

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION
Petition No.: 32 of 2023

In the Matter of:

Investment Approval for “Increasing Capacity of 132 kV Substation Bazpur from 1x80+1X40 MVA to 2x80 MVA and of 132 kV Substation Ramnagar from (1x20+1x40) MVA to 2x40 MVA”.

And

In the Matter of:

Power Transmission Corporation of Uttarakhand Limited. (PTCUL)

...Petitioner

CORAM

Shri D.P. Gairola, Member (Law) /Chairman (I/c)

Shri M. K. Jain, Member (Technical)

Date of Order: September 01, 2023

ORDER

This Order relates to the Petition filed by Power Transmission Corporation of Uttarakhand Ltd. (hereinafter referred to as “PTCUL” or “the Petitioner”) vide letter No. 2144/MD/PTCUL/UERC dated 27.07.2023 seeking Investment Approval for “Increasing Capacity of 132 kV Substation Bazpur from 1x80+1X40 MVA to 2x80 MVA and of 132 kV Substation Ramnagar from (1x20+1x40) MVA to 2x40 MVA” under Para 11 of Transmission Licence. [Licence No. 1 of 2003].

2. The proposal submitted by the Petitioner involves a capital investment of Rs. 14.96 Crores as per details given below:

S. No.	Particulars	Augmented Transformer Capacity (in MVA)	Project Cost including IDC as per DPR (Rs. Crore)
1.	Increasing Capacity of 132 kV Substation Bazpur from 1x80+1x40 MVA to 2x80 MVA and its associated works.	80 MVA	14.96
2.	Increasing Capacity 132 kV Substation Ramnagar from (1x20+1x40) MVA to 2x40 MVA and its associated works.	40 MVA	

3. The Petitioner has submitted an extract of the Minutes of Meetings wherein the Petitioner's Board has approved Corporation's proposal for above-mentioned works to be funded through 70% loan assistance from Financial Institution and balance 30% through equity from GoU.
4. In the Petition, the Petitioner has proposed the following works under the system strengthening of 132 kV S/s Bazpur and 132 kV S/s Ramnagar:
- Supply and Erection of 80 MVA T/F and associate works at 132 kV S/s Bazpur.
 - Modification works such as strengthening of existing 132 kV Main bus from single ACSR deer conductor to Twin ACSR Moose conductor and extension of existing control room building at 132 kV S/s Bazpur.
 - Construction of 132 kV TBC at 132 kV S/s Bazpur.
 - Erection of 40 MVA T/F dismantled from 132 kV S/s Bazpur and associated works at 132 kV S/s Ramnagar.
5. To justify the need of the aforesaid works proposed in the Petition, the Petitioner has submitted that:
- 132 kV Sub-station Bazpur & 132 kV Sub-station, Ramnagar are two of the most important sub-stations of Kumaon region supplying power to domestic, agricultural, industrial and commercial consumers of Bazpur, Ramnagar and nearby region. At present, there are 02 Nos 132/33 kV transformers (1x80 MVA+1x40 MVA=120 MVA) installed at 132 kV S/s Bazpur and 02 Nos 132/33 kV transformers (1x40 MVA + 1x20 MVA = 60 MVA) installed at 132 kV S/s Ramnagar. 40 MVA T/F at 132 kV S/s Bazpur and 20 MVA T/F at 132 kV S/s,

Ramnagar are generally loaded more than 80% of their capacity during peak load season in peak hours. As per growing load demand of Bazpur and Ramnagar region, there is an essential requirement of adding a new 80 MVA transformer in place of 40 MVA transformer and 40 MVA transformer in place of 20 MVA transformer at 132 kV S/s Bazpur & 132 kV S/s Ramnagar respectively. Proposed load growth in next five years in both of these areas is high on 33 kV system. Also, in case of T-1 contingency, the other transformer shall not be able to cater the demand of respective sub-stations so, for catering the increased load demand in Bazpur, Ramnagar and nearby areas & for better utilization of both sub-stations, increasing capacity of 132 kV S/s Bazpur from 120 MVA to 160 MVA by installing a new 1x80 MVA T/F and increasing capacity of 132 kV S/s Ramnagar from 60 MVA to 80 MVA by installing 1x40 MVA T/F dismantled from 132 kV S/s Bazpur is essentially required.

