



उत्तराखण्ड पावर कारपोरेशन लि०

(उत्तराखण्ड सरकार का उपक्रम)

Uttarakhand Power Corporation Ltd.

(A. Govt. of Uttarakhand Undertaking)

CIN : U40109UR2001SGC025867

Email ID: df@upcl.org, Website: www.upcl.org

No. 06.....

/UPCL/RM/B-20

Dated: 02-01-2019

BEFORE THE UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

INDEX

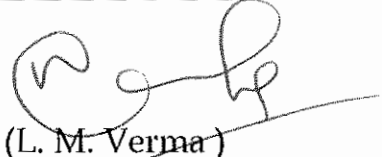
IN THE MATTER OF:

APPLICATION SEEKING APPROVAL OF
BUSINESS PLAN OF THE PETITIONER
COMPANY FOR THE CONTROL PERIOD OF
THREE FINANCIAL YEARS FROM FY 2019-20
TO FY 2021-22.

AND

IN THE MATTER OF: UTTARAKHAND POWER CORPORATION LIMITED.
.....Petitioner

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(L. M. Verma)
Director (Finance)

BEFORE THE UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF : APPLICATION SEEKING APPROVAL OF BUSINESS PLAN OF THE PETITIONER COMPANY FOR THE CONTROL PERIOD OF THREE FINANCIAL YEARS FROM FY 2019-20 TO FY 2021-22.

And

In the matter of : Uttarakhand Power Corporation Limited.

.....Petitioner

This is with reference to Hon'ble Commission's letter no. UERC/6/TF-504/2018-19/2018/1332, dated 21-12-2018 vide which the petitioner has been asked to submit the reply to the deficiencies/ shortcomings observed by the Hon'ble Commission in the Business Plan Petition. The petitioner is directed to submit the reply on the affidavit latest by 02-01-2019. The point wise reply/ information is mentioned herein below and the petitioner most respectfully showeth as follows in the matter:

A. Existing Distribution Infrastructure

The Distribution infrastructure details submitted in Table 2 of the Business Plan Petition is not matching with the details submitted under Table 1 of MYT Petition. The Petitioner should clarify the same.

Reply:

The details of distribution infrastructure submitted under Table 2 of the Business Plan have been submitted as on March, 2018 while those used for the purpose of Table 1 of the MYT Petition provide details of distribution infrastructure as on September, 2018. Hence, the variation observed by the Hon'ble Commission is due to details furnished for different months of the year.

B. Sales Projection

- i) The Petitioner should submit category wise pending applications for new connections as on 30.11.2018.

Reply:

The category wise pending applications for new connections as on 30.11.2018 have been provided in the table below:

 1

Table 1: Details of Pending Applications for New Connections as on 30.11.2018

Category	No. of Registrations	Pending due to non-payment by Consumer	Pending on part of UPCL	
			Before payment by consumer	After payment by consumer
Domestic	13284	3196	7872	2216
Government Irrigation System	67	3	60	4
Industrial Supply	332	65	151	116
Mixed Load	2		2	
Non Domestic	2721	992	812	917
Private Tube Wells/Pumping Sets	1020	144	294	582
Public Lighting	68	6	35	27
Public Water Works	48	18	17	13
Grand Total	17542	4424	9243	3875

The Petitioner has reduced the pendency cases as on 26.12.2018 as shown in the table below:

Table 2: Details of Pending Applications for New Connections as on 26.12.2018

Category	No. of Registrations	Pending due to non-payment by Consumer	Pending on part of UPCL	
			Before payment by consumer	After payment by consumer
Domestic	6558	3196	2760	602
Government Irrigation System	65	3	59	3
Industrial Supply	267	65	128	74
Mixed Load	2		2	
Non Domestic	2039	992	691	356



Category	No. of Registrations	Pending due to non-payment by Consumer	Pending on part of UPCL	
			Before payment by consumer	After payment by consumer
Private Tube Wells/Pumping Sets	892	144	273	475
Public Lighting	68	6	35	27
Public Water Works	43	18	14	11
Grand Total	9934	4424	3962	1548

- ii) The Petitioner should submit the category wise bifurcation of sales booked on metered and assessment basis for FY 2017-18 in the format annexed.

Reply:

The category wise sales booked on metered and assessment basis for FY 2017-18 in the required format is shown in the table below:

Table 3: Category wise sales for FY 2017-18

S. No.	Sub-Category	Based on Actual Meter Reading			Based on Assessment			Unmetered			Total		
		No. of Consumers (No)	Connected Load (KW)	Sales (MU)	No. of Consumers (No)	Connected Load (KW)	Sales (MU)	No. of Consumers (No)	Connected Load (KW)	Sales (MU)	No. of Consumers (No)	Connected Load (KW)	Sales (MU)
(i)	BPL and Kutir Jyoti	358986	360470	222.65	13010	13070	8.32	0	0	0	371996	373540	230.97
(ii)	Other Domestic Consumers	1505133	2378838	2346.14	56201	91390	85.61	0	0	0	1561334	2470228	2431.75
(iii)	UPCL Employees and Pensioners	4868	14990	19.71	1129	3387	4.50	0	0	0	5997	18377	24.21
(iv)	UJVNL Employees and Pensioners	877	1869	6.84	321	835	2.12	0	0	0	1198	2704	8.96
(v)	PTCUL Employees and Pensioners	248	605	1.76	215	624	1.41	0	0	0	463	1228	3.17
(vi)	Single Point Bulk Supply	108	27687	42.48	0	0	0.00	0	0	0	108	27687	42.48
1	Domestic	1870220	2784459	2639.58	70876	109305	101.95	0	0	0	1941096	2893764	2741.53
2	Non-domestic	226321	995367	1185.65	8014	277	46.83	0	0	0	234335	995644	1232.48
3	PTW	31093	166293	260.73	1363	6569	10.64	0	0	0	32456	172862	271.37
4	LT Industry	9984	220885	294.78	245	5664	7.43	0	0	0	10229	226549	302.22
5	Public Lamps	1412	15257	55.06	58	626	2.26	0	0	0	1470	15883	57.31
6	Govt. Irrigation System	1710	62344	159.90	62	2261	5.80	0	0	0	1772	64605	165.70
7	Public Water Works	1553	93105	359.88	52	2880	7.34	0	0	0	1605	95985	367.23
8	HT Industry	2329	1762523	5858.05	0	0	0.00	0	0	0	2329	1762523	5858.05
9	Mixed Load	72	57946	182.43	0	0	0.00	0	0	0	72	57946	182.43
10	Railway Traction	2	15000	27.73	0	0	0.00	0	0	0	2	15000	27.73
11	Other State Supply	5	900	2.77	0	0	0.00	0	0	0	5	900	2.77
Total		2144700	6174079	11026.56	80671	127581	182	0	0	0	2225371	6301661	11208.82

iii) The Petitioner should submit the Final SG-IV statement for FY 2017-18.

Reply:

The Final SG-IV statement forms a part of the Commercial Diary and has been provided in response to the MYT deficiency note dated 21-12-2018.

iv) CS-3 statement of UPCL shows serving employees of UPCL as 3340 as on March, 2018 whereas Form 4.1 (B) shows the number of employees of UPCL as 2923 during FY 2017-18.Reconciliation for the same needs to be done.

Reply:

This reconciliation is time consuming exercise and therefore Hon'ble Commission is requested to kindly exempt the petitioner for the same during this tariff determination proceedings.

v) Whether sales for FY 2017-18 includes open access sales also.

Reply:

The Petitioner submits that the energy sales of FY 2017-18 does not include open access sales.

vi) The Petitioner should submit the % billing on NA/NR/IDF basis in the month of September 2018 to November 2018.

Reply:

For September to November 2018, the following table provides details of % consumers on NA/NR/IDF basis:

Table 4: Status of Not Accessible (NA) Consumer (in %)

S.No.	Zone	Circle	Division	Sep-18	Oct-18	Nov-18
1	Kumaon	Ranikhet	Almora	5.62	5.79	5.75
2			Ranikhet	7.48	7.60	7.41
3			Bageshwar	11.98	11.56	11.16
4			Bhikiyasen	7.48	6.82	6.19
5		Haldwani	Nainital	3.82	3.75	3.96
6			Haldwani Town	5.30	4.49	4.41
7			Haldwani Rural	0.96	1.08	1.22
8			Ramnagar	2.57	3.18	3.00
9		Kashipur	Jaspur	5.74	4.21	2.72
10			Kashipur	4.38	3.56	2.64
11			Bazpur	2.50	2.19	1.46

S.No.	Zone	Circle	Division	Sep-18	Oct-18	Nov-18	
12	Rudrapur	Pithoragarh	Pithoragarh	3.11	3.21	2.78	
13			Dharchula	8.37	5.90	4.14	
14			Champawat	1.90	1.87	1.85	
15		Rudrapur	Sitarganj	5.67	6.42	7.33	
16			Rudrapur	4.12	4.28	4.10	
17			Khatima	3.45	3.17	3.69	
18	Garhwal	Srinagar	Pauri	3.68	3.66	3.83	
19			Srinagar	4.33	4.18	3.96	
20			Rudraprayag	4.76	4.34	3.87	
21			Gairsain	6.44	6.42	6.29	
22			Gopeshwar	4.90	4.50	4.57	
23			Kotdwar	1.62	1.69	1.66	
24			Narayanbagar	2.16	2.21	2.70	
25			Tehri	Tehri	4.80	5.01	4.61
26		Uttarkashi		0.14	0.15	0.15	
27		Dehradun	DehradunNorth	4.83	4.88	4.74	
28			DehradunCentral	1.07	1.07	1.19	
29			DehradunSouth	2.33	2.33	2.21	
30		Dehradun (R)	Rishikesh	1.83	1.85	1.76	
31			Vikasnagar	1.95	1.41	1.40	
32			Rural Dehradun	1.11	1.21	1.12	
33			Doiwala	2.29	2.49	2.82	
34			EDD Mohanpur	3.85	3.83	3.57	
35		Haridwar	Haridwar	Haridwar Urban	2.89	2.86	2.86
36				EDD Bhadrabad	0.78	0.88	1.08
37				Rural SIDCUL	0.00	0.02	0.02
38				Laksar	1.32	1.20	0.83
39			Roorkee	Roorkee Urban	1.92	1.46	1.58
40				RoorkeeRural	6.73	5.92	4.91
41				EDD Bhagwanpur	2.18	2.64	1.41
42	Ramnagar Roorkee			1.43	1.40	1.50	
Total				3.55	3.42	3.24	

Table 5: Status of NR Consumer (in %)

