

Before
UTTARAKHAND ELECTRICITY REGULATORY COMMISSION
Petition No. 05 of 2016

In the Matter of:

Petition seeking approval on the projects covering construction of 16 Nos. 33/11 kV substation and their associated lines of 131.34 Km.

And

In the Matter of:

Uttarakhand Power Corporation Limited. (UPCL),
Victoria Cross, Vijeyta Gabar Singh Bhawan,
Urja Bhawan, Kanwali Road,
Dehradun.

.....Petitioner

Coram

Shri Subhash Kumar	Chairman
Shri K.P. Singh	Member

Date of Order: December 08, 2016

ORDER

This Order relates to the Petition filed by Uttarakhand Power Corporation Limited (hereinafter referred to as "UPCL" or "the Petitioner" or "the licensee") seeking approval of the Commission for Capital Investment for project covering the construction of 16 Nos. 33/11 kV substation and their associated lines of 131.34 Km.

Background & Petitioner's Submissions

2. The Petitioner vide its letter No. 5324/UPCL/Comm/RMC-6(D(P) dated 16.12.2015 submitted an Application seeking approval for investment on the project covering the construction of 16 Nos. 33/11 kV substation and their associated lines of 131.34 Km under the provisions of UERC (Conduct of Business)

Regulations, 2014 and clause 11 of the Distribution and Retail Supply License [License No. 2 of 2003] for the following 33/11 kV Substations & lines:

Sl. No.	Name of the S/s	Capacity (MVA)	Length of 33 kV line (Km)	Total Cost (Rs. in Crore)
Garhwal Zone				
1.	Doordarshan Kendra, Dehradun	2 X 10	6	5.32
2.	IHM Nibuwala, Dehradun	2x10	0.10	4.49
3.	Chalang Sahastradhara Road, Dehradun	2 x 8	15	5.28
4.	Maroda, Saklana Patti, Tehri	1x3	20	7.08
5.	Tharali, Chamoli	1x3	1.2	2.50
6.	Mehalchauri, Chamoli	1 X 5	4	3.96
7.	Bharadisain, Gairsain, Chamoli	2 X 10	10	12.53
8.	Adi Badri, Chamoli	1 X 3	3	3.21
Total Garhwal Zone			59.30	44.37
Kumaon Zone				
9.	Khatima Town, Sitarganj	2 X 10	8.50	5.49
10.	Rehta, Vikrampur, Bazpur	2 X 8	11.50	5.57
11.	Reemabanlekh, Bageshwar	1 X 3	15	4.73
12.	Jainti, Almora	1 X 5	1.30	3.02
13.	Mohanary, Almora	1x5	26	7.58
14.	Bhamrola, Malsa Road, Rudrapur	2x8	0.60	3.47
15.	Gangapur Atarya Road, Rudrapur	2 x 5	4.90	3.89
16.	Aliganj Road, Kashipur	2 x 8	4.21	4.97
Total Kumaon Zone			72.01	38.72
Total Uttarakhand			131.31	83.09

3. The Commission heard the matter on 19.01.2016 for admissibility and observed that out of 16 nos. of proposed projects, the resolutions of Board of Directors (BoD) of the Petitioner Company have been provided for 11 projects only. The Commission took cognizance of the same w.r.t. Regulation 10(2) of UERC (Conduct of Business) Regulations, 2014 wherein, the approval of Board is pre-requisite for admission of the investment Petitions. Therefore, an Order dated 19.01.2016 was issued by the Commission holding that:

“

- (1) *The Petition be admitted w.r.t. 11 projects complying with the CBR in totality.*
- (2) *Remaining projects may be brought before the Commission through separate Petition(s) in accordance with the provision of UERC (Conduct of Business) Regulations, 2014.”*

4. Accordingly, the Commission admitted only following 11 nos. proposals for further scrutiny/examination out of total 16 nos. proposals submitted by the Petitioner:

