

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

In the Matter of:

Approval of Capital Investment under Para 11 of the Transmission and Bulk Supply Licence
[Licence No. 1 of 2003].

In the Matter of:

Power Transmission Corporation of Uttarakhand Limited
7-B, Lane No. 1,
Vasant Vihar Enclave
Dehradun

..... Applicant

AND

In the Matter of:

Application No. 1453/MD/PTCUL/UERC dated 19.07.2007 filed by Power Transmission
Corporation of Uttarakhand Limited

Coram

Shri V J Talwar Chairman

Shri V K Khanna Member

Date of Order: 23rd October 2007

ORDER

The Petitioner, PTCUL has submitted proposal for capital investment vide their application No. 1453/MD/PTCUL/UERC dated 19.07.2007 to the Commission for approval under Para 11 of Transmission and Bulk Supply Licence [Licence No. 1 of 2003].

2. The investment proposal of the Petitioner comprises of substation works, both new and for augmentation, and the associated line works. In addition to these transmission works the proposal also includes construction of one SLDC at Dehradun and two sub-SLDCs at Kashipur and Rishikesh.
3. The revised proposal submitted by the Petitioner vide letter No 1973/MD/PTCUL/UERC dated 26.09.2007 involves a capital investment of Rs. 221.02 Crore as per details given below in Table 1:

Table 1: Scope of Works

S. No.	Scheme No.	Particulars	Transformer Capacity MVA/ No. of Bay	Line Length (Km)	Total Cost (Rs. in Crore)
1	1 (a)	Construction of 132 KV Srinagar-II Substation	2x40 MVA		21.69
2	1 (b)	LILO of 132 KV Rishikesh-Srinagar (I) Line at Srinagar (II) 132 KV Substation		3	1.20
3	2	Construction of SLDC at Dehradun and 2 Nos. Sub-SLDC at Kashipur and Rishikesh			51.92
4	3 (a)	Construction of 132 KV Lakser Substation	2x40 MVA		13.22
5	3 (b)	LILO of 132 KV Roorkee-Nehtaur (II) line at 132 KV Lakser Substation		1	0.34
6	4 (a)	LILO of 132 KV Kashipur to Jaspur for 400/220/132 KV Kashipur Substation		3	1.03

S. No.	Scheme No.	Particulars	Transformer Capacity MVA/No. of Bay	Line Length (Km)	Total Cost (Rs. in Crore)
7	4 (b)	LILO of 132 KV Kashipur to Ramnagar for 400/220/132 KV Kashipur Substation		1	0.34
8	4 (c)	132 KV S/C line on D/C towers from 400 KV Kashipur to Bajpur		20	5.64
9	5 (a)	220 KV D/C line section from Kashipur to Barhani		26	17.93
10	5 (b)	220 KV line from Barhani to Pantnagar		35	19.50
11	5 (c)	220 KV line from Barhani to Haldwani		27.5	15.43
12	5 (d)	LILO of 132 KV Pithoragarh-Almora line for 220 KV Pithoragarh (PGCIL) Substation		10	4.02
13	5 (e)	Up-gradation of 66KV Almora-Pithoragarh line to 132 KV level		66	5.74
14	5 (f)	Construction of 132 KV bay at Pithoragarh	1 No.		1.24
15	6 (a)	Construction of 132 KV Bageshwar Substation	2x15 MVA		15.41
16	6 (b)	132 KV S/C line on D/C towers from Ranikhet to		60	18.79

S. No.	Scheme No.	Particulars	Transformer Capacity MVA/No. of Bay	Line Length (Km)	Total Cost (Rs. in Crore)
		Bageshwar			
17	6 (c)	Construction of 132 KV bay at Ranikhet	1 No.		1.24
18	7	LILO of 132 KV Dhona-Khatima line for Sitarganj 132 KV Substation		25	8.55
19	8	LILO of 132 KV Kichha-Pantnagar line at Rudrapur 132 KV Substation		5	1.71
20	9	Increasing capacity of 132/66/33 KV Haldwani Substation	Replacement of 1x20 MVA 132/66 KV Traf. with 1x40 MVA 132/33 kV Traf.		2.92
21	10	Increasing capacity of 132/33 KV Majra Substation	2x40 to 3x40 MVA		6.28
22	11	Augmentation of 132/33 KV Purkul Substation	Replacement of 1x20 MVA Tfr. with 1x40 MVA Tfr.		2.58
23	12	4 Nos. 132 KV bays at Kotdwar 132 KV grid Station	4 No.		4.30
		Grand Total			221.02