S.No.	Zone	Circle	Division	Sep-18	Oct-18	Nov-18
1	Kumaon	Ranikhet	Almora	2.74	4.32	3.51
2			Ranikhet	4.35	4.48	0.73
3			Bageshwar	13.80	7.72	10.48
4			Bhikiyasen	13.44	9.19	8.65
5		Haldwani	Nainital	6.01	5.07	10.07
6			Haldwani Town	7.37	11.70	10.14
7			Haldwani Rural	1.17	1.21	0.53

S.No.	Zone	Circle	Division	Sep-18	Oct-18	Nov-18	
8		Kashipur	Ramnagar	0.83	2.02	1.70	
9			Jaspur	17.69	7.36	5.96	
10			Kashipur	9.22	8.98	8.57	
11			Bazpur	2.64	5.26	6.27	
12	Rudrapur	Pithoragarh	Pithoragarh	0.71	0.94	2.72	
13			Dharchula	12.22	10.46	10.52	
14			Champawat	12.09	8.85	6.70	
15		Rudrapur	Sitarganj	5.35	6.12	7.35	
16			Rudrapur	3.65	3.38	3.67	
17			Khatima	2.32	8.43	8.77	
18	Garhwal	Srinagar	Pauri	2.36	0.83	0.79	
19			Srinagar	12.62	8.24	7.31	
20			Rudraprayag	12.77	14.56	15.21	
21			Gairsain	7.37	7.57	6.87	
22			Gopeshwar	7.54	10.23	14.92	
23			Kotdwar	15.11	16.58	14.51	
24			Narayanbagar	0.59	0.48	0.77	
25			Tehri	Tehri	13.41	4.96	3.84
26		Uttarkashi		8.02	7.96	11.46	
27		Dehradun	Dehradun North	1.60	1.98	2.09	
28			Dehradun Central	1.98	2.26	4.16	
29			Dehradun South	4.04	2.78	1.82	
30		Dehradun (R)	Rishikesh	3.75	4.31	4.02	
31			Vikasnagar	15.01	14.96	11.28	
32			Rural Dehradun	3.13	2.77	2.90	
33			Doiwala	3.18	3.67	2.05	
34			EDD Mohanpur	5.76	3.28	4.09	
35		Haridwar	Haridwar	Haridwar Urban	4.27	3.75	3.35
36				EDD Bhadrabad	4.71	4.16	2.97
37				Rural SIDCUL	4.17	5.62	3.57
38	Laksar			7.85	6.07	5.26	
39	Roorkee		Roorkee Urban	3.09	2.31	1.42	
40			Roorkee Rural	10.73	13.80	10.18	
41			EDD Bhagwanpur	3.46	2.75	1.67	
42			Ramnagar Roorkee	3.74	4.72	2.83	
Total				6.66	6.05	5.79	

Table 6: Status of IDF Consumer (in %)

S.No.	Zone	Circle	Division	Sep-18	Oct-18	Nov-18
1	Kumaon	Ranikhet	Almora	3.07	2.92	2.80
2			Ranikhet	3.47	3.54	3.43
3			Bageshwar	9.53	9.32	9.11
4			Bhikiyasen	7.75	7.23	6.79
5		Haldwani	Nainital	1.53	1.50	1.48
6			Haldwani Town	3.78	5.60	6.56
7			Haldwani Rural	0.57	0.56	0.54
8		Kashipur	Ramnagar	0.87	1.18	1.07
9			Jaspur	5.65	8.84	9.70
10			Kashipur	1.70	2.31	3.18
11		Rudrapur	Pithoragarh	Bazpur	1.65	7.07
12	Pithoragarh			4.32	4.11	3.97
13	Dharchula			8.61	8.05	7.85
14	Champawat		1.16	1.16	1.16	
15	Rudrapur		Sitarganj	1.84	2.91	4.10
16			Rudrapur	3.11	3.03	2.94
17		Khatima	0.87	2.07	2.17	
18	Garhwal	Srinagar	Pauri	2.79	2.73	2.73
19			Srinagar	6.81	6.70	6.62
20			Rudraprayag	12.30	12.04	11.71
21			Gairsain	7.23	7.13	7.11
22			Gopeshwar	8.01	7.70	7.81
23			Kotdwar	3.34	3.31	3.25
24			Narayanbagar	12.42	12.26	12.24
25			Tehri	Tehri	3.60	3.48
26		Uttarkashi		8.17	7.93	7.75
27		Dehradun	Dehradun North	0.23	0.22	0.21
28			Dehradun Central	0.64	0.65	0.64
29			Dehradun South	1.97	1.97	1.99
30		Dehradun (R)	Rishikesh	1.74	1.93	1.84
31			Vikasnagar	4.06	4.94	5.53
32			Rural Dehradun	0.96	1.02	1.04
33			Doiwala	1.64	1.51	1.33
34			EDD Mohanpur	0.87	0.87	0.92
35	Haridwar	Haridwar	Haridwar Urban	3.39	3.34	3.15
36			EDD Bhadrabad	4.71	4.83	4.65
37			Rural SIDCUL	0.30	0.29	0.34
38			Laksar	11.47	11.95	12.63
39	Roorkee	Roorkee	Roorkee Urban	4.92	4.70	4.51
40			Roorkee Rural	5.99	8.02	8.80
41			EDD Bhagwanpur	7.00	6.76	7.01
42			Ramnagar Roorkee	4.58	4.95	4.90
Total				3.94	4.21	4.33

vii) The Petitioner should submit the Distribution Circle/ Division wise status of Defective Meters as on 30.11.2018.

Reply:

The status of Defective Meters as on 30-11-2018 is as follows:

S. NO.	DIVISION	No. of Defective Meters
1	DOIWALA	380
2	EDD MOHANPUR	433
3	RISHIKESH	979
4	RURAL_DEHRADUN	597
5	VIKASNAGAR	3403
6	DEHRADUN_CENTRAL	373
7	DEHRADUN_NORTH	101
8	DEHRADUN_SOUTH	1688
9	EDD GAIRSAIN	1648
10	GOPESHWAR	2746
11	KOTDWAR	2871
12	NARAYANBAGAR	1622
13	PAURI	1324
14	RUDRAPRAYAG	5925
15	SRINAGAR	2678
16	TEHRI	3159
17	UTTARKASHI	3455
18	HALDWANI RURAL	383
19	HALDWANI TOWN	2788
20	NAINITAL	828
21	RAMNAGAR	498
22	BAZPUR	3325
23	JASPUR	3471
24	KASHIPUR	1919
25	ALMORA	1637
26	BAGESHWAR	4774
27	BHIKIYASEN	2233
28	RANIKHET	1361
29	EDD JAWALAPUR	3505
30	HARIDWAR_URBAN	1273
31	LAKSAR	6309
32	RURAL_SIDCUL	14
33	EDD BHAGWANPUR	2828
34	RAMNAGAR ROORKEE	2313
35	ROORKEE_RURAL	4221
36	ROORKEE_URBAN	2512
37	CHAMPAWAT	522
38	DHARCHULA	2352
39	PITHORAGARH	2719
40	KHATIMA	934
41	RUDRAPUR	3358
42	SITARGANJ	1878
TOTAL		91337

viii) The Petitioner should submit the Distribution Circle/ Division wise Mechanical Meters as on 30.11.2018.

Reply:

The status of Mechanical Meters as on 30-11-2018 is as follows:

S. No.	Zone	Circle	Division	No. of Mechanical Meters
1	Kumaun	Ranikhet	Almora	3674
2			Ranikhet	3528
3			Bhikiyasain	3920
4			Bageshwar	3469
5		Haldwani	Nainital	2096
6			Haldwani (U)	241
7			Haldwani (R)	56
8			Ramnagar	157
9		Kashipur	Kashipur	8
10			Jaspur	0
11			Bajpur	396
12	Rudrapur	Pithoragarh	Pithoragarh	8686
13			Dharchula	3457
14			Champawat	3264
15		Rudrapur	Sitarganj	428
16			Khatima	1430
17			Rudrapur	95
18			Garhwal	Srinagar
19	Srinagar	0		
20	Rudraprayag	1021		
21	Gairsain	1758		
22	Gopeshwar	265		
23	Narayanbagar	610		
24	Kotdwar	9992		
25	Tehri	Tehri		
26		Uttarkashi		529
27	Dehradun	Dehradun North		0
28		Dehradun Central		952
29		Dehradun South		0
30	Dehradun (R)	Rishikesh		267
31		Vikasnagar		304

S. No.	Zone	Circle	Division	No. of Mechanical Meters
32	Haridwar		Raipur DDun	2169
33			Mohanpur	73
34			Doiwala	9
35			Haridwar (U)	281
36		Haridwar (R)	0	
37		Laksar	0	
38		Jwalapur	0	
39		Roorkee	Roorkee (U)	0
40			Ramnagar, Roorkee	0
41			Roorkee (R)	0
42			Bhagwanpur	0
Total				56694

ix) The Petitioner should submit the category wise monthly load shedding carried out in FY2017-18.

Reply:

The category wise monthly load shedding for FY 2017-18 has been provided below:

Table 7: Category wise Monthly Load Shedding for FY 2017-18

Month	Domestic	Non-Domestic	LT Industry	HT Industry	PTW	Mixed Load	Public Lamps	GIS	PWW	Railway Traction	Total
Apr	0.32	0.14	0.04	0.68	0.03	0.02	0.01	0.02	0.04	0.00	1.30
May	1.31	0.59	0.14	2.80	0.13	0.09	0.03	0.08	0.18	0.01	5.36
Jun	0.08	0.04	0.01	0.17	0.01	0.01	0.00	0.00	0.01	0.00	0.33
Jul	2.40	1.09	0.27	5.14	0.24	0.16	0.05	0.15	0.32	0.02	9.83
Aug	0.93	0.42	0.10	1.98	0.09	0.06	0.02	0.06	0.12	0.01	3.79
Sep	0.42	0.19	0.05	0.89	0.04	0.03	0.01	0.03	0.06	0.00	1.71
Oct	0.16	0.07	0.02	0.34	0.02	0.01	0.00	0.01	0.02	0.00	0.65
Nov	0.59	0.27	0.06	1.25	0.06	0.04	0.01	0.04	0.08	0.01	2.40
Dec	0.56	0.25	0.06	1.19	0.05	0.04	0.01	0.03	0.07	0.01	2.27

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Month	Domestic	Non-Domestic	LT Industry	HT Industry	PTW	Mixed Load	Public Lamps	GIS	PWW	Railway Traction	Total
Jan	0.40	0.18	0.04	0.86	0.04	0.03	0.01	0.02	0.05	0.00	1.64
Feb	0.32	0.15	0.04	0.69	0.03	0.02	0.01	0.02	0.04	0.00	1.32
Mar	0.21	0.09	0.02	0.44	0.02	0.01	0.00	0.01	0.03	0.00	0.84
Total	7.69	3.47	0.85	16.43	0.76	0.51	0.15	0.46	1.03	0.08	31.44

C. Power Procurement Plan

- i) The Petitioner has submitted that Vishnugad station shall start operation from Jan-2021, i.e. during FY 2020-21. However, the same has been shown in Table 22 to start operation from FY 2021-22. The Petitioner should clarify the same.