Sl. No	Name of the S/s	Capacity (MVA)	Length of 33 kV line (KM)	Estimated cost of Substation	Estimated cost of line	Total Cost (Rs. Crore)
Garhwal Zone						
1.	Doordarshan Kendra, Dehradun	2 X 10	6	3.55	1.77	5.32
2.	Chalang Sahastradhara Road, Dehradun	2 x 8	15	3.57	1.71	5.28
3.	Mehalchauri, Chamoli	1 X 5	4	2.92	1.04	3.96
4.	Bharadisain, Gairsain, Chamoli	2 X 10	10	9.37	3.16	12.53
5.	Adi Badri, Chamoli	1 X 3	3	1.52	1.69	3.21
Total Garhwal Zone		64	38	20.93	9.37	30.30
Kumaon Zone						
6.	Khatima Town, Sitarganj	2 X 10	8.50	3.67	1.82	5.49
7.	Rehta, Vikrampur, Bazpur	2 X 8	11.50	3.41	2.16	5.57
8.	Reemabanlekh, Bageshwar	1 X 3	15	2.12	2.61	4.73
9.	Jainti, Almora	1 X 5	1.30	2.79	0.23	3.02
10.	Gangapur Atarya Road, Rudrapur	2 x 5	4.90	3.01	0.88	3.89
11.	Aliganj Road, Kashipur	2 x 8	4.24	3.93	1.04	4.97
Total Kumaon Zone		70	45.44	18.93	8.74	27.67
Grand Total		134	83.44	39.86	18.11	57.97

5. With regard to funding of these projects, the Petitioner has submitted that same will be met through loan from REC and Equity from State Government in the ratio of 70:30, respectively.
6. On preliminary examination of the Petitions, the Commission vide letter No. 246 dated 12.05.2016 directed the Petitioner to furnish information/clarification/data on the following deficiencies/infirmities for further scrutiny/analysis of the Petition:

“

1. For calculating the net profit, cost benefit and payback period for each scheme UPCL has anticipated load in 1st year after construction at each S/s. Which seems to be on a higher side.
UPCL is required to submit the basis of anticipating the load in the 1st year and subsequent years.
2. While calculating the payback period, the total cost of energy billed has been taken into account in 1st and the subsequent years. The Commission has observed that the energy being fed to the area by the new/proposed substation must have been fed by other substations/feeders in present scenario and therefore, the energy billed at the

old substation will be reduced proportionately with the installation of new proposed substation. Hence, for calculation of energy billed/cost benefit analysis for the new proposed substation, the expected future load should only be considered.

UPCL is required to clarify the same.

3. *The payback period for 11 Nos. substations (excluding 5 nos. substations having no BOD approval) varies from 0.89 years to 13.97 years, the same should be re-examined in light of points 1 & 2 above. Moreover, the other expenditures like O&M expenditures, depreciation and other expenses, if any, are also required to be considered for arriving at a realistic payback period.*

UPCL is required to re-examine and submit the revised document including O&M expenditures, depreciation and other expenses, if any.

4. *UPCL is required to submit the voltage profile of the feeders being fed by the old feeders for the area where new substations have been proposed.*
5. *The Single Line Diagram (SLD) of the existing and proposed S/s with their interconnection to 33/11 kV or 132/33 kV S/s alongwith their loading should be provided in order to justify the construction of S/s and the reliability of supply.*
6. *It has been observed that some substations are getting loaded to 60% or more to their rated capacity in the 1st year of their installation and even in the S/s where single Transformers have been proposed. This will cause a larger area to be affected in case of breakdown of the Transformer installed at the S/s.*

UPCL is required to review its proposal where only 1 no. Transformer has been installed at the proposed S/s w.r.t. Regulation 48.4 & 48.6 of CEA (Technical Standards for construction of Electric Plants and Electric Lines) Regulations, 2010.

7. *Cost estimates for the supply in works are not supported by rate schedules for E&M and Civil works.*

UPCL is required to furnish the rate schedules alongwith justification for variation in cost for same capacity of substation/length of 33 kV line.

8. *UPCL is required to submit the status of clearance for railway crossing works in Doordarshan Kendra -Dehradun, Aliganj Road- Kashipur and Khatima town proposal.*
9. *UPCL is required to submit the assurance of GoU for providing 30% equity funding.*
10. *UPCL in its petition under abstract of details of 33/11 kV S/s and lines proposed for FY 2015-16 has submitted that "Total cost of the project for construction of 16 nos.*

33 kV S/s and 131.34 Km 33 kV line during FY 2015-16 is approx. Rs. 83.09 Crore. This cost shall be met through internal resources.”