- b) The details of the maximum load on presently installed transformers at 132 kV S/s Bazpur and 132 kV S/s Ramnagar is as follows:

S.No.	Month	132 kV S/S Bazpur			132 kV S/S Ramnagar		
		Max. Load in MVA on 80 MVA T/f	Max. Load in MVA on 40 MVA T/f	Total max load in 120 MVA	Max. Load in MVA on 40 MVA T/f	Max. Load in MVA on 20 MVA T/f	Total max load in 60 MVA
1	Jan-22	54.7	27.7	82.4	26.3	15.8	42.1
2	Feb-22	57.4	27.9	85.3	24.2	14.6	38.8
3	Mar-22	51.7	25.6	77.3	24.2	15.8	40
4	Apr-22	58.8	29.3	88.1	28.8	17.8	46.6
5	May-22	62.2	30.4	92.6	28.3	18.3	46.6
6	Jun-22	72.8	35.7	108.5	39.8	18.5	58.3
7	Jul-22	71.4	36.8	108.2	35.7	18.1	53.8
8	Aug-22	67.7	33.2	108.9	34.5	16.2	50.7
9	Sep-22	62.5	30.9	93.4	34.1	15.3	49.4
10	Oct-22	48.7	24.2	72.9	27.9	14.2	42.1
11	Nov-22	47.4	23.1	70.5	22.9	19.2	42.1

Petitioner submitted that as is evident from the above table, in the month of June, July and August, 2022 the maximum load on 40 MVA T/F at 132 kV S/s Bazpur and on 20 MVA T/F at 132 kV S/s Ramnagar reached 80%-90% of their existing capacity.

- c) The Petitioner submitted that after the augmentation of 132 kV Sub-station Bazpur and of 132 kV Sub-station Ramnagar, reliability and quality of power shall be ensured in the area and T-1 contingency criteria shall also be met.

Commission's Observations, Views & Decision:

6. On examination of the proposal and discussion/clarification, the Commission observed that:
- a) 132 kV S/s Bazpur and 132 kV s/s Ramnagar are two of the most important transmission sub-substations of the Kumaon region supplying power to domestic, agriculture, industrial and commercial consumers of Bazpur, Ramnagar and nearby areas and also foreseeing the load growth/demand in near future as submitted by the Petitioner, the Commission is of the view that the augmentation works as proposed by the Petitioner at 132 kV Bazpur S/s and 132 kV Ramnagar S/s is justified.
- b) The Petitioner has submitted the funding pattern in the Petition, however, the Petitioner has not submitted any letter from the financial institution regarding loan and documentary evidence entailing Government's commitments towards equity funding for the proposal.
7. The Commission hereby grants in-principle approval for Rs. 14.96 Crore (including IDC) as shown in the table given below and directs the Petitioner to go ahead with the aforesaid work subject to fulfilment of the conditions mentioned below:

Capital Cost Approved by the Commission

S. No.	Particulars	Augmented Transformer Capacity (in MVA)	Project Cost including IDC as per DPR (Rs. Crore)	Project Cost Considered by the Commission (including IDC) (Rs. Crore)
1.	Increasing Capacity of 132 kV Substation Bazpur from 1x80+1x40 MVA to 2x80 MVA and its associated works.	80 MVA	14.96	14.96
2.	Increasing Capacity 132 kV Substation Ramnagar from (1x20+1x40) MVA to 2x40 MVA and its associated works.	40 MVA		

- (i) The Petitioner should go for the competitive bidding for obtaining most economical prices from the bidders.

- (ii) All the loan conditions as may be laid down by the funding agency in their detailed sanction letter are strictly complied with.
- (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 funding agreed by the State Government or any other source in respect of the proposed project.
- (iv) After completion of the aforesaid project, the Petitioner shall submit the completed cost and financing of the project.
- (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.

(M.K. Jain)
Member (Technical)

(D.P. Gairola)
Member (Law)/Chairman I/C