Reply:

The Petitioner requests the Hon'ble Commission to consider the revised status of expected COD for THDC stations (including Vishnugad HEP) as given in the table below based on written correspondence with the generating company:

Table 8: Expected COD for Vishnugad HEP

Name of Station	Capacity	Expected COD
Tehri PSP	1000 MW	May 2021
Vishnugad Pipalkoti	444 MW	December 2021
Khurja STPP	1320 MW	Oct-2022 (1 st Unit) and Apr-2023 (2 nd Unit)

- ii) The Petitioner should submit the reason for not projecting any power from 22.8 MW SHP at Village Bernigad, Uttarkashi for which PPA has been executed with K. Ramchandra Rao Transmission and Projects Company Ltd.

Reply:

Based on recent correspondence with the generating company enclosed in Annexure - 1 (hard copy), K. Ramchandra Rao Transmission and Projects Company Ltd., it has been observed that the project has been facing delays in getting various approvals. In October, 2018 the generator has communicated that due to delays in getting statutory clearances and financial closure, the expected COD for Berigad SHP of 22.8 MW capacity is December, 2022. As a

result, the Petitioner has not considered any generation from the aforementioned plant.

- iii) The Petitioner should submit the status of PPA with SECI for procurement of power as submitted in the Business Plan.

Reply:

In November, 2018 UPCL has confirmed and agreed to sign the PPA for the quantum of Solar and Non-Solar RE Power from SECI at very competitive rates as provided hereunder:

Table 9: Details of PPA with SECI

PPA Signing Quarter	Solar (MW)	Non-Solar (MW)	Expected COD
Qtr-3 (Oct-18 to Dec-18)	200	100	Qtr-3 (Oct-20 to Dec-20)
Qtr-1 (Apr-19 to June-19)	200	100	Qtr-1 (Apr-21 to June-21)

The supporting documents have been submitted under Annexure-2 (hard copy).

D. Distribution Loss

- i) The Petitioner should submit the Distribution Division wise actual Distribution Losses for FY 2017-18.

Reply:

The details of Distribution losses for FY 2017-18 are given as below:

Table 10: Division./Circle wise Distribution Losses for FY 2017-18

S. No.	Name of Divisions / Circles / Zones	Distribution Losses (%)
1	EDD (R), Dehradun	12.36%
2	EDD, Vikasnagar	31.46%
3	EDD, Rishikesh	10.42%
4	EDD, Doiwala	12.76%
5	EDD, Mohanpur	5.22%
	EDC, Dehradun	14.71%
1	EDD (N), Dehradun	7.76%
2	EDD (S), Dehradun	9.73%
3	EDD (C), Dehradun	9.99%
	EDC, Dehradun	9.28%

S. No.	Name of Divisions / Circles / Zones	Distribution Losses (%)
1	EDD, Tehri	27.51%
2	EDD, Uttarkashi	40.13%
	EDC, Tehri	31.45%
1	EDD, Srinagar	14.30%
2	EDD, Pauri	17.21%
3	EDD, Narayanbagar	54.72%
4	EDD, Gairsain	27.87%
5	EDD, Gopeshwar	31.97%
6	EDD, Kotdwar	7.28%
7	EDD, Rudraprayag	25.58%
	EDC, Srinagar	15.95%
	Garhwal Zone	15.09%
1	EDD (U), Roorkee	30.96%
2	EDD (R), Roorkee	26.11%
3	EDD Bhagwanpur	8.05%
4	EDD, Ramnagar	27.72%
	EDC, Roorkee	23.86%
1	EDD (U), Hardwar	16.09%
2	EDD (R), Hardwar	6.02%
3	EDD, Laksar	22.13%
4	EDD, Jwalapur	11.27%
	EDC, Haridwar	11.82%
	Haridwar Zone	17.46%
1	EDD (U), Haldwani	22.01%
2	EDD, Nainital	13.80%
3	EDD, Ramnagar	17.71%
4	EDD (R), Haldwani	12.73%
	EDC, Haldwani	16.32%
1	EDD, Kashipur	10.52%
2	EDD, Bajpur	14.23%
3	EDD, Jaspur	13.13%
	EDC, Kashipur	12.25%
1	EDD, Almora	11.50%
2	EDD, Bageshwar	25.57%
3	EDD, Ranikhet	16.49%
4	EDD, Bhikyasain	13.36%

S. No.	Name of Divisions / Circles / Zones	Distribution Losses (%)
	EDC, Ranikhet	16.83%
	Kumaon Zone	13.83%
1	EDD, Rudrapur	10.38%
2	EDD, Sitarganj	14.92%
	EDC, Rudrapur	11.64%
1	EDD, Pithoragarh	26.29%
2	EDD, Champawat	19.80%
3	EDD, Dharchula	31.90%
	EDC Pithoragarh	25.42%
	Udhamnagar Zone	12.93%
	Total Uttarakhand	15.17%

E. Capital Investment Plan

- i) The Petitioner in Para 6.4 and 6.5 of the Petition has submitted that it has planned capital expenditure based on review of the existing network in its various operational Circles and expected growth in demand. The Petitioner is required to submit the review report identifying the capital expenditure need for its various operational Circles/ Divisions.

Reply:

The Petitioner submits that the capital expenditure proposed is based both on analysis of historical trends and multiple round of discussions held at several levels with UPCL staff. The nature of review was thus, both in the form of open deliberations and a stocktaking exercise of physical and financial progress of works undertaken in previous years. The capital expenditure for 3rd Control Period was then proposed through multiple inputs received from various departments/circles/divisions. In case of Central schemes, the progress on each scheme was recorded, followed by a discussion on future works to be undertaken. For Other works, four sub-heads were created based on the broad objectives of the proposed works, i.e. load growth, system modernization, reliability improvement and loss reduction to meet future requirements.



1. DDUGJY

- i) The Petitioner in its Business Plan has projected capex of Rs. 459.03 Crore towards Rural Household Access and Rs. 43.78 Crore towards metering. The Petitioner should submit the detailed scope of work covered under the above two schemes. The details should include Distribution Circle/ Division wise works planned.

Reply:

Table 35 of the Business Plan provides details of the total outlay for Uttarakhand under DDUGJY. It is to clarify that the total outlay of the scheme was Rs. 845.32 Cr. for Grid and Off-grid projects. As a part of Off-Grid projects, an amount of Rs. 3.31 Cr. was sanctioned while the remaining Rs. 841.92 Cr. was towards Grid projects. Further, within this amount of Rs. 841.92 Cr. the amount of Rs. 459.03 Cr. and Rs. 43.78 Cr. was the sanctioned cost under rural household access and metering respectively as also shown in Table 35 of the Business Plan. The detailed scope of work for rural household access and metering have been enclosed in Annexure-3 (hard copy). The Petitioner has projected capital expenditure of Rs. 345.30 Cr. in FY 2019-20 and nil capital expenditure for the remaining two years of the 3rd Control Period.

- ii) The Petitioner in its Business Plan has submitted that it shall complete the entire feeder segregation works by December 2018. The Petitioner should confirm whether the same have been completed.

Reply:

The Petitioner submits that out of 44 feeders to be segregated, 11 have been completed and the remaining are expected to be completed by March, 2019.

2. SAUBHAGYA

- i) The Petitioner has submitted that it has released new connections to 168861 households as on 15.11.2018. The Petitioner should submit Distribution Circle/ Division wise new connection released.

Reply:

The Petitioner is submitting the revised status of the scheme till 29.12.2018 and requests the Hon'ble Commission to consider the same. Till 29.12.2018 the Petitioner has released 2,17,292 new connections with details as shown in the table below:

Table 11: Details of new connections released under SAUBHAGYA scheme

District	Total Households	Electrified Households as on 10th Oct,2017	Balance Unelectrified Households as on 10th Oct,2017	Household Electrified w.e.f 11th Oct,2017	Balance Un-electrified Households	Household Electrification (%)
Dehradun	368126	333399	34727	34727	-	100
Haridwar	363403	322355	41048	41048	-	100
Udham Singh Nagar	348347	301955	46392	46392	-	100
Nainital	204149	184015	20134	20134	-	100
Garhwal	148047	138618	9429	9429	-	100
Almora	134691	125407	9284	9284	-	100
Tehri Garhwal	123613	112405	11208	11208	-	100
Pithoragarh	100503	90853	9650	9650	-	100
Chamoli	73129	65362	7767	7767	-	100
Bageshwar	52728	46396	6332	6332	-	100
Champawat	50569	43712	6857	6857	-	100
Uttarkashi	48676	37555	11121	11121	-	100
Rudraprayag	45616	42273	3343	3343	-	100
Total	20,61,597	18,44,305	2,17,292	2,17,292	-	

- ii) The Petitioner has further submitted that 110 villages out of 116 identified villages under GSA-I and 693 villages out of 695 villages under GSA-II have been covered. The Petitioner should submit the details of works carried out under the GSA-I and GSA-II.

Reply:

The Petitioner was supposed to carry out the following works under GSA-I and GSA-II:

- Releasing new connection to BPL households with BPL kit at free of cost
- Releasing connection to APL (rural) households at Rs. 500 to be recovered in 10 equal instalments
- Infrastructural development at Rs. 1500 per household (connection)

The Petitioner is submitting the revised physical progress under GSA-I and GSA-II as on 28.12.2018 along with district-wise details:

Table 12: Physical Progress under GSA-I & GSA-II

Particulars	Total Villages	No. of Villages Saturated	Household Connections Released
GSA-I	116	116	9372
GSA-II	695	695	58425



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Table 13: Details of GSA-I & GSA-II

District	Total Villages	Targeted UE Households	Un-Electrified households as per field survey	No. of Villages Saturated	Village Achievement (%)	Household Connections Released	Household Achievement (%)	Balance Villages	Balance UE households
GSA-I									
Haridwar	53	1347	3566	53	100	3566	100	-	-
Udham Singh Nagar	21	789	1859	21	100	1859	100	-	-
Nainital	19	2889	2398	19	100	2398	100	-	-
Tehri Garhwal	4	-	130	4	100	130	100	-	-
Almora	3	40	248	3	100	248	100	-	-
Bageshwar	3	108	209	3	100	209	100	-	-
Chamoli	2	138	305	2	100	305	100	-	-
Champawat	2	72	191	2	100	191	100	-	-
Dehradun	2	53	35	2	100	35	100	-	-
Garhwal	2		91	2	100	91	100	-	-
Rudraprayag	2	95	70	2	100	70	100	-	-
Uttarkashi	2	18	174	2	100	174	100	-	-
Pithoragarh	1	-	96	1	100	96	100	-	-

District	Total Villages	Targeted UE Households	Un-Electrified households as per field survey	No. of Villages Saturated	Village Achievement (%)	Household Connections Released	Household Achievement (%)	Balance Villages	Balance UE households
Total	116	5549	9372	116	100	9372	100	-	-
GSA-II									
Udham Singh Nagar	362	8558	30669	362	100	30669	100	-	-
Haridwar	333	20120	27756	333	100	27756	100	-	-
Total	695	28678	58425	695	100	58425	100	-	-

- iii) The Petitioner has submitted that additional measures are required to ensure reliable power supply and has proposed capex of Rs. 64.63 Crore towards the same. In this regard, the Petitioner should submit the details of works which shall be covered under the above.

