

**Before**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**In the matter of:**

Petition seeking approval for the investment on the project covering the construction of 14 Nos., 33/11 kV sub-station and their associated lines of 113.70 Km.

**And**

**In the matter of:**

Managing Director, Uttarakhand Power Corporation Limited (UPCL) .... Petitioner

**Coram**

<b>Shri Subhash Kumar</b>	<b>Chairman</b>
<b>Shri C.S. Sharma</b>	<b>Member</b>
<b>Shri K.P. Singh</b>	<b>Member</b>

**Date of Order: March 03, 2015**

**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 the investment on the projects covering the construction of 14 No. 33/11 kV substation and their associated lines of 113.70 Km at various locations in the State.

**1. Background**

- 1.1. UPCL vide its letter No. 1658/UPCL/RM-6 dated 02.08.2014 had submitted an application seeking approval of the Commission for the capital investment on the projects covering the construction of 14 Nos., 33/11 kV substation and their associated lines of 113.70 Km.
- 1.2. UPCL in its application has proposed construction of 14 Nos, 33/11 kV substations and associated 113.70 Km. long, 33 kV lines in different locations of the State of Uttarakhand with an estimated cost of Rs. 46.66 Cr. The details of substations alongwith their estimated costs as proposed by UPCL are as follows:

Sl. No.	Name of Substation	District	Substation Capacity (MVA)	Estimated cost of Substation (Rs. Cr.)	Length of 33 kV line (Km)	Estimated cost of line (Rs. Cr.)	Total Cost (Rs. Cr.)
<b>Garhwal Zone</b>							
1	Urja Bhawan	Dehradun	2x10	2.96	0.20	0.14	3.10
2	Milan Vihar (G.M.S. Road)	Dehradun	1x8	1.96	5.00	0.78	2.74
3	Ring Road (Raipur)	Dehradun	2x5	2.03	0.50	0.11	2.14
4	Jhjhra	Dehradun	2x10	3.02	0.00	0.00	3.02
5	Rajendra nagar	Dehradun	2x8	2.56	3.00	0.35	2.91
6	Adi Badri (Nanda Sain)	Chamoli	1x3	1.15	3.00	0.39	1.54
7	Mahalchauri	Chamoli	1x3	1.31	2.00	0.28	1.59
8	Gular kodiya	Tehri	2x3	1.90	16.00	2.42	4.32
9	Chaka laser	Tehri	2x3	1.77	16.00	2.27	4.04
<b>Total Garhwal Zone</b>			<b>92</b>	<b>18.66</b>	<b>45.70</b>	<b>6.74</b>	<b>25.40</b>
<b>Kumaon Zone</b>							
1	Aliganj road	U.S. Nagar	2x5	2.13	8.00	0.96	3.09
2	Sitarganj	U.S. Nagar	2x5	2.23	6.00	1.01	3.24
3	Patwadangar	Nainital	2x5	2.19	27.00	7.59	9.78
4	Machor	Almora	1x3	1.04	20.00	1.80	2.84
5	Kaniya	Nainital	1x5	1.32	7.00	0.99	2.31
<b>Total Kumaon Zone</b>			<b>38</b>	<b>8.91</b>	<b>68.00</b>	<b>12.35</b>	<b>21.26</b>
<b>Total Uttarakhand</b>			<b>130</b>	<b>27.57</b>	<b>113.70</b>	<b>19.09</b>	<b>46.66</b>

1.3. To meet this capital investment of Rs. 46.66 Cr., UPCL has submitted that the same will be met through loan from REC and Equity from State Government in the ratio of 70:30, respectively.

1.4. UPCL in its application has submitted that the estimated capital investment on the proposed works is pertaining to improvement in voltage profile and reliability of power supply to the consumers of urban as well as rural areas of the State and also to meet future load growth in the areas.

## 2. Observations

2.1 On examination of the Application, the Commission pointed out certain deficiencies, which were forwarded to UPCL vide letter No. 1176 dated 19.09.2014 and meanwhile heard the Petitioner on 24.09.2014 for admissibility of the matter and issued an Order dt. 24.09.2014 vide letter no. 1228 dt. 24.09.2014 admitting the Petition with the direction that "...the Petitioner shall submit its reply to the deficiencies pointed out in the Commission's letter No. 1176

*dated 19.09.2014 latest by the stipulated date i.e. 15.10.2014, failing which the petition would be liable for rejection."*

2.2 In compliance to the Commission's Order, UPCL vide its letter No. 2183 dated 10.10.2014 submitted its point-wise reply to the deficiencies pointed out by the Commission as here under:

*"*

- 1. Details regarding source substation and associated 33 kV feeders from 132 kV S/s along with proposed/existing length of 33 & 11 kV lines, etc. are enclosed herewith as **Annexure-1**.*
- 2. UPCL has submitted the petition for the sanction of 14 nos substation because one substation at Chopta, Rudraprayag (1x3 MVA) has already 'in-principle' approved by the Hon'ble Commission vide letter no. 745/UERC/Dir(C&L)/10-11 dated 14-07-2014.*
- 3. In the proposed 2x10 MVA, 33/11 kV S/s at Urja Bhawan, 0.2 Kms of 33 kV line shall be constructed from tapping point of 33 kV Bindal-Govindgarh-Vasant Vihar line.*
- 4. The augmentation of existing distribution system shall be taken up immediately to avoid the overloading of existing lines & sub-stations and the augmented capacities shall be so planned so as to meet the projected load of the area for at least next five years. The plan shall also be reviewed every two years for necessary modifications, if any.*
- 5. To meet out the Capital Investment of project for the construction of 14 Nos. 33/11 kV S/s and 113.70 Kms of 33 kV line, UPCL has arranged loan assistance to the tune of 70% of the capital cost from Rural Electricity Corporation Limited and balance 30% by way of equity from GoU.*
- 6. The expected improvement in voltage profile in the areas which would be catered by these proposed substations vis-à-vis existing voltage profile in these areas is enclosed as Annexure-2.*
- 7. Revised abstract sheet of cost benefit analysis/payback period incorporating applicable bank interest are enclosed herewith as Annexure-3.*
- 8. Approval/MoM for the project by BoD for the project is enclosed herewith as Annexure-4."*

2.3 Further, the submission of UPCL was examined and the Commission observed following anomalies/deficiencies in the reply of UPCL and issued the same vide its letter No. 1727 dated 12.12.2014.

“

1. *With regard to the status of land for the proposed Substations in Garhwal/ Kumaon zone, it has been observed that in Garhwal zone, out of proposed 9 Substations, acquisition of land for 4 Substations have not been done yet. Similarly, in Kumaon zone, out of proposed 5 Substations, land for only 1 Substation has been acquired. ... clarification is needed on the following:*

*(1) Basis for the proposed length of 33/11 kV lines for those substations where land has yet not been acquired for the purpose.*

*(2) Referring to the scheme implementation and loan disbursement period as per Terms and Conditions of Loan of REC (page 2 of 9), UPCL is required to submit the date by which the land shall be acquired for the proposed Substations and updated schedule for completion of the projects.*

2. *Improvement in voltage profile after construction of the proposed substation as shown in Annexure-2 is required to be explained. Further, the reduction in losses due to the proposed substations is required to be submitted alongwith the reduction of LT lines, increase in the length of HT line and there impact on HT/LT ratio.*

3. *UPCL is required to carryout cost benefit analysis and submit Pay Back & Benefit to Cost (B/C) ratio for the proposed project.*

4. *UPCL is required to submit sample case study of three differently located substations, which were constructed in recent past, with respect to energy being received, metered, billed and realized.*

...

2.4 In response, to the Commission's letter No. 1727 dated 12.12.2014, UPCL vide letter No. 81 dated 09.01.2015 submitted its point-wise reply/ information/ clarification to the Commission:-

“

1. (a) *Sites for all the 14 Nos. 33/11 kV S/s have been indentified and land acquisition work are under process. However, in most of the cases, the land is available and the substations are proposed either on government land or on UPCL land. It is true that, in some sites land has not been acquired but land for those substations has been indentified/finalized and will be acquired prior to the award of contract. Updated sheet regarding details of source substation and associated*

*33 kV feeders from 132 kV S/s along with proposed/existing length of 33 & 11 kV lines, Status of land etc are enclosed herewith as **Annexure-1**.*

*(b) By the time of finalization of tendering process, land acquisition of those sites is expected to be completed.*

*2. The expected improvement in voltage profile after construction of proposed substation is enclosed herewith as **Annexure-2**.*

*3. Abstract sheet of benefit to Cost Ratio is enclosed herewith as **Annexure-3**.*

*4. Sample case study of 3 nos. newly constructed substation with respect to Energy being received, metered, billed and realized is enclosed herewith as **Annexure-4**"*

2.5 On receipt of the above reply, a meeting was held on 22.01.2015 with the concerned officers of UPCL and based on the discussions held during the meeting, UPCL was asked to clarify the issues pointed out in the meeting during the forthcoming/proposed Power Point Presentation. In this regard, a letter was also issued to UPCL vide ref no. 1959 dated 23.01.2015 directing it to make Power Point Presentation on 28.01.2015 before the Commission covering following points on the scheduled date:-

"

*1. The justification for investment with regard to load relief on the existing substations, lines and improvement in voltage profile.*

*2. Expected loading of the proposed substations, cost benefit analysis and latest update of land acquisition for the substations.*

..."