UPCL is required to clarify the same.

11. UPCL in its petition under abstract of details of 33/11 kV S/s and lines proposed for FY 2015-16 has submitted details of S/s, substation capacity, length of 33 kV line and total cost of the project. However, on examination it has been observed that following variations exist when compared with approval granted by the BOD:

...”

7. In response, the Petitioner vide its letter No. 1965 dated 15.06.2016 and letter No. 2760 dated 02.08.2016 submitted the information/clarifications, which was further examined and analyzed. The Commission found following deficiencies in the said submission and the same were forwarded to the Petitioner vide Commission’s letters No. 1008 dated 23.09.2016 and 1056 dated 29.09.2016 for submitting information/clarification:

Deficiencies sent vide letter dated 23.09.2016:

“...following details pertaining to Chalang S/s and Doordarshan Kendra S/s in BoD approval dated 24.06.2016 are different than the details provided by you in your original Petition submitted vide letter No. 5324 dated 16.12.2015:-

(Cost-Rs. Cr, Length-Km)

Sl. No.	Name of the S/s	As per UPCL’s Petition dt. 16.12.2015			As per BOD approval dt. 24.06.2016		
		Capacity (MVA)	Total Cost	Length of 33 kV line	Capacity (MVA)	Total Cost	Length of 33 kV line
1	Chalang Sahastradhara Road, Dehradun	2 x 8	5.28	15	2 X 12.5	5.79	15
2	Doordarshan Kendra, Dehradun	2 X 10	5.32	6	2 X 10	6.46	3

Variations are indicated in Bold in the above table.

In this connection, I have been directed to inform you to furnish the revised details of the aforesaid substations including abstract of cost, estimated cost of construction of S/s, single line diagram and payback period calculation. Further, you are directed to submit the reasons for the aforesaid changes alongwith the details of source of funding for the revised project costs before the Commission latest by 05.09.2016.”

Deficiencies sent vide letter dated 29.09.2016:

“

1. UPCL has proposed 2 X 10 MVA, 33/11 kV GIS Substation at Bharadisain with a total cost of Rs. 12.53 Crore. On examination it has been observed that the cost of similar rating AIS S/s is in the range of 3.5 to 4 Crore.

UPCL is required to furnish justification for opting for GIS Substation over AIS Substation and the basis for the cost estimate of GIS Substation.

2. In the cost benefit analysis of the projects, it has been observed that the basis for considering anticipated load for the first year has not been furnished.

UPCL is required to furnish the same.

3. In the payback period computations, it has been observed that following Substations are having higher/longer payback period:-

i) Bharadisain, Gairsain, Chamoli (2 X 10 MVA) – 13.06 years.

ii) Adibadri, Chamoli (1 X 3 MVA) – 17.51 years.

iii) Reema Banlekh, Bageshwar (1 X 3 MVA) – 24.54 years.

iv) Jainti, Almora (1 X 5 MVA) – 18.17 years.

Further, on examination it is observed that the loading on Bharadisain (2x10 MVA) in 10th year (as shown in Annexure-1 page 4 of your submission dated 15.06.2016) is anticipated as 3.98 MVA. Such light loading on transformers may cause high transformation for almost 10 years would cause high transmission losses during the period, which does not seem to be justified.

UPCL is required to furnish the justification for proposing 2 X 10 MVA capacity S/s at Bharadisain.

4. The anticipated load for the proposed 1 X 3 MVA in Reema Banlekh, Bageshwar has been shown as constant i.e. 3 MVA (full load) between 6th year to 10th year of the installation. Further, it has also been observed that the transformer in the very first year would be 67% loaded and will reach its maximum rating in a period of 6 years. Therefore, it appears that UPCL has not prudently calculated the capacity of the S/s which should ideally be at least 1X5 MVA S/s with a provision for augmented capacity as 2 X 5 MVA S/s.

UPCL is required to clarify the same.

Besides above, UPCL is also required to clarify the reasons for not including Reema Banlekh in the revised proposal brought before the BoD alongwith the proposal of other substations.

