

**Before**  
**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**  
**Petition No. 47 & 48 of 2016**

**In the Matter of:**

Approval of Capital Investments under Para 11 of the Transmission Licence involving following works of System Improvement:

- (a) Augmentation of 132 kV S/s Bindal from 2x40 MVA to 3x40 MVA by procurement, installation & commissioning of 132/33 kV, 40 MVA Transformer at 132 kV S/s Bindal, Dehradun.
- (b) Augmentation of Transformation capacity from 2x40 MVA to 3x40 MVA by commissioning of 01 no. additional 132/33 kV, 40 MVA Transformer, HV & LV Bay & Oil pit for NIFDES & Construction of 03 Nos. new 33 kV Feeder Bays at 132 kV S/s Jashodharpur, Kotdwar (Pauri Garhwal).

And

**In the Matter of:**

Power Transmission Corporation of Uttarakhand Limited (PTCUL)

**Coram**

**Shri Subhash Kumar      Chairman**

**Date of Order: 10<sup>th</sup> February, 2017**

**ORDER**

This Order relates to the Petitions filed by Power Transmission Corporation of Uttarakhand Ltd. (hereinafter referred to as "PTCUL" or "the Petitioner") seeking approval of the Commission for the investment of following works:

- (a) Augmentation of 132 kV S/s Bindal from 2x40 MVA to 3x40 MVA by procurement, installation & commissioning of 132/33 kV, 40 MVA Transformer at 132 kV S/s Bindal, Dehradun.

- (b) Augmentation of Transformation capacity from 2x40 MVA to 3x40 MVA by commissioning of 01 no. additional 132/33 kV, 40 MVA Transformer, HV & LV Bay & Oil pit for NIFDES & Construction of 03 Nos. New 33 kV Feeder Bays at 132 kV S/s Jashodharpur, Kotdwar (Pauri Garhwal).
2. The Petitioner submitted proposals for capital investment of the works mentioned in the above para for approval of the Commission under Para 11 of Transmission Licence [Licence No. 1 of 2003] vide letters No.1511/MD/PTCUL/UERC dated 21.09.2016 and No.1512/MD/PTCUL/UERC dated 21.09.2016 respectively.
3. The estimated cost of the works proposed by the Petitioner through the DPRs submitted alongwith the Petitions are as follows:

**Table 1: Project wise cost proposed by the Petitioner**

Sl. No.	Particulars	Transformer Capacity	Project Cost including IDC as per DPR (₹ Crore)
(a)	Augmentation of 132 kV S/s Bindal, Dehradun	2x40 to 3x40 MVA	8.61
(b)	Augmentation of Transformation capacity by procurement, installation and commissioning of 01 no. additional 132 /33 kV 40 MVA T/F, HV & LV bay & oil pit for NIFPES & construct of 03 nos. 33 kV feeder Bays at 132 kV S/s Jashodharpur, Kotdwar	2x40 to 3x40 MVA	10.02
	<b>Total</b>		<b>18.63</b>

4. The Petitioner has submitted copy of extracts of the 54<sup>th</sup> Minutes of BoD Meetings of PTCUL held on 22.06.2016, wherein the Petitioner's Board has approved the Corporation's aforesaid proposals with a funding pattern of 70% through loan assistance by financial institutions and balance 30% as equity funding from GoU.
5. A hearing for admissibility of the above proposals was held on 18.10.2016, accordingly, the Applications were admitted under Petition No. 47 & 48 of 2016.
6. To justify the need of the works proposed in the above Petitions, the Petitioner submitted that:
- (a) Augmentation of 132 kV S/s Bindal from 2x40 MVA to 3x40 MVA by procurement, installation & commissioning of 132/33 kV, 40 MVA Transformer at 132 kV S/s Bindal, Dehradun.**

According to the Petitioner, the present capacity of 132 kV S/s Bindal, Dehradun is 80 MVA (2x40 MVA) and approximately 150.5 MVA load is connected to it.