2.6 UPCL vide its letter No. 313 dated 28.01.2015 requested the Commission to allow some additional time and reschedule the presentation in second week of February, 2015. However, the Commission did not allow for the same and directed UPCL to make the presentation on 05.02.2015.

2.7 On the scheduled date i.e. 05.02.2014, Power Point Presentation was made by UPCL. During the presentation, UPCL also submitted its clarification/submission vide letter No. 398 dated 05.02.2015 on the points discussed during meeting held on 22.01.2015.

2.8 In response to the points raised during presentation, UPCL vide its letter no. 623/UPCL/Com/RMC-6/CE dated 06.02.2015 submitted that Land for

proposed 2X3 MVA, 33/11 kV S/s Chaka Laser has also been acquired and clarified that :-

“

3. *The cost estimate submitted by UPCL with its original petition, has mistakenly omitted cost of control room building for proposed 1X8 MVA, Milan Vihar S/s. Same amounting to Rs 46.68 lakhs should be included in its cost estimate. Estimate of which has already been submitted with UPCL's letter no. 398/UPCL/com/RMC-6/CE dated 05.02.2015. Similarly, for 11 kV indoor panel with total cost of approx. 39 Lakhs and 33 kV panel with total cost of Rs 51 Lakhs has to be revised to 19.5 lakhs and 25.6 Lakhs respectively. Thus, net increase in cost estimate for 1X8 MVA, Milan Vihar S/s would be Rs 1.68 Lakhs. Commission is requested to please omit the error of omissions and consider this cost escalations while according project approval.*
4. *In the cost estimate of 2X8 MVA Rajendranagar, UPCL has mistakenly omitted cost of control room building. Same should be included in its cost estimate. The, cost estimate of control room building, amounting to Rs 46.68 lakhs is already provided with UPCL's letter no. 398/UPCL/com/RMC-6/CE dated 05.02.2015. Commission is requested to please omit the error of omissions and consider this cost escalations while according project approval.*
5. *In the abstract sheet of cost estimate for 1X3 MVA Machor S/s, UPCL has mistakenly omitted cost of Erection Charges + Contingency charges + Centage Charges in the abstract sheet whereas it has been included in estimate submitted. Due to which, actual cost of 1X3 MVA Machor S/s should be read as 386.86 Lakhs instead of 284.00 Lakhs. Commission is requested to please omit the typing mistake and consider this cost while according project approval. “*

### **3. Commission's views and Decisions**

- 3.1. Clause 11.3 and clause 11.6 of the Distribution and Retail Supply License 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."*

*"11.6 The Licensee shall submit to the Commission along with the "Expected Revenue Calculation" and in terms of paragraph 25.1(b)(ii), the annual investment plan consisting of those schemes approved by the Commission, schemes submitted before the Commission for approval and all schemes not requiring approval of the Commission planned for the ensuing financial year and shall make investment in the said financial year in accordance with the said investment plan. Provided, is however, if any unforeseen contingencies required reallocation of funds within the schemes listed in the annual investment plan, the Licensee may do so provided further that reallocation in respect of individual project does not exceed Rs. 250 lakhs, after intimating the Commission. If on account of unforeseen circumstances the licensee is required to make investment in a scheme which does not find a place in the annual investment plan, the Licensee may do so up to the Limit of Rs. 250 lakhs after intimating the Commission."*

3.2. Further, Regulation 53(3) of UERC (Conduct of Business) Regulations, 2004 specifies as under:

*"In the application for investment approval, the licensee shall furnish the following information or particulars:*

- (a) A detailed project report containing examination of an economic technical system and environmental aspects of the investment together with the outline of the working to be undertaken, the salient features and particulars demonstrating the need for investment;*
- (b) The project cost together with the cost benefit analysis;*
- (c) Whether the investment is in a new project or for expansion or upgradation of an existing system;*
- (d) Sanctions and statutory clearances required for execution of the project and status of such sanctions and statutory clearances;*
- (e) Phasing of investment over the financial years and Commissioning schedule;*
- (f) The manner in which investments will be capitalized for the purposes of inclusion in the revenue requirements of the Licensee;*

- (g) *Constraints which the Licensee may face in making the investments or in the implementing the project including constraints on information available;*
- (h) *Resource mobilization and financial plans for meeting the investment;*
- (i) *Process for inviting and finalizing tenders for procurement of equipment, material and/or services relating to investment, in accordance with a transparent tendering procedure as may be approved by the Commission; and*
- (j) *Such other particulars as the Commission may from time to time"*

3.3. Moreover, Regulation 55(1) of CBR specifies as under:

*"The licensee and other applicants seeking investment approval shall furnish information, particulars, documents as may be required by the Commission staff, consultants and experts appointed by the Commission for the purpose and allow them access to the records and documents in the power, possession or custody of the licensee. "*

3.4. In accordance with the above provisions of Regulations and licence conditions, it is clear that merely filing of incomplete application does not absolve the licensee of its duty as required under the Act and Regulations framed there under. The Commission notes with the concern, the approach of the licensee in fulfilling requirements of the Regulations in submitting the Proposal.

