

Before
UTTARAKHAND ELECTRICITY REGULATORY COMMISSION
Petition No. 47 of 2024

In the Matter of:

Investment Approval for DPR of “Augmentation of Transformer Capacity at 220 kV S/s SIDCUL Haridwar from 2x80 MVA (132/33 kV) + 1x50 MVA (220/33 kV)+1x25 MVA (220x33 kV) to 2x80 MVA (132/33 kV) + 2x50 MVA (220/33 kV).”

And

In the Matter of:

Power Transmission Corporation of Uttarakhand Limited (PTCUL)
‘Vidyut Bhawan’, Near ISBT, Majra,
Dehradun.

.....Petitioner

Coram

Shri M.L. Prasad

Chairman

Shri Anurag Sharma

Member (Law)

Date of Order: July 30, 2025

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. 1793/MD/PTCUL/UERC dated 21.06.2024 seeking Investment Approval for “Augmentation of Transformer Capacity at 220 kV S/s SIDCUL Haridwar from 2x80 MVA (132/33 kV) + 1x50 MVA (220/33 kV)+1x25 MVA (220x33 kV) to 2x80 MVA (132/33 kV) + 2x50 MVA (220/33 kV)” under Para 11 of Transmission Licence. [Licence No. 1 of 2003].

1. Background

- 1.1 The Petitioner through the aforesaid letter has submitted the investment approval amounting to Rs. 13.74 Crore for the proposed work. The DPR for the same was passed by the Board of Director in its 90th Meeting of BoD held on 27.05.2024.
- 1.2 Subsequently, the Petitioner, vide its letter dated 08.04.2025, submitted a supplementary Petition in the matter, wherein, only the cost of the DPR was revised from Rs. 13.74 Crore to Rs. 16.86 Crore, based on the revision of the Schedule of Rates (SoR) and the scope of work remains the same as earlier DPR. The revised DPR was duly approved by the Board of Directors in the 94th meeting of BoD held on 26.09.2024.
- 1.3 In the aforesaid supplementary Petition, the Petitioner has submitted the following proposal for investment approval:

Particulars	Project Cost as per DPR (excluding IDC) (in Crore)	Total Project Cost as per DPR (including IDC (in Crore)
Augmentation of Transformer Capacity at 220 kV S/s SIDCUL Haridwar from 2x80 MVA (132/33 kV) + 1x50 MVA (220/33 kV) + 1x25 MVA (220x33 kV) to 2x80 MVA (132/33 kV) + 2x50 MVA (220/33 kV).	16.32	16.86

- 1.4 The Petitioner has submitted a copy of the extract of Minutes of 94th meeting of the Board of Directors (BoD) of PTCUL held on 26.09.2024, wherein the Petitioner's Board has approved the Corporation's aforesaid proposals as stated below:

"After consideration, the Board passed following resolution unanimously.

RESOLVED THAT the consent of the Board be and is hereby accorded to approve the Detailed Project Report for Augmentation of Transformer Capacity from 2x80 MVA (132x33 kV) + 1x50 MVA (220x33 kV) + 1x25 MVA (220/33 kV) to 2x80 MVA (132/33 kV) + 2x50 MVA (220/33 kV) AT 220 kV S/s SIDCUL, Haridwar at total scheme cost of Rs. 16.86 Crore with IDC and Rs. 16.32 Cr. Without IDC.

Resolved Further That the DPR submitted and approved in the 92nd Board meeting held on 27/08/2024 vide agenda item no. 92.31 on the same project shall be treated as null & void and shall be deemed to have been withdrawn by the management.

RESOLVED FURTHER THAT the aforesaid DPR to be submitted to Hon'ble UERC for investment approval.

RESOLVED FURTHER THAT Managing Director, Director (Operations) or any other functional Director jointly and severally are hereby authorized to sign, seal and certifies all the documents, petitions and all other legal paper that might be required for sending the proposal for investment approval for signing all clarifications and to do all other such legal acts may be necessary to be acted upon in furtherance of the investment approval.

RESOLVED FURTHER THAT the Managing Director and/or Director (Finance) and /or Company Secretary be and are hereby jointly and severally authorized to approach to REC/PFC/NABARD/HUDCO/ Banks and other financial institution as they deem fit and proper and tie-up the loan component with a debt equity ratio of 70:30."