Reply:

The Petitioner submits that although the sanctioned cost of the scheme at the time of inception was Rs. 149.34, the scheme is now expected to close at Rs. 124.15 Cr. Based on the revised physical progress under the scheme and the capital expenditure incurred till date, the Petitioner proposes a revised capex of Rs. 31.72 Cr. for FY 2019-20 and nil expenditure for remaining years of the 3rd Control Period. This expenditure is needed to provide last mile connectivity to ensure reliable power supply to the connected households. The Petitioner requests the Hon'ble Commission to approve the revised submission.

- iv) The Petitioner has submitted that the sanctioned cost under the above scheme is Rs. 149.34 Crore. However, the Petitioner has proposed to utilised only Rs. 71.05 Crore out of the above sanctioned cost. The Petitioner should clarify the underutilisation proposed.

Reply:

As stated in the previous reply, the scheme is expected to close at Rs. 124.15 Cr. Out of this, the Petitioner has already incurred an expenditure of Rs. 92.43 Cr. towards service connection charges for the 2,17,292 un-electrified households covered under the scheme. The Petitioner proposes to incur the remaining capital expenditure of Rs. 31.72 Cr. in the year FY 2019-20 towards providing last mile connectivity for ensuring reliable power supply to these households.

- v) The Petitioner in its reply to query no. 6 of information requirement dated 13.12.2018 has submitted that under SAUBHAGYA Scheme the capex incurred in FY 2018-19 is Rs. 11.19 Crore. However, the total expenditure incurred has been projected as only Rs. 9.19 Crore. The Petitioner should clarify the same.

Reply:

The Petitioner requests the Hon'ble Commission to condone the inadvertent error in the response dated 13.12.2018. As clarified above, the Petitioner has incurred an expenditure of Rs. 92.43 Cr. till date under the scheme. Against this, it has received a grant of Rs. 13.30 Cr. from the Govt.



3. IPDS

- i) The Petitioner has submitted that the sanctioned cost towards IPDS (IT-Phase-II) is Rs. 11.96 Crore, however the capex proposed under the same is Rs. 106.19 Crore which includes SCADA/DMS in Rudrapur and Haridwar. The Petitioner should clarify whether the above works have been approved.

Reply:

UPCL is planning to implement SCADA/DMS in Rudrapur and Haridwar towns. The project shall be implemented in the coming five years and shall cover industrial area SIDCUL of both the towns as well. DPR of both the projects is under preparation and the same shall be submitted to PFC by 15th February, 2019 for funding the projects under IPDS of Govt. of India. Thereafter, the proposal shall be submitted to the Hon'ble Commission for investment approval.

- ii) The Petitioner has further proposed capex of Rs. 388.49 Crore to be incurred in the third control period towards underground cabling works in Haridwar Town. The Petitioner should submit the quantified benefit arising out after carrying out such works including loss reduction in the circle/ division.

Reply:

The cost benefit analysis of the project is attached herewith at annexure - 4 (hard copy).

- iii) The Petitioner has submitted a total sanction cost of Rs. 191.63 Crore under system strengthening works. However, the proposed capex under the same is Rs. 166.72 Crore. The Petitioner should clarify the underutilisation of the sanctioned cost under the same.

Reply:

Out of Rs. 191.63 Cr sanctioned towards system strengthening works, the Petitioner has already incurred expenditure to the tune of approx. Rs. 25 Cr. upto FY 2017-18. The Petitioner proposes to utilize the remaining Rs. 166.72 Cr in FY 2018-19 and therefore, requests the Hon'ble Commission to approve the same.

4. Other Works

- i) The Petitioner has projected capex of Rs. 105.90 Crore towards release of 3500 new PTW connections. In this regard the Petitioner should clarify the following.
- a. Basis of estimating 3500 new connections in the category as the number of new consumer addition in the category has been proposed as 5440 as per Table 5 of the Business Plan.

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Reply:

During FY 2015-16 to FY 2017-18, the Petitioner has provided 5208 new connections under this category and considering the additions in the past, a reasonable estimate of 3500 new connections has been considered for the Third Control Period. For projection of number of consumers in the RTS-4 category, the Hon'ble Commission may consider the same.

- b. As per the cost projection the average cost for release of each connection works out to Rs.3 lakh. The Petitioner should submit the basis of such assumption.

Reply:

The Petitioner has considered a base cost of Rs. 2.5 lakh per connection for release of new PTW connections in FY 2018-19 based on recent DPRs. For future years, an annual escalation of 10% has been considered to arrive at unit cost for each year of the 3rd Control Period.

- ii) The Petitioner has proposed various works for reduction of losses. In this regard, the Petitioner should clarify the following.

- a. The Petitioner has proposed capex of Rs. 518.84 Crore for laying of 7500 km of LT ABC conductors in the Control Period in the theft prone areas and Rs. 109.14 Crore towards 11 kV and 33 underground cables. The Petitioner should submit the Distribution Circle/ Division wise works planned along with associated cost and the target loss levels post completion of such works.

Reply:

The Petitioner has proposed a tentative capex plan for laying down of 7500 kms LT ABC in the 3rd Control Period based on the requirement during FY 2017-18 and FY 2018-19. During the last two years, the Petitioner has estimated installation of 3250 kms of LT AB cable at a project cost of Rs. 157.55 Cr. for which the DPR has already been submitted to the Hon'ble Commission. Based on historical cost, the existing loss levels and inflation, the Petitioner has proposed installation of 7500 kms (2500 km each year) for the 3rd Control Period.

- b. The Petitioner has proposed replacement of around 2.4 lakh single phase and 20,000 three phase defective meters in the third Control Period. The Petitioner should submit the details of year wise total number of single and three phased defective meters reported in FY 2015-16 to FY 2017-18 and year wise total number of replacement of defective meters carried out during the above period.

Reply:

The total number of defective meters and meters replaced in FY 2015-16, FY 2016-17 and FY 2017-18 are given in the table given below:

Year	No. of Defective Meters	No. of meters replaced	
		Single Phase	Three Phase
FY 2015-16	112907	138048	3209
FY 2016-17	94684	121214	4055
FY 2017-18	68246	97668	4786

iii) The Petitioner has proposed various works to increase system reliability and to undertake safety measures. In this regard, the Petitioner should clarify the following.

- a. The Petitioner has proposed to replace 5100 nos. of Distribution Transformers at a cost of Rs. 271.39 Crore in the third Control Period to avoid overloading and reduce technical losses. However, the nos. of proposed replacement as per Table 75 and 76 is 4700 only. The Petitioner is required to clarify the same. Further, the Petitioner is also required to submit the need for the same when system augmentation works is already been carried out under RAPDRP/IPDS Schemes.

Reply:

The Petitioner submits that the figure of 5100 no.s is an advertent error. The Petitioner proposes to replace a total of 4700 transformers during the 3rd Control Period, the details of which have been provided in Table 75 and 76 of the Business Plan. Further, the Petitioner is required to undertake these works in areas which are not covered under R-APDRP and IPDS for system augmentation and therefore, requests the Hon'ble Commission to approve the same.

- b. The Petitioner should further submit Distribution Circle/ Division wise nos. of DT planned to be replaced and the impact on reduction in loss level on account of above works

Reply:

The details of distribution transformers to be installed / replaced from FY 2019-20 to FY 2021-22 are attached herewith at annexure -5 (hard copy). The installation of these transformers is necessary to avoid overloading of DTs due to load growth. Overloaded transformers also increase technical losses



and breakdowns and therefore investment for installation of new transformers reduces losses and improves quality and reliability of supply. However, the petitioner presently does not have any mechanism for computation of exact impact on reduction in existing losses.

- c. The Petitioner has proposed to incur cost of Rs. 102.33 Crore towards protection system of 18000 transformers which shall result in reduction in transformer failure rate. The Petitioner should submit the Distribution Circle/ Division wise planned works and the current failure rate of transformers and reduction in failure rates post execution of such works.

Reply:

The details of providing protection system on DTs for FY 2019-20 are attached herewith at annexure -6 (hard copy) This protection shall also be provided on the same numbers of DTs during FY 2020-21 and 2021-22. However, the cost escalation has been considered @ 10% for each year. Further, the details of current failure rate of transformer is attached herewith at annexure -7 (hard copy) The reduction in failure rate may be computed as follows:

(i)	Total DTs as on 31-03-2018	:	69074
(ii)	DTs damaged during FY 2017-18	:	5386
(iii)	DTs failure rate in FY 2017-18	:	7.80%
(iv)	Proposed protection on DTs	:	18,000
(v)	Estimated DTs failure after providing protection system :		
	$5386 / 69074 \times (69074 - 18000) = 3982$		
(vi)	Estimated DTs failure rate after providing protection system :		
	$3982 / 69074 = 5.76\%$		
(vii)	Reduction in DTs failure rate	:	$7.80\% - 5.76\% = 2.04\%$

- iv) The Petitioner has proposed procurement of Sub-station and consumer meter testing equipment amounting to Rs. 35.55 Crore. The Petitioner is required to submit the detailed works envisaged under the above head.

Reply:

As per Regulation 3.1.3 of the UERC (The Electricity Supply Code) Regulations, 2007 the Petitioner is required to conduct periodical inspection / testing and calibration of bulk supply meters (HT) every year and LT Meters every five years. In view of the above, the Petitioner has been undertaking testing of 2637 HT meters and 3,00,000 LT meters at a total cost of Rs. 10.38 Cr. Based on this cost and the anticipated growth in number of consumers during

the next Control Period, the Petitioner has therefore, proposed a total capex of Rs. 35.55 Cr. (Rs. 11.85 Cr. each year) for the 3rd Control Period.