4. To meet this Capital Investment, the Petitioner has proposed to mobilise the resources by way of loan assistance of Rs. 217.59 Crore through REC under P:SI (Transmission) Category which will be available to them plus the balance amount of Rs. 3.43 Crore to be met by the State Government as equity funding. REC's loan assistance at the interest rates under each of the following options is competitive and appears to be reasonable.

Option I	Option II
Effective interest rate with reset after every 3 years	Effective interest rate with reset after 10 years
8.75 % - 9.25%	9.00% -10.75%

5. The Petitioner has confirmed that the substation works, both new and for augmentation, and the associated transmission lines proposed under these EHV projects for assistance under P:SI (Transmission) Category through REC have not been financed or tied up for financial assistance from any other source or lending organization and thus there is no duplicate financing for the proposed works.
6. The objective of the Petitioner for the proposed Capital Investment has been stated to have unified State grid whereby Kumaon and Garhwal zone are effectively connected and to minimise dependence on Uttar Pradesh both in terms of meeting the load requirement of Kumaon Zone in particular and to avoid routing of power generated within the State through UP. Also these investments have been stated to be not only to cut down T&D losses but also adequately meet the future load demand ensuring thereby uninterrupted supply of quality power at proper voltages to the consumers. The need for this investment have been assessed by the Petitioner keeping in view the existing load on the system and the forecast of load demand over the next 5 years based on the power survey conducted by C.E.A. for the State of Uttaranchal.

7. For the proposed Capital Investment in augmenting and strengthening the EHV Transmission network, both substations and line works (as detailed in Table 1 above), the Petitioner needs to ensure (a) that the demand forecast has taken into account the past trend and the future potential for area-wise load growth based on the plans for development envisaged for these areas of the State, (b) that the assessment with respect to saving of energy and additional sale of energy and the quantum of benefits thereon has accordingly been made, (c) that the location and the capacity of the new substation and the augmentation of the existing one including the associated line has been made after the detail technical study of the alternative options available and (d) that it has adopted the most optimal option.
8. The capital investment of Rs. 221.02 crores does not include the IDC component. However, the Petitioner has submitted separate IDC calculation for each of the scheme amounting to a total of Rs. 56.91 crores. The Petitioner proposes to meet this through State Government equity funding for which it proposes to approach the State Government.
9. The Petitioner has submitted cost benefit analysis of each of the project under the scheme based on the anticipated load growth assumed for next seven years after commissioning of the project. Also the IRR calculation submitted by the Petitioner for the schemes exceeds the minimum IRR requirement of 15% laid down by REC in its terms and conditions.
10. The Commission has no objection to the Petitioner going ahead with this capital investment, subject to fulfillment of the following conditions:
 - a) All the loan conditions as may be laid down by REC in their detailed sanction letters are strictly complied with.

- b) The proposal include establishment of SLDC at Dehradun and Sub-SLDCs at Kashipur and Rishikesh. Petitioner has submitted only cost estimates for these works and has not submitted DPR for establishment of SLDC and two Nos. Sub-SLDC. In the absence of the DPR Commission has agreed to give in principle approval for establishment of SLDC at Dehradun and 2 Nos. Sub-SLDC at Kashipur and Rishikesh and the investment thereon (proposed scheme at S.No. 3 of Table 1 above) and directs Petitioner to submit DPR for these works at the earliest.
- c) After completion of the project the Petitioner shall submit the completed cost of each of the works.
- d) The additional cost burden, if any, arising from out of the cost or time over runs or variation in the scope of implementation of the project and shortfalls in the revenue estimates or on any other account shall not be reflected in the Annual Revenue Requirement of the licensee nor shall be allowed to be passed on to the consumers.

(V K Khanna)
Member

(V J Talwar)
Chairman