5. Single line diagram of the following substations have not been provided:-

- a. Mehalchaouri, Chamoli (1 X 5 MVA).
- b. Rehta, Vikrampur, Bajpur (2 X 8 MVA).
- c. Jainti, Almora (1 X 5 MVA)
- d. Aliganj Road, Kashipur (2 X 8 MVA).

UPCL is required to provide the same.

6. In a Single Line Diagram (SLD) of the proposed substation, UPCL has not mentioned existing as well as anticipated loadings on the 11 kV, 33 kV & 132 kV sides and also on all 11 kV feeders feeding the proposed area.

UPCL is required to submit the single line diagrams of all the proposed 11 nos. substations including the existing and anticipated loading on the 11 kV, 33 kV & 132 kV sides and also on all 11 kV feeders.

7. On checking the voltage profile of the feeders being fed by the old feeders for the areas where new S/s have been proposed, it is observed that the voltage profile of the following area is much below the permissible limits as specified in the Regulations:-

S. No.	Name of S/s	Voltage at Tail end at 11 kV level
1	Mehalchaouri, Chamoli	8.6
2	Bharadisain, Gairsain, Chamoli	9.5
3	Adibadri, Chamoli	8.8
4	Reema Banlekh, Bageshwar	9.8
5	Jainti, Almora	8.9

It is found that new S/s are being proposed after extending the 33 kV lines. Therefore, an analysis is required to be made whether the measures proposed will be sufficient to increase the voltage profile of the said feeders at the proposed new S/s. UPCL is required to explore the possibility of installing suitable capacity capacitor banks at aforesaid S/s in order to improve the voltage profile.

8. The details for 33/11 kV Chalang Sahastradhara Road, Dehradun (2x12.5 MVA) and Doordarhsan Kendra, Dehradun (2x10 MVA) substations as informed vide letter dated 23.09.2016 has not been submitted till date.

UPCL is required to submit the same."

8. In response to the above, the Petitioner vide its letter No. 3409 dated 03.10.2016 submitted point-wise reply to the deficiencies pointed out by the Commission in its letter dated 23.09.2016. The Commission examined the submission and for further clarification on certain issues, decided to hold a meeting on 18.10.2016 and accordingly, on the scheduled date, the meeting was held with Director (Projects) and concerned Officers of the Petitioner. During the meeting, various issues pointed out in the deficiency notes were discussed and the Petitioner was directed to rectify the inconsistencies/infirmities made in the earlier submissions at the earliest.
9. Thereafter, the Petitioner vide its letter No. 3560 dated 17.10.2016 & letter No. 1907 dated 04.11.2016 submitted information/clarifications for justifying the need of the works proposed in its Petition. The Petitioner's submissions in support of each of the proposed projects are detailed below:
- (1) Construction of 2x10 MVA, 33/11 kV Substation at Doordarshan Kendra, Dehradun and 6(2x3) Km. 33 kV LILO line from 33 kV Majra-Doiwla Line.**
- (a) The Petitioner in its Petition and subsequent submissions submitted that the electricity to Doordarshan Kendra and nearby areas are being supplied through 3 Km long 11 kV Ajabpur feeder emanating from 33/11 kV S/s Araghar and 2 Km long 11 kV Vidhan Sabha Feeder emanating from 33/11 kV S/s Araghar.
- (b) At present, there are about 5000 consumers in the area and the population is increasing rapidly. Estimating 10% load growth in the area and to improve reliability and quality of power supply, construction of 2x10 MVA, 33/11 kV Substation at Doordarshan Kendra, Dehradun is needed.
- (c) After construction of the proposed 2x10 MVA, 33/11 kV S/s, the load of 11 kV Ajabpur & Vidhan Sabha feeders emanating from 33/11 kV S/s Ajabpur and 33/11 kV S/s Araghar would be reduced and thus the important installations viz. the Vidhan Sabha and Doordarshan Kendra would not only get independent power supply through cable but also a

substantial improvement would occur in reliability and voltage profile in the area.

(2) Construction of 2x8 MVA, 33/11 kV Substation at Chalang, Sahastradhara Road, Dehradun and 15 Km, 33 kV line from 132/33 kV S/s Purkul.