- v) **The Petitioner has proposed cost of Rs. 12 Crore towards renewal of DC and DR Hardware. The Petitioner should submit the basis of projecting the above cost.**

Reply:

UPCL Data Centre (DC) and Disaster Recovery Centre (DR) was commissioned in the year 2011 and 2014 respectively. Most of the hardware in the DC are already 8 years old and require hardware afresh. Under R-APDRP Part-A works, cost of DC hardware was Rs. 11 Cr. (approx.). In view of the advancement in technology and IPDS-IT up-gradation, tentative estimated cost of Rs. 12 Cr. in the year FY 2020-21, FY 2021-22 is taken for hardware upgrade/replacement in DC & DR.

5. Manpower Plan

UPCL in its Business Plan Petition has projected total recruitment of 1411 employees in the upcoming control period. However, the Petitioner in its business plan has submitted the details of 329 vacant posts for which recruitment is under process. The Petitioner is required to submit the year wise details of balance posts which it intends to fill during the third control period.

Reply:

The Petitioner has proposed a total recruitment of 1411 employees between FY 2018-19 to FY 2021-22. The year-wise break-up of this recruitment plan is as follows:

Table 14: Recruitment Plan for 3rd Control Period

Year	Recruitment Plan (in No.)
FY 2018-19	273
FY 2019-20	600
FY 2020-21	537
FY 2021-22	1
Total	1411



The detailed vacancies expected to be filled during the 3rd Control Period are as follows:


Designation	Recruitment from 01-04-2018 to 30-09-20 18	Recruitment from 01-10-2018 to 31-03-2019 Expected	Recruitment from 01-04-2019 to 31-03-2020 Expected	Recruitment from 01-04-2020 to 31-03-2021 Expected	Recruitment from 01-04-2021 to 31-03-2022 Expected
Managing Director				1	
Director (Project)		1			
Director (Operation)					1
Executive Engineer (E&M)	5				
Executive Engineer (Civil)	3				
Assistant Engineer (E&M)			72*		
Assistant Engineer (Civil)			7*		
Acct. Officer			15*		
Personnel Officer			8*		
Law Officer			2*		
TG-II (Elect)			496 ^s	280	
Junior Engineer (E&M)		160*			
Junior Engineer (Civil)		6*			
Asst. Accountant		40*			
Asst. Acct. Officer	1				
Asst Store Keeper				11	
Draftsman		19*			
Data Entry Operator/ OA-III	36			245	
Coolie/Mate	2				
Sub-Total	47	226	600	537	1
Total					1411

* The Petitioner has already provided detailed recruitment status for these posts (329 in no.) in the Business Plan

\$ Advertisement has been released on 8.12.2013 by Uttarakhand Pravidhik Shiksha Parishad for filling up of 496 vacancies. However, the matter is pending before Hon'ble High Court, Nainital

Note: The recruitment of FY 2020-21 & FY 2021-22 is to be considered against expected retirement

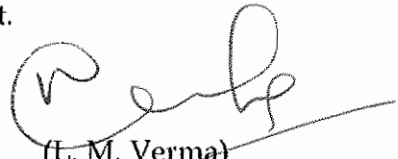
For and on behalf of
Uttarakhand Power Corporation Limited



(L. M. Verma)
Director (Finance)

Verification

I, Lalit Mohan Verma S/o Late Shri Sundar Lal Verma, aged about 60 years, working as Director (Finance) Uttarakhand Power Corporation Limited, VCV Gabar Singh Urja Bhawan, Dehradun do hereby verify that the contents of Paras A to E and other miscellaneous paras are derived from official records, which are true to my personal knowledge and that I have not suppressed any material fact.



(L. M. Verma)
Director (Finance)
Uttarakhand Power Corporation Limited

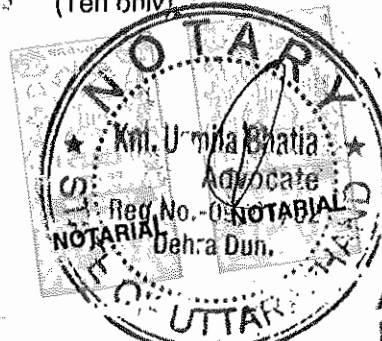
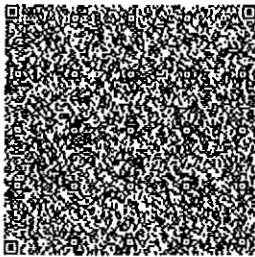


सत्यमेव जयते

INDIA NON JUDICIAL Government of Uttarakhand

e-Stamp

Certificate No. : IN-UK66512704123720Q
 Certificate Issued Date : 18-May-2018 10:45 AM
 Account Reference : NONACC (SV)/ uk1260004/ DEHRADUN/ UK-DH
 Unique Doc. Reference : SUBIN-UKUK126000434125296026381Q
 Purchased by : UTTARAKHAND POWER CORPORATION LTD
 Description of Document : Article Miscellaneous
 Property Description : NA
 Consideration Price (Rs.) : 0
 (Zero)
 First Party : UTTARAKHAND POWER CORPORATION LTD
 Second Party : NA
 Stamp Duty Paid By : UTTARAKHAND POWER CORPORATION LTD
 Stamp Duty Amount(Rs.) : 10
 (Ten only)



At. No. L. No. 187

BEFORE UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

In the matter of: APPLICATION SEEKING APPROVAL OF BUSINESS PLAN OF THE PETITIONER COMPANY FOR THE CONTROL PERIOD OF THREE FINANCIAL YEARS FROM FY 2019-20 TO FY 2021-22.

And
In the matter of: Uttarakhand Power Corporation Limited.

Petitioner

AFFIDAVIT VERIFYING THE PETITION

I, Lalit Mohan Verma, S/o Late Shri Sundar Lal Verma, aged about 60 years, working as Director (Finance) - Uttarakhand Power Corporation Limited, VCV Gabar Singh Bhawan, Dehradun, the deponent named above do hereby solemnly affirm and state on oath as under:

1. That the deponent is the Director (Finance) of Uttarakhand Power Corporation Limited who is authorized as per resolution of the company and is acquainted with the facts deposed to below.
2. I, the deponent named above do hereby verify that the contents of the paragraph No.-1 of the affidavit and those of the paras A to E and other miscellaneous paras of the accompanying petition are based on the perusal of records which I believe to be true and verify that no part of this affidavit is false and nothing material has been concealed.

Deponent
(L.M. Verma)
Director (Finance)

Uttarakhand Power Corporation Limited

- 28 -

Statutory Alert:

1. The authenticity of this Stamp Certificate should be verified at 'www.shcilestamp.com'. Any discrepancy in the details on this Certificate and as available on the website renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

I, ANIL PRASAD RAWKOTI....., Advocate, do hereby declare that the person making this affidavit is known to me through the perusal of records and I am satisfied that he is the same person alleging to be deponent himself.

(.....
Advocate
VAR.N. 5154/04

Solemnly affirmed before me on this 2.1.19..... day ofby the deponent who has been identified by the aforesaid advocate.

I have satisfied myself by examining the deponent that he understood the contents of the affidavit which has been read over and explained to him. He has also been explained about section 193 of Indian Penal Code that whoever intentionally gives false evidence in any of the proceedings of the Commission or fabricates evidence for purpose of being used in any of the proceedings shall be liable for punishment as per law.

(Handwritten signature)

(Notary Public)



This affidavit is sworn before me by Shri. Anil Prasad Rawkoti who is identified Shri. Anil Prasad Rawkoti at Dehradun on 2.1.19
KM. URMILASHATIA
Advocate & NOTARY, Dehradun.

BPC(C)(ii)



K.RAMACHANDRA RAO TRANSMISSION & PROJECTS PVT. LTD.

CIN : U40109TG2005PTL046728

Annexure - 1

Lr.No. KRRIPPL/UJVNL/Bernlgad/ 0875 /2018-19, Date. 24.10.2018.

To,
The Superintendent Engineer (Commercial),
Uttarakhand Power Corporation Ltd.
Victoria Cross Vijeya Gabar Singh Urja Bhawan,
Kanwali Road, Balliwala Chowk,
Dehradun-248001, Uttarakhand.

Sub: Development, Implementation & Operation of Bernlgad Small Hydro Power Project (22.8 MW) on the river Yamuna in Uttarkashi on BOT basis - Submission of expected commercial operation date - Reg:

Ref: 1) Your email Dated: 07.09.2018

Respected Sir,

Please refer your email dated 07.09.2018 vide which we were directed to submit Expected Commercial Operation Date (CoD) of Bernlgad SHP along with development report of Bernlgad project.

In this regard it is submitted that earlier Expected Commercial Operation Date (CoD) of Bernlgad SHP project was FY 2019-20, accordingly we have mentioned the same in the PPA entered into with UPCL.

It is further submitted that the statutory clearances and Financial Closure for our project Bernlgad SHP could not obtained within stipulated time frame due to delay in approval of revised cost approval of DPR, Forest Clearance, approval of CAT Plan, approach road for the connectivity of project site etc., which were beyond our control and accordingly we have requested Government of Uttarakhand to accord the time extension up to 21.02.2021 for getting statutory clearances and obtaining Financial Closure for the Bernlgad SHP.

Contd...(2)

ISO 9001 : 2015
I-1001 : 2015
I-1001 : 2007
Cert No: 170525091010N
1705250910201
1705250910301

Head Off : "PRAVEEN CHAMBERS", 305 B-Block, Kushal Towers, Khairatabad, HYDERABAD, (T.S) - 500 004.
 Phone : 040-23316151, 23316627, 66660023, Fax : 040-23305842, E-mail : tower@krrtppl.com
 B.O : A-1/28, Freedom Fighters Enclave, Neb Sarai, NEW DELHI - 110 068.
 B.O : 39/10/1, GF8, Anjana Appartments Labbipet, Vijayawada, KRISHINA Dist., (A.P) - 520 010.
 B.O : H.No. 38, Vivekanand Nagar, Jind, (HARYANA) - 126 102.
 B.O : H.No. 445, 2nd Cross, 3rd Stage, 3rd Block, Basaveswara Nagar, BANGALORE, (KARNATAKA) - 560 079
 B.O : H.No. HIG-199, Harmu Housing Colony, Near Central Bank, Sahjanandh Chowk, RANCHI (JHARKHAND)-834002
 B.O : 88/138A/1, Lukerganj, ALLAHABAD, (UP) - 211003.
 B.O : Flat No. 405, Dakshinoswari, Nandanapuri, Near Aslana, PATNA, (BIHAR) - 800 014.



2

We are continuously approaching and following up with various departments including Government of Uttarakhand for getting aforesaid approvals/clearances. However we have not received any communication/reply or approval from Government of Uttarakhand on the above issues.

After getting statutory approvals from various organization/institutions only, It is expected to obtain Financial Closure for the project by FY 2020-21. Accordingly expected Commercial Operation Date (CoD) of Bernigad project will be December, 2022. The detailed progress report of Bernigad project is enclosed for your kind information.

If any additional information/clarification is required/called for will be submitted immediately.