3.5. From the submission of UPCL and subsequent confirmation in the matter of status of land acquisition for the proposed works, it has been observed that out of the total proposed 14 Nos., 33/11 kV Sub-stations, the licensee has acquired land for only 07 nos., 33/11kV Sub-Station namely Urja Bhawan, Milan Vihar, Ring Road, Jhajara, Machor and Chaka Laser. With regard to the status of acquisition of land for other 07 nos. Sub-stations, the licensee has submitted that it is either 'under process' or 'not acquired'. The Commission has taken cognizance of the same and expressed its concern that in the absence of land, there will always be uncertainty on the part of execution of the project resulting in time and cost variation. Hence, the Commission decides not to consider the works proposed for the Sub-stations where land has not been acquired so far. The Petitioner may file fresh Petition for investment approval of such Sub-stations.

3.6. Further, the Commission observed that the Petitioner did not properly checked the estimates of individual 33/11kV Sub-stations before submitting the proposal to the Commission, due to which apparent errors have appeared in the Petition,



such as :

- (1) In the estimate of 33/11kV S/s Milan Vihar, the costs of 11kV and 33 kV Panels have been taken 2 times (double) of the costs actually to be taken in the estimates.
- (2) In the estimate of 33/11kV S/s Milan Vihar and Rajendra Nagar, cost of control rooms has not been taken into account.
- (3) In the estimate of Machor, various charges namely contingency, centage etc. have not been taken into account.

The Commission reprimands such lackadaisical approach of the licensee, while making submissions and directs the licensee that on completion of the Project, it shall submit before the Commission completed cost of each of the projects covered in the scheme.

- 3.7. Based on the submissions made by the Petitioner and considering the proposed improvement in quality & reliability of power including voltage profile to the consumers and apparent relief to existing overloaded lines/transformers, the Commission hereby grants in-principle approval to the Petitioner for going ahead with the construction of substations with the proposed cost estimates for 07 Nos. 33/11 kV substations where land has been acquired and their associated lines namely **Urja Bhawan, Milan Vihar, Ring Road, Jhajhra, Rajendra Nagar, Chaka Laser & Machor** as follows, subject to condition mentioned in para 4.0 below:

Sl. No.	Name of Substation	District	Substation Capacity (MVA)	Estimated cost of Substation (Rs. Cr.)	Length of 33 kV line (Km)	Estimated cost of line (Rs. Cr.)	Total Cost (Rs. Cr.)
<b>Garhwal Zone</b>							
1	Urja Bahwan	Dehradun	2x10	2.96	0.20	0.14	3.10
2	Milan Vihar (G.M.S. Road)	Dehradun	1x8	1.96	5.00	0.78	2.74
3	Ring Road (Raipur)	Dehradun	2x5	2.03	0.50	0.11	2.14
4	Jhajhra	Dehradun	2x10	3.02	0.00	0.00	3.02
5	Rajendra nagar	Dehradun	2x8	2.56	3.00	0.35	2.91
6	Chaka laser	Tehri	2x3	1.77	16.00	2.27	4.04
<b>Kumaon Zone</b>							
1	Machor	Almora	1x3	1.04	20.00	1.80	2.84
<b>Total</b>			<b>83</b>	<b>15.34</b>	<b>44.70</b>	<b>5.45</b>	<b>20.79</b>

4. **Conditions of in-principle approval:**

- 4.1. The licensee shall ensure compliance of all provisions of Electricity Act, 2003 and other enactments relating to protection, security and safety of line and substations including obtaining of clearance from Electrical Inspector before energizing these electrical systems.
- 4.2. The petitioner shall ensure completion of the works within the specified time lines. In case the petitioner fails to do so, the servicing cost/cost of the loan in whole or part may not be allowed as pass through in the ARR.
- 4.3. All the terms and conditions of sanction of loans as laid down by REC/Financial Institution in their detailed sanction letters should be strictly complied with.
- 4.4. The cost of servicing 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.

**(K.P. Singh)**  
Member

**(C.S. Sharma)**  
Member

**(Subhash Kumar)**  
Chairman