(a) With regard to construction of 2x8 MVA 33/11 kV S/s, the Petitioner has submitted that presently of the electricity to Chalang area is being supplied through 11 kV Sahastradhara feeder and 11 kV Usha Colony feeder emanating from 33/11 kV S/s IT Park. In this area about 9000 consumers are residing and an approximate annual load growth of the area is about 15%.

(b) After construction of the proposed 2x8 MVA, 33/11 kV S/s, the load 11 kV feeders namely Sahastradhara & Usha Colony feeders emanating from 33/11 kV S/s IT Park would be reduced and the reliability & voltage profile of the power supply in this area would improve.

(3) Construction of 1x5 MVA, 33/11 kV S/s at Mehalchauri (Chamoli) and 4 (2x2) Km., 33 kV LILO at 33 kV Ganai-Gairsain line.

(a) With regard to construction of 1x5 MVA, 33/11 kV S/s at Mehalchauri (Chamoli) and 4(2x2) Km., 33 kV LILO at 33 kV Ganai-Gairsain line, the Petitioner has stated that presently Mehalchauri and nearby area is being supplied through 11 kV Kunigad feeder emanating from 33/11 kV S/s Gairsain. The length of 11 kV feeder is exceptionally high and wide spread in a large area due to which the reliability and voltage profile of power supply in the area is not satisfactory.

(b) With construction of the proposed 1x5 MVA, 33/11 kV S/s, the already overloaded Garsain S/s would be relieved and reliability and voltage profile of power supply in the Mehalchauri area would improve.

(4) Construction of 2x10 MVA, 33/11 kV GIS Substation at Bhararisain (Chamoli) and 10 Km, 33 kV LILO from 33 kV Karnprayag-Gairsain line

(a) With regard to the need of the 33/11 kV Bhararisain GIS S/s and 10 Km, 33 kV line, LILO on Karnprayag-Gairsain line, the Petitioner submitted

that presently Bhararisain is being supplied through 11 kV Garisain feeder which is emanating from 33 kV S/s Karanprayag. Further, the Petitioner submitted that the proposed S/s would cater to the loads of upcoming Vidhan Sabha and VIP residential area with an approximate annual load growth of 10%.

- (b) The Petitioner also submitted that with construction of the proposed 2x10 MVA, 33/11 kV S/s, the load on 11 kV Gairsain feeder emanating from 33x11 kV S/s Karanprayag would be reduced and also the reliability and voltage profile of supply in this area would improve. Therefore, the 33/11 kV S/s and associated 33 kV line are required for strengthening the network.
- (c) With regard to justification for opting Bhararisain as 2x10 MVA GIS S/s, the Petitioner submitted that there is paucity of land in this area and as per Government planning for establishing a new township including Vidhan Sabha, MLA residences, other Government and commercial establishments substantial load growth in the area will occur shortly, therefore, GIS S/s with the proposed capacity would be required.

(5) Construction of 1x3 MVA, 33/11 kV Substation at Adibadri and 3 Km, 33 kV LILO from 33 kV Karanprayag-Gairsain line.

- (a) The Petitioner in its Petition submitted that Adibadri is a prime area with a lot of religious significance related to Shri Nanda Devi Raj Jat Yatra. Presently the electricity to this area, covering 80 villages is being supplied through 11 kV Gairsain feeder which is emanating from 33/11 kV S/s Gairsain in which is very long in length. This area covers about 4000 wide spread consumes. The Petitioner further submitted that, since the 11 kV feeder feeding this area is very long and passes through difficult terrain, therefore, frequent breakdowns are experienced, resulting in poor reliability and low voltage profile. Therefore, to increase reliability and improve the quality of power supply, the proposed S/s would be required.