Thanking You,

Yours faithfully
for K. Ramachandra Rao Transmission
& Projects Pvt. Ltd.,

(K. Ramachandra Rao)
Managing Director

Copy Submitted to:

Managing Director, Uttarakhand Power Corporation Ltd, Dehradun.

Enclosure: I. Detailed progress report of Bernigad project

BP(C)(iii)

Annexure - 2



उत्तराखण्ड पावर कारपोरेशन लि०

(उत्तराखण्ड सरकार का उपक्रम)

Uttarakhand Power Corporation Ltd.

(A. Govt. of Uttarakhand Undertaking)

CIN : U40100UR2001SGC026607

Email ID: cgmupcl@yahoo.com, Website: www.upcl.org

Letter No. 1036 /UPCL/Com/RPO/MD

Date: 02.11/2018

Managing Director,
Solar Energy Corporation of India Ltd.,
1st Floor, Prilus Platinum,
D-3, District Center,
Saket, New Delhi-110017.

Special Port

Sub: Allocation of Wind/Solar Power from MNRE schemes to meet RPO at competitive rates under Section 63 of Electricity Act, 2003.

Sir,

In reference to above, kindly refer to your office letter no. SECI/RPO/PSA/2018/23357 dated 18-07-2018 wherein bidding trajectory of SECI upto 2021 and expected dates of signing and commissioning of project were provided. UPCL was also informed regarding auction to be conducted by SECI for RE capacity in order to obtain Wind and Solar power at very competitive rates (below Rs. 3.00/KWh) and to provide the same to obligated DISCOMs/States/UTs to fulfil Solar and Non-Solar RPO obligations.

In this regard, UPCL hereby confirms and agrees to sign the PPA for the quantum of Solar and Non-Solar RE Power as provided hereunder:

PPA signing Quarter	Solar (MW)	Non-Solar (MW)	Expected CoD
Qtr-3 (Oct-18 to Dec-18)	200	100	Qtr-3 (Oct-20 to Dec-20)
Qtr-1 (Apr-19 to June-19)	200	100	Qtr-1 (Apr-21 to June-21)

The consent for above quantum of Solar and Non-Solar power shall remain subject to ceiling of maximum tariff of Rs. 3.00/KWh to be discovered during e-reverse auction and the tentative timelines given in the proposal. In case there is any deviation in the timelines or in the tariff discovered in e-reverse auction beyond Rs. 3.00/KWh, UPCL reserves the right to reconsider above consent.

Yours sincerely,

(B.C.K. Mishra)
Managing Director

Annexure - 3

Rural Household Access Details

Annexure-11
(Amount is in lacs)

S.No.	Scope of Work (Head)	Scope of Work (Detail)	Unit	Name of District															
				Dehradun		Haridwar		Uttarkashi		Pauri Garhwal		Tehri Garhwal		Rudraprayag		Chamoli		Garhwal	
				Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.
1	Connecting / UnConnecting HHS																		
A	BPL Hhs																		
		Total BPL Hhs proposed to be electrified	Nos.	8825	264.75	14635	439.05	13001	390.03	3493	104.79	6764	202.92	4279	128.37	2317	69.51	53314	1599.42
B	New 11 KV Line DTR																		
		25 KVA (3 Ph)	Nos.	388	948.57	31	74.83	472	1153.94	349	853.23	529	1293.29	117	286.04	466	1139.27	2352	5749.17
C	New 11 KV Spur Line																		
		11 KV Rabbit Conductor	Kms.	249.02	2259.69	34.11	305.77	293.94	2667.31	244.9	2222.30	313.47	2844.53	77.84	706.35	340.45	3089.35	1553.7	14095.29
D	New LT AB Cable																		
		2X35+1X16	Kms.	229.73	844.72	36.06	130.94	284.73	1046.96	189.32	696.13	312.51	1149.11	87.56	321.96	358.6	1318.58	1498.5	5508.40
		3X35+1X35+1X16	Kms.	170.95	991.14	20.78	118.97	226.86	1315.30	147.7	856.34	273.97	1588.44	51.82	300.45	227.15	1316.98	1119.2	6487.63
E	Total			5308.88		1069.58		6573.53		4732.80		7078.28		1743.16		6933.69		33439.92	

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Rural Household Access Details

Annexure-11

(Amount is in lacs)

S.No.	Scope of Work (Head)	Scope of Work (Detail)	Unit	Name of District													
				Nainital		US Nagar		Almora		Bageshwar		Pithoragarh		Champawat		Kumaun	
				Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.
1	Connecting / UnConnecting HHs																
A	BPL Hhs																
		Total BPL Hhs proposed to be electrified	Nos.	4652	139.56	11730	351.90	1527	45.81	10268	308.04	5786	173.58	5462.00	163.86	39425	1182.75
B	New 11 KV Line DTR																
		25 KVA (3 Ph)	Nos.	119	290.93	103	248.64	169	413.17	86	210.25	197	481.62	238.00	581.86	912	2226.47
C	New 11 KV Spur Line																
		11 KV Rabbit Conductor	Kms.	76.37	693.01	42.24	378.65	101.19	918.23	64.24	582.93	144.24	1308.88	103.19	936.38	531.47	4818.08
D	New LT AB Cable																
		2X35+1X16	Kms.	72.65	267.14	47.77	173.47	111.07	408.41	54.98	202.16	138.47	509.16	110.01	404.51	534.95	1964.84
		3X35+1X35+1X16	Kms.	53.31	309.08	30.97	177.32	81.14	470.44	44.92	260.44	78.47	454.96	56.99	330.42	345.8	2002.66
E	Sarvarkheda-town Feeder	Poles				1075	268.26									1075	268.26
F	Total			1699.71		1598.23		2256.05		1563.83		2928.20		2417.03		12463.05	

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Metering Details

Annexure-11
(Amount is in lacs)

S.No.	Scope of Work (Head)	Scope of Work (Detail)	Unit	Name of District															
				Dehradun		Haridwar		Uttarkashi		Pauri Garhwal		Tehri Garhwal		Rudraprayag		Chamoli		Garhwal	
				Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.
1	Metering																		
A	LT Metering (Consumer Metering)																		
		Replacement of Electro-Mechanical Meters (1-Ph Domestic and Commercial Meters)	Nos.	10500	166.53	0	0.00	10000	158.60	6000	95.16	0	0.00	3500	55.51	7000	111.02	37000	586.82
		Replacement of Electro-Mechanical Meters (3-Ph Domestic and Commercial Meters)	Nos.	319	13.46	0	0.00	510	21.52	0	0.00	0	0.00	0	0.00	100	4.22	929	39.19
B	LT Metering (Shifting of Meter)																		
		Total Requirement of shifting of meters outside (1-Ph Domestic and Commercial Meters)	Nos.	24250	644.81	23500	617.11	2500	66.48	2000	53.18	0	0.00	2500	66.48	10000	265.90	64750	1713.95
		Total Requirement of shifting of meters outside (3-Ph Domestic and Commercial Meters)	Nos.	3850	164.24	3350	141.14	500	21.33	20	0.85	0	0.00	300	12.80	200	8.53	8220	348.89
C	Total			989.04		758.25		267.92		149.19		0.00		134.78		389.67		2688.85	

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Metering Details

Annexure-11

(Amount is in lacs)

S.No.	Scope of Work (Head)	Scope of Work (Detail)	Unit	Name of District													
				Nainital		US Nagar		Almora		Bageshwar		Pithoragarh		Champawat		Kumaun	
				Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.	Qty.	Amt.
1	Metering																
A	LT Metering (Consumer Metering)																
		Replacement of Electro-Mechanical Meters (1-Ph Domestic and Commercial Meters)	Nos.	11497	182.34	300	4.70	16825	266.84	0	0.00	1000	15.86	0	0.00	29622	469.74
		Replacement of Electro-Mechanical Meters (3-Ph Domestic and Commercial Meters)	Nos.	0	0.00	100	4.17	0	0.00	0	0.00	0	0.00	0	0.00	100	4.17
B	LT Metering (Shifting of Meter)																
		Total Requirement of shifting of meters outside (1-Ph Domestic and Commercial Meters)	Nos.	2196	58.39	13712	360.08	540	14.36	3000	79.77	15000	398.85	4000	106.36	38448	1017.81
		Total Requirement of shifting of meters outside (3-Ph Domestic and Commercial Meters)	Nos.	311	13.27	3465	145.98	84	3.58	100	4.27	200	8.53	500	21.33	4660	196.96
C	Total				254.00		514.92		284.79		84.04		423.24		127.69		1688.68

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POWER FINANCE CORPORATION LTD.

Cost Benefits Analysis

Particulars	Units	Base Year	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year10	Year11	Year12
Total Project Cost (Rs.)	INR Crores	188.73												
Project Cost (phasing)	INR Crores		75.49	113.24	-									
Total Input (Units)	MU	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25
AT&C Losses	%	33.0%	30.0%	25.0%	15.0%	15.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Total Units for which revenue is realised	MU	123.45	128.98	138.19	156.62	156.62	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83
Average Tariff	(INR/Unit)	5.10	5.20	5.31	5.41	5.52	5.63	5.74	5.86	5.98	6.09	6.22	6.34	6.47
Total Realisation	INR Crores	62.96	67.09	73.32	84.76	86.46	93.38	95.24	97.15	99.09	101.07	103.09	105.16	107.26
Depreciation Charges					9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44
O&M Charges					3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77
Depreciation & O&M Charges	INR Crores				13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21
Incremental Benefit	INR Crores		4.13	10.36	8.59	10.29	17.20	19.07	20.98	22.92	24.90	26.92	28.98	31.09
Net Cash Flow		-	(71.36)	(102.87)	8.59	10.29	17.20	19.07	20.98	22.92	24.90	26.92	28.98	31.09

IRR
Payback Period

13.8%
9

Note:-

The Input Units shall be assumed to be constant and shall be equal to input considered for base year
 The Average Tariff shall be assumed to be increase by average 2% every year
 Depreciation @ 5 % and O & M Charges @ 2 %

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Cost Benefits Analysis

Particulars	Units	Year-13	Year-14	Year-15	Year-16	Year-17	Year-18	Year-19	Year-20	Year-21	Year-22
Total Project Cost (Rs.)	INR Crores										
Project Cost (phasing)	INR Crores										
Total Input (Units)	MU	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25
AT&C Losses	%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Total Units for which revenue is realised	MU	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83
Average Tariff	(INR/Unit)	6.60	6.73	6.86	7.00	7.14	7.28	7.43	7.58	7.73	7.88
Total Realisation	INR Crores	109.40	111.59	113.82	116.10	118.42	120.79	123.21	125.67	128.18	130.75
Depreciation Charges		9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	
O&M Charges		3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77
Depreciation & O&M Charges	INR Crores	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	3.77
Incremental Benefit	INR Crores	33.23	35.42	37.65	39.93	42.25	44.62	47.04	49.50	52.01	64.01
Net Cash Flow		33.23	35.42	37.65	39.93	42.25	44.62	47.04	49.50	52.01	64.01