The Petitioner has submitted the details of month-wise Maximum loading of Transformers at 132 kV S/s Bindal. The maximum load on each 40 MVA Transformers in last 4 years is exceeding its rated current carrying capacity of 174 Amp. And the same are presented below:

FY Year	Month	Maximum Load (Amp.)	
		Transformer-I	Transformer-II
2013-14	June 2013	181	181
2014-15	June 2014	190	190
2015-16	June -2014	178	178
2016-17 up to Dec 17	May 2014	192	192

The Petitioner has further informed that two new 33/11 kV S/s namely 33kV Ghantaghar (1x10 MVA) and 33 kV Urja Bhawan have been connected to 132 kV S/s Bindal. So to avoid power cuts and to provide un-interrupted power supply to the consumers, augmentation at 132 kV Bindal S/s is proposed.

**(b) Augmentation of Transformation capacity from 2x40 MVA to 3x40 MVA by commissioning of 01 no. additional 132/33 kV, 40 MVA Transformer, HV & LV Bay & Oil pit for NIFDES & Construction of 03 Nos. New 33 kV Feeder Bays at 132 kV S/s Jashodharpur, Kotdwar (Pauri Garhwal)**

The Petitioner has submitted that 132/33 kV S/s Jashodharpur, Kotdwar caters to the power need of Tarei & Hills region. Presently there are two 132/33 kV 40 MVA, Transformers installed at the substation. The substation meets the load requirement of domestic, commercial, industrial as well as agricultural consumers of Kotdwar town and nearby areas.

The Petitioner has submitted the details of month-wise Maximum loading of Transformers at 132 kV S/s Jashodharpur, Kotdwar. The maximum load on each 40 MVA Transformer in last 4 years is shown table below:

FY Year	Month	Maximum Load (Amp.)	
		Transformer-I	Transformer-II
2012-13	Dec-2012	155	144
2013-14	Jan-2014	169	158
2014-15	June-2014	169	156
2015-16	Mar-2016	160	154

According to the Petitioner, the existing Transformers are approximately 80-85% loaded w.r.t. their rated. Keeping in view the load growth in recent times and in future, it is very essential to augment the transformer capacity of substation by adding one more 40 MVA transformer and 03 nos. 33 kV bays.

7. On examination of the proposals, submitted by the Petitioner, certain deficiencies/observations were observed, which were communicated to the Petitioner vide Commission's letters No. 1615 & 1616 dated 20.01.2017. Reply to deficiencies/observations was submitted by the Petitioner vide its letter No. 179 dated 30.01.2017.

**Commission's observations, Views and Decision**

8. In support of these clarifications given by the Petitioner the proposed augmentation works are acceptable. However, on examination of the proposals, it has also been observed that while preparing the estimate for the revised DPRs, the Petitioner in addition to contingency and cost of establishment, audit & accounting has added quantity variation and cost escalation @ 20% in the estimate. In the absence of any justified reasons for including quantity variation and cost variation, the Commission is not considering the same as of now.
9. Based on the above, against the Petitioner's proposed capital expenditure of ₹18.63 Crore, the Commission hereby grants in-principle approval for the expenditure of ₹13.02 Crore only as per Table 2 given below with the direction that the Petitioner should go ahead with the aforesaid works subject to fulfillment of the terms & conditions mentioned in Para 10 below.

**Table 2: Project wise cost proposed by the Petitioner vis-a-vis cost considered by the Commission**

Sl. No.	Particulars	Substation/Transformer Capacity	Project Cost including IDC as per DPR (₹ Crore)	Cost considered by the Commission (₹ Crore)
(a)	Augmentation of 132 kV S/s Bindal, Dehradun.	2x40 to 3x40 MVA	8.61	6.03
(b)	Augmentation of Transformation capacity by procurement, installation and commissioning of 01 no. additional 132 /33 kV 40 MVA T/F, HV & LV bay & oil pit for NIFPES & construct of 03 nos. 33 kV feeder Bays at 132 kV S/s Jashodharpur, Kotdwar.	2x40 to 3x40 MVA	10.02	6.99
	<b>Total</b>		<b>18.63</b>	<b>13.02</b>

10. Terms and conditions subject to which in-principle approval granted by the Commission are as follows:

- (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 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.

**(Subhash Kumar)**  
**Chairman**