(6) Construction of 2x10 MVA, 33/11 kV S/s at Khatima (U.s Nagar) and 8.5 Km 33 kV line from 33/11 kV S/s Lohia head to 33/11 kV S/s Khatima Town

(a) The Petitioner in its Petition has stated that presently the electricity to Khatima Town is being supplied through 11 kV Town-I feeder and 11 kV town-II feeder emanating from 33/11 kV S/s Khatima which are 13 Kms. and 12 Kms. long respectively. This area covers about 3500 consumers with an approximate annual increase in number of consumers/load of 5%. At present, the reliability and voltage profile of power supply in this area is not satisfactory. The Petitioner also submitted that after construction of 2x10 MVA, 33/11 kV S/s at Khatima, the load of 2 nos. 11 kV feeders (Town-I & Town-II) emanating from 33/11 kV S/s Khatima, would be reduced and thus, the reliability and voltage profile of power supply in this area would improve.

(7) Construction of 2x8 MVA, 33/11 kV S/s at Rehta (U.S. Nagar) and 11.5 Km 33 kV line from 132/33 kV S/s Kesowala to 33/11 kV S/s Rehta (U.S. Nagar)

(a) The Petitioner has stated that presently the electricity to Rehta area is being supplied through Banna feeder, 11 kV Gobara feeder and 11 kV Veera feeder emanating from 33/11 kV S/s Fauzi colony which are about 15 Kms, 30 Kms and 35 Kms long respectively. This area covers about 3000 consumers with an approximate annual increase in number of consumers/load of 8%.

(b) The Petitioner submitted that after construction of proposed 2x8 MVA, 33/11 kV S/s, the load of 11 kV feeders namely Banna feeder, Gobara feeder & Veera feeder emanating from 33/11 kV S/s Fauzi colony would be reduced. Moreover, the reliability and voltage profile of power supply in this area would improve and the consumers would avail quality power supply.

(8) Construction of 1x3 MVA, 33/11 kV S/s at Reema Banlekh (Bageshwar) and 15 Km 33 kV line from 33/11 kV S/s Vijaypur to 33/11 kV S/s Reema Banlekh.

- (a) The Petitioner submitted that presently supply of electricity to Reema Banlekh area is being fed through 33/11 kV S/s Vijaypur, Bageshwar and Kapkot on 11 kV Kameri feeder, 11 kV Balighat feeder and 11 kV Harsil feeder. Since these 11 kV feeders are very long in length and passes through dense forest, frequent trippings/breakdowns reduce the system reliability and voltage profile of the power supply.
- (b) After construction of proposed 1x3 MVA, 33/11 kV S/s, the load on aforesaid 03 feeders namely Kameri, Balighat and Harsil feeders emanating from 33/11 kV S/s Vijaypur, 33/11 kV S/s Bageshwar and 33/11 kV S/s Kapkote respectively would be reduced. The problem of low voltage and recurring 11 kV faults could also be reduced by making 1x3 MVA, 33/11 kV S/s having 3 short feeders. Moreover, the reliability and voltage profile of power supply in this area covering 45 villages and 30 Toks would improve and the consumers of the area would avail quality power supply.
- (9) Construction of 1x5 MVA, 33/11 kV S/s at Jainti (Almora) and 1.3 (2x0.65) Km, 33 kV LILO at 33 kV Lamgarh-Devidhura line.**
- (a) The Petitioner submitted that presently the electricity to Jainti and nearby area is being supplied through 11 kV Lamgarh feeder emanating from 33x11 kV S/s Lamgarh. Since the 11 kV feeder is very long in length, the reliability and voltage profile of power supply in this area is not satisfactory.
- (b) The Petitioner also submitted that after construction of the proposed 1x5 MVA, 33/11 kV S/s, the load of above 11 kV Lamgarh feeder emanating from already overloaded S/s Lamgarh, would be reduced. The Petitioner further submitted that Jainti and its surrounding areas are being fed through only one 11 kV feeder and this area has no other alternate power supply, thus, during monsoon it becomes difficult to maintain the supply. Therefore, to overcome the above constraints construction of Jainti S/s would be required.

(10) Construction of 2x5 MVA, 33/11 kV S/s at Gangapur, Atariya Road (U.S. Nagar) and 4.9 Km, 33 kV line from 132 /33 kV S/s SIDCUL Pantnagar to 33/11 kV S/s Gangapur.