IRR
Payback Period

Note:-

The Input Units shall be assumed to be constant
The Average Tariff shall be assumed to be increasing
Depreciation @ 5 % and O & M Charges @ 2

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Cost Benefits Analysis

Particulars	Units	Year-23	Year-24	Year-25	Year-26	Year-27	Year-28	Year-29	Year-30
Total Project Cost (Rs.)	INR Crores								
Project Cost (phasing)	INR Crores								
Total Input (Units)	MU	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25
AT&C Losses	%	10.0%	10.0%	10.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Total Units for which revenue is realised	MU	165.83	165.83	165.83	169.51	169.51	169.51	169.51	169.51
Average Tariff	(INR/Unit)	8.04	8.20	8.37	8.53	8.71	8.88	9.06	9.24
Total Realisation	INR Crores	133.36	136.03	138.75	144.67	147.56	150.52	153.53	156.60
Depreciation Charges									
O&M Charges		3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77
Depreciation & O&M Charges	INR Crores	3.77	3.77	3.77	3.77	3.77	3.77	3.77	3.77
Incremental Benefit	INR Crores	66.63	69.30	72.02	77.94	80.83	83.78	86.79	89.86
Net Cash Flow		66.63	69.30	72.02	77.94	80.83	83.78	86.79	89.86

**IRR
Payback Period**

Note:-

The Input Units shall be assumed to be constant
 The Average Tariff shall be assumed to be increasing
 Depreciation @ 5 % and O & M Charges @ 2

POWER FINANCE CORPORATION LTD.

Cost Benefits Analysis

Particulars	Units	Base Year	Year-1	Year-2	Year-3	Year-4	Year-5	Year-6	Year-7
Total Project Cost (Rs.)	INR Crores	199.74							
Project Cost (phasing)	INR Crores		79.90	119.84	-				
Total Input (Units)	MU	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25
AT&C Losses	%	33.0%	30.0%	25.0%	15.0%	15.0%	10.0%	10.0%	10.0%
Total Units for which revenue is realised	MU	123.45	128.98	138.19	156.62	156.62	165.83	165.83	165.83
Average Tariff	(INR/Unit)	5.10	5.20	5.31	5.41	5.52	5.63	5.74	5.86
Total Realisation	INR Crores	62.96	67.09	73.32	84.76	86.46	93.38	95.24	97.15
Depreciation Charges					9.99	9.99	9.99	9.99	9.99
O&M Charges					3.99	3.99	3.99	3.99	3.99
Depreciation & O&M Charges	INR Crores				13.98	13.98	13.98	13.98	13.98
Incremental Benefit	INR Crores		4.13	10.36	7.82	9.52	16.43	18.30	20.21
Net Cash Flow		-	(75.76)	(109.48)	7.82	9.52	16.43	18.30	20.21
	IRR		13.0%						
	Payback Period		10						

Note:-

The Input Units shall be assumed to be constant and shall be equal to input considered for base year

The Average Tariff shall be assumed to be increase by average 2% every year

Depreciation @ 5 % and O & M Charges @ 2 %





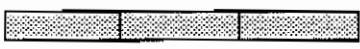
Year-8 Year-9 Year-10 Year-11 Year-12 Year-13 Year-14 Year-15 Year-16 Year-17 Year-18 Year-19 Year-20 Year-21 Year-22

184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25
10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83	165.83
5.98	6.09	6.22	6.34	6.47	6.60	6.73	6.86	7.00	7.14	7.28	7.43	7.58	7.73	7.88
99.09	101.07	103.09	105.16	107.26	109.40	111.59	113.82	116.10	118.42	120.79	123.21	125.67	128.18	130.75
9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	
3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99
13.98	13.98	13.98	13.98	13.98	13.98	13.98	13.98	13.98	13.98	13.98	13.98	13.98	13.98	3.99
22.15	24.13	26.15	28.21	30.32	32.46	34.65	36.88	39.16	41.48	43.85	46.27	48.73	51.24	63.79
22.15	24.13	26.15	28.21	30.32	32.46	34.65	36.88	39.16	41.48	43.85	46.27	48.73	51.24	63.79

41

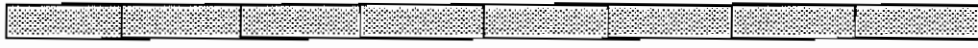


Year-23 Year-24 Year-25 Year-26 Year-27 Year-28 Year-29 Year-30



184.25	184.25	184.25	184.25	184.25	184.25	184.25	184.25
10.0%	10.0%	10.0%	8.0%	8.0%	8.0%	8.0%	8.0%

165.83	165.83	165.83	169.51	169.51	169.51	169.51	169.51
8.04	8.20	8.37	8.53	8.71	8.88	9.06	9.24
133.36	136.03	138.75	144.67	147.56	150.52	153.53	156.60



3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99
3.99	3.99	3.99	3.99	3.99	3.99	3.99	3.99
66.41	69.08	71.80	77.72	80.61	83.56	86.57	89.64
66.41	69.08	71.80	77.72	80.61	83.56	86.57	89.64

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Annexure - 5

No. of DTs to be installed / replaced from FY 2019-20 to 2021-22

Sl. No.	Name of Division	Transformer in KVA						Total
		25	63	100	250	400	500	
Garhwal Zone								
Electricity Distribution Circle(Rural), Dehradun								
1	Dehradun(Rural)	24	77	8	7	1	0	117
2	Rishikesh	12	26	4	4	1	0	46
3	Vikasnagar	43	62	3	1	0	0	110
4	Doiwala	11	29	2	2	0	0	44
Total EDC, Dehradun(Rural)		90	195	17	14	2	0	318
Electricity Distribution Circle(Urban), Dehradun								
5	Dehradun(North)	3	13	4	6	2	0	28
6	Dehradun(South)	1	26	6	9	2	0	43
7	Dehradun(Central)	2	22	3	10	2	0	38
Total EDC, Dehradun(Urban)		5	62	13	25	6	0	110
Electricity Distribution Circle, Tehri								
8	Tehri	93	97	2	3	1	0	197
9	Uttarkashi	52	48	1	2	0	0	104
Total EDC, Tehri		145	145	4	5	1	0	300
Electricity Distribution Circle, Srinagar								
10	Srinagar	45	39	1	2	1	0	87
11	Kotdwar	78	64	3	3	1	0	148
12	Rudraprayag	45	45	1	1	0	0	92
13	Gopeshwar	40	22	0	1	0	0	64
14	Pauri	42	69	2	1	0	0	114
15	Narayanbagar	53	18	0	0	0	0	72
Total EDC, Srinagar		303	257	7	8	2	0	577
Total Garhwal Zone		544	658	40	52	11	0	1305
Haridwar Zone								
Electricity Distribution Circle, Roorkee								
16	Roorkee(Urban)	109	53	3	2	1	3	171
17	Ramnagar	44	30	2	4	1	3	85
18	Roorkee(Rural)	161	82	3	3	0	5	255
	Bhagwanpur	151	131	4	2	0	1	289
Total EDC, Roorkee		465	296	12	11	3	12	800
Electricity Distribution Circle, Haridwar								
19	Haridwar(Urban)	5	35	4	5	2	0	52
20	Haridwar(SIDCUL-Rural)	4	20	2	0	0	0	26
21	Laksar	165	61	5	3	0	0	235
22	Jwalapur	34	81	6	7	4	0	132
Total EDC, Haridwar		209	198	17	15	6	0	445
Total Haridwar Zone		674	495	30	26	9	12	1246

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Sl. No.	Name of Division	Transformer in KVA						Total
		25	63	100	250	400	500	
Kumaon Zone								
Electricity Distribution Circle, Haldwani								
24	Nainital	60	63	2	4	1	3	131
25	Ramnagar	34	86	4	3	1	0	127
26	Haldwani(Urban)	3	19	5	5	2	0	35
27	Haldwani(Rural)	13	84	8	7	0	0	112
Total EDC, Haldwani		110	251	19	18	3	3	405
Electricity Distribution Circle, Kashipur								
25	Kashipur	60	95	4	4	1	1	167
26	Jaspur	78	62	4	2	0	0	147
27	Bazpur	101	90	2	2	1	0	196
Total EDC, Kashipur		240	248	10	8	2	1	510
Electricity Distribution Circle, Ranikhet								
28	Ranikhet	42	33	1	1	0	0	76
29	Bhikyasen	42	15	0	0	0	0	58
29	Almora	55	42	1	1	0	0	100
30	Bageshwar	68	30	0	1	0	0	99
Total EDC, Ranikhet		206	120	3	3	1	0	333
Total Kumaon Zone		556	619	33	30	6	4	1248
Rudrapur Zone								
Electricity Distribution Circle, Rudrapur								
31	Rurapur	170	196	10	7	2	7	392
32	Sitarganj	95	155	6	2	1	5	264
Total EDC, Rudrapur		266	351	16	9	3	12	656
Electricity Distribution Circle, Pithoragarh								
33	Pithoragarh	69	38	1	1	0	1	110
34	Dharchula	44	16	0	1	0	0	61
35	Champawat	48	24	1	1	0	0	74
Total EDC, Pithoragarh		161	78	2	3	1	1	246
Total Rudrapur Zone		427	429	18	12	3	13	902
Total UPCL		2200	2200	120	120	30	30	4700

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(5)

