/C Lines	₹15,07,446.00	₹8,63,390.79
8	Providing and fixing of the coloured Globules	₹3,36,812.00	₹52,785.00
9	Testing and commissioning Charges	₹1,88,431.00	₹900.00
		₹4,16,27,003.00	₹4,51,03,543.00
		₹4,16,27,003.00	

Cost of erection charges for one Km of trans. Line

₹34,68,916.92

₹66,15,362.72

Er. Sanjay Kumar, J.E. (E)
H.P.P.T.C. Ltd. Sarabai,
Bhuntar, Kullu (H.P.)

Dy. Manager (Projects)
HPPTCL Division Sarabai
Bhuntar Distt. Kullu (H.P.)-175125

Er. Sanjay Kaushal
Sr. Manager (Project)
HPPTCL Division Sarabai
Bhuntar Distt. Kullu (H.P.)-175125



HIMACHAL PRADESH POWER TRANSMISSION CORPORATION LTD.

Detail of the Price variation Paid

CIVIL ERECTION PV BILL DETAIL			
Sl. No.	PV Invoice no.	Verified Amount	Remark
1	PV RA-1	8341	
2	PV RA-2	159264	
3	PV RA-3	384159	
4	PV RA-4	521793	
5	PV RA-5	231709	
6	PV RA-6	582772	
7	PV RA-7	1003530	
8	PV RA-8	937271	
9	PV RA-9	1167225	
10	PV RA-10	853535	
11	PV RA-11	1102240	
12	PV RA-12	843738	
13	PV RA-13	551328	
14	PV RA-14	707104	
15	PV RA-15	237351	

9291360

92.9136

ELECTRICAL ERECTION PV BILL DETAIL			
Sl No.	Invoice No.	INV AMOUNT	Remark
1	PV RA-1	398782	
2	PV RA-2	126181	
3	PV RA-3	191216	
4	PV RA-4	209738	
5	PV RA-5	113370	

1039288

10.3928752

Total Price variation

10330648

Er. Sanjay Kumar, J.E. (E)
H.P.P.T.C. Ltd. Sarabai
Bhuntar, Kullu -H.P

Dy. Manager (Projects)
HPPTCL Division Sarabai
Bhunter Distt. Kullu (H.P.)-175125

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