(a) The Petitioner submitted that presently the electricity to Gangapur area is being supplied through 11 kV Bagwar feeder which is 15.40 Kms long & 11 kV Fulshunga feeder which is 9.8 Kms long emanating from 33/11 kV S/s Bhadaipura and 11 kV Transit Camp feeder which is 6.80 Kms long & 11 kV Jagatpura feeder which is 4.20 Km long emanating from 33/11 kV S/s Matkota. Since the 11 kV feeders are feeding the densely populated area, the reliability and voltage profile of power supply in these areas is not satisfactory.

(b) The Petitioner further submitted that after construction of proposed 2x5 MVA, 33/11 kV S/s, the load of the aforesaid 11 kV feeders emanating from 33/11 kV S/s Bhadaipura S/s and 33/11 kV S/s Matkota would be reduced. Moreover, the reliability and voltage profile of power supply in this area would improve and the consumers would be able to avail better quality power supply.

(11) Construction of 2x8 MVA, 33/11 kV S/s at Aliganj Road (Kashipur and 2.24 Km, 33 kV line from 220 /132 kV S/s Mahuwakheraganj to 33/11 kV S/s at Aliganj Road.

(a) The Petitioner submitted that presently the electricity to Aliganj area is being supplied through 11 kV Paiga feeder, Khadagapur feeder, 11kV Banskhera feeder & 11 kV Dhela feeder emanating from 33/11 kV Substation 20 No. which are 6 Kms, 4 Kms, 5 Kms & 6 Kms long respectively and 11 kV Industrial feeder 7 Km emanating from 33/11 kV S/s Mahuwakheraganj. The Petitioner also submitted that this area covers about 5300 consumers with an approximate annual increase in number of consumers/load of 10%. Since the 11 kV feeder is feeding densely populated area, the reliability and voltage profile of power supply in this area is not satisfactory.

(b) The Petitioner further submitted that after construction of proposed 2x8 MVA, 33/11 kV S/s, the load of the above 5 nos., 11 kV feeders namely Paiga, Khadagpur, Banskhera, Dhela, & Industrial feeders emanating from 33/11 kV Substation-20 No. and 33/11 kV S/s Mahuwakheraganj, would be reduced. Moreover, with reduction of recurring 11 kV faults, the reliability and problem of low voltage would also be reduced after construction of 2x8 MVA, 33/11 kV S/s at Aligang Road, Kahipur.

Commission's observations, Views & directions

10. Clause 11.3 of the Distribution and Retail Supply License (Licence No. 2 of 2003) issued to UPCL provides as under:

"11.3 The Licensee shall make an application to the Commission for obtaining prior approval of the Commission for schemes involving major investments as per the procedure which the Commission may specify from time to time and demonstrate to the satisfaction of the Commission that:

- a) there is a need for the major investments in the Distribution System, which the Licensee proposes to undertake,*
- b) the Licensee has examined the economic, technical, system and environmental aspects of all viable alternatives to the proposal for investing in or acquiring new Distribution system assets to meet such need."*

11. Further, Regulation 10(2) of UERC(Conduct of Business)Regulations, 2014 specifies as under:

"10. Petitions and pleadings before the Commission

...

(2) Every Petition filed shall be verified by an affidavit and every such affidavit shall be in Form-II attached to these Regulations or as otherwise directed by the Commission from time to time. In case, where the Petition is filed by a company, the Petition & affidavit will be signed and verified by the Managing Director/Director or any officer not below the rank of Chief Engineer/General Manager of the Company. Provided, in case of Tariff petitions, Investment approval petition and Review petition in the aforesaid matters, the petition & the affidavit has to be signed and verified only by the Managing Director or Director, along with the resolution of the Board of Directors of the company approving such petitions."

12. On examination of the Petition & subsequent submissions w.r.t. the above provisions of the License conditions and Regulations, it has been observed that the Petitioner did not file the investment proposals in line with the above provisions as out of 16 proposals submitted before the Commission, 05 proposals were without approval of the Board of Directors of the Company. The Petitioner was required to examine economic, technical, system and environmental aspects related to proposed investment and take necessary approval from the Board of Directors prior to filing the Petition before the Commission. However, the Petitioner did not file the Petition as per Regulations, which prima-facie shows negligence on Petitioner's end.