Details of providing protection system on the DTs for FY 2019-20

S. No.	Name of Divisions	63 and 100 KVA	250 KVA and Above	Providing ACB on the transformers having capacity of 250 KVA and above	Rs. Cr.	Providing MCCB on the transformers having capacity of 63 KVA and 100 KVA	Rs. Cr.	Providing fencing on the transformers having capacity of 250 KVA and above	Rs. Cr.	Providing plinth on the transformers having capacity of 250 KVA and above	Rs. Cr.	Providing TPMS / Go swith	Rs. Cr.	Total Cost (Rs. Cr.)
Garhwal Zone														
Electricity Distribution Circle(Rural), Dehradun														
1	Dehradun(Rural)	1083	217	39	0.49	261	0.70	24	0.10	12	0.03	175	0.22	1.53
2	Rishikesh	458	143	26	0.32	111	0.30	16	0.06	8	0.02	81	0.10	0.80
3	Vikasnagar	614	49	9	0.11	148	0.40	5	0.02	3	0.01	89	0.11	0.65
4	Doiwala	301	43	8	0.10	73	0.20	5	0.02	2	0.01	46	0.06	0.37
Total EDC, Dehradun(Rural)		2456	452	81	1.01	593	1.60	51	0.20	25	0.06	391	0.49	3.35
Electricity Distribution Circle(Urban), Dehradun														
5	Dehradun(North)	452	239	43	0.53	109	0.29	27	0.11	13	0.03	93	0.12	1.08
6	Dehradun(South)	640	295	53	0.66	154	0.42	33	0.13	17	0.04	126	0.15	1.40
7	Dehradun(Central)	355	365	65	0.82	86	0.23	41	0.16	20	0.04	97	0.12	1.38
Total EDC, Dehradun(Urban)		1447	899	161	2.01	349	0.94	101	0.40	50	0.11	316	0.39	3.86
Electricity Distribution Circle, Tehri														
8	Tehri	694	116	21	0.26	167	0.45	13	0.05	6	0.01	109	0.14	0.91
9	Uttarkashi	368	67	12	0.15	89	0.24	7	0.03	4	0.01	59	0.07	0.50
Total EDC, Tehri		1062	183	33	0.41	256	0.69	20	0.08	10	0.02	167	0.21	1.41
Electricity Distribution Circle, Srinagar														
10	Srinagar	260	76	14	0.17	63	0.17	9	0.03	4	0.01	45	0.06	0.44
11	Kotdwar	539	109	20	0.24	130	0.35	12	0.05	6	0.01	87	0.11	0.77
12	Rudraprayag	299	21	4	0.05	72	0.19	2	0.01	1	0.00	43	0.05	0.31
13	Gopeshwar	142	40	7	0.09	34	0.09	4	0.02	2	0.00	24	0.03	0.24
14	Pauri	484	30	5	0.07	117	0.31	3	0.01	2	0.00	69	0.09	0.49
15	Narayanbagar	132	14	3	0.03	32	0.09	2	0.01	1	0.00	20	0.02	0.15
Total EDC, Srinagar		1856	290	52	0.65	448	1.21	32	0.13	16	0.04	289	0.36	2.38
Total Garhwal Zone		6821	1824	327	4.08	1646	4.43	204	0.82	102	0.22	1163	1.45	11.01
Haridwar Zone														
Electricity Distribution Circle, Roorkee														
16	Roorkee(Urban)	510	117	21	0.26	123	0.33	13	0.05	7	0.01	84	0.11	0.77
17	Ramnagar	347	158	28	0.35	84	0.23	18	0.07	9	0.02	68	0.08	0.75
18	Roorkee(Rural)	712	92	16	0.21	172	0.46	10	0.04	5	0.01	108	0.14	0.86
	Bhagwanpur	979	64	11	0.14	236	0.64	7	0.03	4	0.01	140	0.18	0.99
Total EDC, Roorkee		2548	431	77	0.96	615	1.66	48	0.19	24	0.05	401	0.50	3.37
Electricity Distribution Circle, Haridwar														
19	Haridwar(Urban)	575	238	43	0.53	139	0.37	27	0.11	13	0.03	109	0.14	1.18
20	Haridwar(SIDCUL-Rural)	261	12	2	0.03	63	0.17	1	0.01	1	0.00	37	0.05	0.25
21	Laksar	785	72	13	0.16	189	0.51	8	0.03	4	0.01	115	0.14	0.86
22	Jwalapur	914	360	64	0.81	221	0.59	40	0.16	20	0.04	171	0.21	1.82
Total EDC, Haridwar		2535	682	122	1.53	612	1.65	76	0.31	38	0.08	433	0.54	4.10
Total Haridwar Zone		5083	1113	199	2.49	1227	3.30	125	0.50	62	0.14	834	1.04	7.47

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S. No.	Name of Divisions	63 and 100 KVA	250 KVA and Above	Providing ACB on the transformers having capacity of 250 KVA and above	Rs. Cr.	Providing MCCB on the transformers having capacity of 63 KVA and 100 KVA	Rs. Cr.	Providing fencing on the transformers having capacity of 250 KVA and above	Rs. Cr.	Providing plinth on the transformers having capacity of 250 KVA and above	Rs. Cr.	Providing TPMO / Go swith	Rs. Cr.	Total Cost (Rs. Cr.)
Kumaon Zone														
Electricity Distribution Circle, Haldwani														
21	Nainital	461	125	22	0.28	111	0.30	14	0.06	7	0.02	79	0.10	0.75
22	Ramnagar	798	92	16	0.21	193	0.52	10	0.04	5	0.01	120	0.15	0.93
23	Haldwani(Urban)	553	209	37	0.47	133	0.36	23	0.09	12	0.03	103	0.13	1.07
24	Haldwani(Rural)	1141	186	33	0.42	275	0.74	21	0.08	10	0.02	179	0.22	1.49
Total EDC, Haldwani		2953	612	110	1.37	713	1.92	68	0.27	34	0.08	480	0.60	4.24
Electricity Distribution Circle, Kashipur														
25	Kashipur	862	180	32	0.40	208	0.56	20	0.08	10	0.02	140	0.18	1.24
26	Jasgur	632	76	14	0.17	153	0.41	9	0.03	4	0.01	95	0.12	0.74
27	Bazpur	621	73	13	0.16	150	0.40	8	0.03	4	0.01	93	0.12	0.73
Total EDC, Kashipur		2115	329	59	0.74	510	1.37	37	0.15	18	0.04	329	0.41	2.71
Electricity Distribution Circle, Ranikhet														
28	Ranikhet	242	29	5	0.06	58	0.16	3	0.01	2	0.00	36	0.05	0.28
29	Bhikyasen	113	12	2	0.03	27	0.07	1	0.01	1	0.00	17	0.02	0.13
29	Almora	338	43	8	0.10	82	0.22	5	0.02	2	0.01	51	0.06	0.40
30	Bageshwar	191	30	5	0.07	46	0.12	3	0.01	2	0.00	30	0.04	0.25
Total EDC, Ranikhet		884	114	20	0.26	213	0.57	13	0.05	6	0.01	134	0.17	1.06
Total Kumaon Zone		5952	1055	189	2.36	1436	3.87	118	0.47	59	0.13	943	1.18	8.01
Rudrapur Zone														
Electricity Distribution Circle, Rudrapur														
31	Rurapur	1849	290	52	0.65	446	1.20	32	0.13	16	0.04	288	0.36	2.38
32	Sitarganj	1282	79	14	0.18	309	0.83	9	0.04	4	0.01	183	0.23	1.28
Total EDC, Rudrapur		3131	369	66	0.83	756	2.03	41	0.17	21	0.05	471	0.59	3.66
Electricity Distribution Circle, Pithoragarh														
33	Pithoragarh	270	52	9	0.12	65	0.18	6	0.02	3	0.01	43	0.05	0.38
34	Dharchula	107	19	3	0.04	26	0.07	2	0.01	1	0.00	17	0.02	0.14
35	Champawat	184	36	6	0.08	44	0.12	4	0.02	2	0.00	30	0.04	0.26
Total EDC, Pithoragarh		561	107	19	0.24	135	0.36	12	0.05	6	0.01	90	0.11	0.78
Total Rudrapur Zone		3692	476	85	1.07	891	2.40	53	0.21	27	0.06	561	0.70	4.44
Total UPCL		21548	4468	800	10.00	5200	14.00	500	2.00	250	0.55	3500	4.37	30.92

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Distribution Transformers failure rate

S. No.	Name of Division	2017-18		
		Inst.	Damg.	Damg. %
Garhwal Zone				
Electricity Distribution Circle(Rural), Dehradun				
1	Dehradun(Rural)	1765	201	11.39%
2	Rishikesh	814	73	8.97%
3	Vikasnagar	1628	243	14.93%
4	Doiwala	566	62	10.95%
Total EDC, Dehradun(Rural)		4773	579	12.13%
Electricity Distribution Circle(Urban), Dehradun				
5	Dehradun(North)	746	28	3.75%
6	Dehradun(South)	973	59	6.06%
7	Dehradun(Central)	777	28	3.60%
Total EDC, Dehradun(Urban)		2496	115	4.61%
Electricity Distribution Circle, Tehri				
8	Tehri	3814	341	8.94%
9	Uttarkashi	1608	84	5.22%
Total EDC, Tehri		5422	425	7.84%
Electricity Distribution Circle, Srinagar				
10	Srinagar	1400	134	9.57%
11	Pauri	1404	106	7.55%
12	Kotdwar	2865	194	6.77%
13	Gopeshwar	950	73	7.68%
14	Rudraprayag	1769	153	8.65%
15	Narayanbagar	1140	114	10.00%
Total EDC, Srinagar		9528	774	8.12%
Total Garhwal Zone		22219	1893	8.52%
Haridwar Zone				
Electricity Distribution Circle, Roorkee				
16	Roorkee(Urban)	2391	232	9.70%
17	Ramnagar	1205	136	
18	Roorkee(Rural)	3320	385	11.60%
19	Bhagwanpur	3405	238	6.99%
Total EDC, Roorkee		10321	991	9.60%
Electricity Distribution Circle, Haridwar				
20	Haridwar(Urban)	904	66	7.30%
21	Laksar	3419	245	7.17%
22	Haridwar(SIDCUL-Rural)	334	91	27.25%
23	Jwalapur	1829	113	6.18%
Total EDC, Haridwar		6486	515	7.94%
Total Haridwar Zone		16807	1506	8.96%

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S. No.	Name of Division	2017-18		
		Inst.	Damg.	Damg. %
Kumaon Zone				
Electricity Distribution Circle, Haldwani				
24	Nainital	1583	83	5.24%
25	Ramnagar	1421	44	3.10%
26	Haldwani(Urban)	825	28	3.39%
27	Haldwani(Rural)	1558	51	3.27%
Total EDC, Haldwani		5387	206	3.82%
Electricity Distribution Circle, Kashipur				
28	Kashipur	2153	114	5.29%
29	Jaspur	1918	103	5.37%
30	Bazpur	2263	134	5.92%
Total EDC, Kashipur		6334	351	5.54%
Electricity Distribution Circle, Ranikhet				
31	Ranikhet	1157	81	7.00%
32	Bhikyasen	1189	111	9.34%
33	Almora	1802	154	8.55%
34	Bageshwar	1725	152	8.81%
Total EDC, Ranikhet		5873	498	8.48%
Total Kumaon Zone		17594	1055	6.00%
Rudrapur Zone				
Electricity Distribution Circle, Rudrapur				
35	Rudrapur	4783	396	8.28%
36	Sitarganj	2888	272	9.42%
Total EDC, Rudrapur		7671	668	8.71%
Electricity Distribution Circle, Pithoragarh				
37	Pithoragarh	2143	76	3.55%
38	Dharchula	1327	69	5.20%
39	Champawat	1313	119	9.06%
Total EDC, Pithoragarh		4783	264	5.52%
Total Rudrapur Zone		12454	932	7.48%
Total UPCL		69074	5386	7.80%

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