In some of the proposals brought before the Commission the capacity/cost of the projects were different from the figures approved by the BoD of the Company e.g. projects proposed for Mehalchauri, Khatima & Aliganj etc.

Moreover, in the case of Doordarshan Kendra and Chalang S/s, even the revised submission was not made in accordance with the revised approval of BoD.

It has been observed that there is wide variation in substation cost estimates. For 2x10 MVA capacity substation, cost estimate is ₹3.67 crores, whereas for just half capacity i.e. 2x5 MVA cost estimate is ₹3.01 crore. Similarly, for substation of 1x5 MVA capacity, cost estimate is ₹2.92 crore. Similar is the case for cost estimate for different lines. UPCL is ordered to examine the cost estimates critically.

The Commission took cognizance of the same and is of the view that such lackadaisical approach of the licensee unnecessarily hampers/delays the proceedings/process of examination/scrutiny and therefore, directs the Petitioners to check the Petitions/submissions systematically and not to repeat such lapses/mistakes in future.

13. On further examination of the Petition and subsequent submissions, it has also been observed that in the initial submissions, the load projections taken for calculating the payback period/cost benefit analysis were not estimated appropriate. However, the same were revised in the subsequent submissions to revise the payback period/cost benefit computations of the respective proposals.

In this regard, the Commission is of the view that the Petitioner should estimate the load projections on the basis of actual demand/load growth alongwith proposed developmental activities in the intended areas to avoid any under/over estimation of the loads.

14. Based on the submissions made in the Petition and clarifications made from time to time, the Petitioner's final proposal is as follows:

Sl. No	Name of the S/s	Capacity (MVA)	Length of 33 kV line (KM)	Total Estimated Cost
	Garhwal Zone			
1.	Doordarshan Kendra, Dehradun	2 X 10	3	6.46
2.	Chalang Sahastradhara Road, Dehradun	2 x 12.5	15	5.79
3.	Mehalchauri, Chamoli	1 X 5	4	3.96
4.	Bharadisain, Gairsain, Chamoli	2 X 10	10	12.53
5.	Adi Badri, Chamoli	1 X 3	3	3.21
	Total Garhwal Zone			31.95
	Kumaon Zone			
6.	Khatima Town, Sitarganj	2 X 10	8.5	5.49
7.	Rehta, Vikrampur, Bazpur	2 X 8	11.5	5.57
8.	Reemabanlekh, Bageshwar	1 X 3	15	4.73
9.	Jainti, Almora	1 X 5	1.3	3.02
10.	Gangapur Atarya Road, Rudrapur	2 x 5	4.9	3.89
11.	Aliganj Road, Kashipur	2 x 8	4.24	4.97
	Total Kumaon Zone			27.67
	Grand Total			59.62

Further, the Commission observed that the purpose of the proposed investments is basically for enhancing the reliability, improving the voltage profile and thus quality of power to the consumers of the respective areas, apparent relief to the existing overloaded lines/transformers by strengthening of the distribution networks.

15. Therefore, in view of the above, the Commission hereby grants in-principle approval for the proposed construction works of 11 nos. 33/11kV S/s and their associated lines as mentioned at para 14 above subject to the fulfillment of the conditions mentioned below:
- The Petitioner is directed to obtain the prices through competitive bidding for the works allowed by the Commission under the prevailing Rules & Regulations. Prudence of the prices will be scrutinized at the time of fixation of tariff after completion of the proposed works.
 - All the loan conditions as may be laid down by the funding agency in their detailed sanction letter are strictly complied with. However, the Petitioner is

directed to explore the possibility of swapping this loan with cheaper debt option available in the market.

- (iii) The Petitioner shall, within one month of the Order, submit letter from the State Government or any such documentary evidence in support of its claim for equity funding agreed by the State Government or any other source in respect of the proposed schemes.
- (iv) After completion of the aforesaid schemes, the Petitioner shall submit the completed cost and financing of the schemes.
- (v) The cost of servicing the project cost shall be allowed in the Annual Revenue Requirement of the petitioner after the assets are capitalized and subject to prudence check of cost incurred.

Ordered accordingly.

(K.P. Singh)
Member

(Subhash Kumar)
Chairman