- 1.5 To justify the need for the proposed work in the aforesaid Petition, the Petitioner has submitted that:

"220/132/33 KV Substation SIDCUL, Haridwar is one of the important grid substation of PTCUL which was commissioned in year 2005-06. Presently there are 02 nos. 80 MVA, 132/33 KV Transformers on 132 KV Bus's and 01 nos. 50 MVA (220/33 KV) & 01 nos. 25 MVA (220/33 KV) Transformers on 220 kV Bus's are installed respectively, which caters the load requirement of domestic, commercial, industrial as well as consumers of Haridwar town. The details of 33 KV feeders which connected from 50 MVA (220/33KV) and 25 MVA (220/33KV) Transformers at 220 KV Substation SIDCUL, Haridwar is as follows: -

S. No.	Feeder/C.B. No.	Load
1	33 kV Line No. 10	28 MVA
2	33 kV Line No. 11	11 MVA
3	33 kV Line No. 12	07 MVA
4	33 kV Line No. 13	10 MVA
5	33 kV Line No. 14	16 MVA
6	33 kV Line No. 15	05 MVA (proposed)
	Total connected load	77 MVA

Presently the running load on 50 MVA (220/33KV) and 25 MVA (220/33KV) Transformers is approximately 95-100% of total capacity of these transformers. The chart showing the maximum load on transformers and average load growth in the last four years at 220 KV Substation SIDCUL, Haridwar (enclosed with DPR for reference). Keeping in view growth in load demand in recent times, it is very essential to increase the transformer

capacity of substation including other necessary related works. Hence, it is proposed to install 01 No. of additional 50 MVA (220/33 KV) Transformer in place of 25 MVA (220/33 KV) Transformer in parallel with 1x50 MVA Transformer at 220 KV S/s SIDCUL, Haridwar."

- 1.6 The Petitioner in its Petition has mentioned that the estimated cost proposed in the DPR has been prepared on the basis of the PTCUL's SoR 2024-25.
- 1.7 The Petitioner in its Petition has enclosed the Bar chart for the project with an execution period of 17 months from the date of award of the contract. Further, the Petitioner under the financial analysis has projected an IRR of 14.38% with breakeven in the 10th year of operations.
- 1.8 On examination of the proposal submitted by the Petitioner, certain deficiencies/shortcomings were observed as mentioned below, which were communicated to the Petitioner vide Commission's letter No. 812 dated 09.09.2024. In reply to the deficiencies raised by the Commission, the Petitioner has submitted its reply vide letter no. 1547/Dir (Operations)/PTCU/UERC dated 23.09.2024. The queries raised by the Commission and subsequent clarification submitted by the Petitioner is as follows:

Query 1:	<p>1. PTCUL has proposed the procurement, installation, testing & commissioning of 50 MVA T/F in place of the existing 25 MVA T/F at the 220/33 kV S/s SIDCUL. In this regard, PTCUL is required to submit the following:</p> <ol style="list-style-type: none"> a. Justify, how the T-1 contingency for the 220/33 kV S/s SIDCUL will be maintained by installing the 50 MVA T/F, as the already operating 50 MVA T/F and 25 MVA T/F is loaded upto 98% and 100% of their rated capacity. b. Basis of consideration of 50 MVA T/F for the proposed augmentation. c. Specify the proposed utilisation of dismantled 25 MVA T/F (220/33 kV) providing the reason for the same. d. Datasheet of each existing T/F at 220/33 kV, 220/132 kV, 132/33 kV S/s SIDCUL with the date of commissioning of each transformer.
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	<p>e. Technical specifications of the proposed 50 MVA T/F to be issued for bidding process.</p>
<p>Reply 1:</p>	<p>a. At 220KV S/s SIDCUL, Haridwar there are 02 No. 80 MVA (132/33 KV) transformers available for feeding 33 KV system which is interconnected to 220/33 KV side via XLPE cable for transferring 33 KV load (approx 20-25 MVA) to either side when required. So T-1 contingency will be maintained by installing 50 MVA Transformer.</p> <p>b. Director (Operations), UPCL vide letter no. 4580 dated 17.11.2023 and letter no. 5163 dated 28.12.2023 had raised demand for increasing transformer capacity from 25 MVA (220/33 KV) to 50 MVA (220/33 KV) at 220 KV S/S SIDCUL Haridwar. Also in 9th Co-ordination Forum Meeting. Hon'ble UERC had directed to expedite the capacity enhancement work.</p> <p>c. Dismantled 25 MVA T/F is 45 year old (1979 make) & received back as scrape. The same shall be intimated to Material Management Wing of PTCUL for further processing as per the guidelines.</p> <p>d. There are 06 No. 220/33 KV, 220/132 KV and 132/33KV Transformers commissioned at 220 KV SIDCUL, Substation SIDCUL, Haridwar.</p> <p>1. <u>50MVA (220/33 KV) T/F:-</u> This is IMP make power transformer having rating on dated 50MVA 220/33KV Three Phase, oil immersed, ONAN/ONAF cooling, frequency 50Hz, Vector Group YNYNO, % impedance 12.61% (at Normal Tap Position), wt. of transformer 98,000 Kg and Volume of oil 30,857 Litres and tap position 1 to17 commissioned on dated 02.06.2016.</p> <p>2. <u>25MVA (220/33 KV) T/F:-</u> This is TELK make power transformer having rating 25MVA,220/33KV Three <u>Phase</u>, oil immersed, ONAN/ONAF/OFAF cooling, frequency 50Hz, Vector Group YYodl, % impedance 12.63% (at normal Tap), wt. of transformer 73,000 Kg and Volume of oil 24,240 Liters and tap position 1 to 17 commissioned on dated 25.09.2019 at 220 KV S/S SIDCUL, Haridwar.</p> <p>3. <u>160MVA (220/132KV)T/F Ist:-</u> This is IMP make AUTO transformer having rating 160MVA, 220/132KV Three Phase, oil immersed, ONAN/ONAF/OFAF cooling, frequency 50Hz, Vector Group YNaod11, % impedance 10.021%(at normal Tap), wt. of transformer 132,000 kg and</p>

	<p>Volume of oil 44,572 Liters and tap position 1 to 17 commissioned on dated 07.01.2015.</p> <p>4. <u>160MVA (220/132KV)T/F IIInd:-</u> This is IMP make AUTO transformer having rating 160MVA, 220/132KV Three Phase, oil immersed, ONAN/ONAF/OFAF cooling, frequency 50Hz, Vector Group YNaod11, % impedance 10.021%(at normal Tap), wt. of transformer 132.000 kg and Volume of oil 44,572 Liters and tap position 1 to 17 commissioned on dated 23.01.2015.</p> <p>5. <u>80MVA (132/33KV)T/F Ist:-</u> This is BHEL make Power transformer having rating 80MVA, 132/33KV Three Phase, oil immersed, ONAN/ONAF cooling, frequency 50Hz, Vector Group YNyno, % impedance 13.75% (at normal Tap) wt. of transformer 123,500 kg and Volume of oil 32,900 Liters and tap position 1 to 17 commissioned on dated 19.06.2006.</p> <p>6. <u>80MVA (132/33KV)T/F IIInd-</u> This is BHEL make Power transformer having rating 80MVA, 132/33KV Three Phase, oil immersed, ONAN/ONAF cooling. frequency <u>50Hz</u>. Vector Group YNyno, % impedance 13.75% (at normal Tap), wt. of transformer 123,500 kg and Volume of oil 32,900 Liters and tap position 1 to 17 commissioned on dated 19.06.2006.</p> <p>e. Technical specification of proposed 50 MVA Transformer is attached.</p>
Query 2:	PTCUL is required to justify not adjusting the dismantled/received back material cost in the estimate.
Reply 2:	PTCUL has separate wing namely Material Management to decide the Cost of all the scraped/received back materials on H-1 basis. Therefore, in the greater interest of Corporation, cost of dismantled/received back material is not adjusted in the estimate.
Query 3:	PTCUL in its Petition has submitted that the load details of the 06 nos. 33 kV feeders (05 nos. existing + 01 no. proposed) emanating from the 220/33 kV S/s SIDCUL. In this regard, PTCUL is required to submit the name of the connected loads of the mentioned feeders with the month-wise maximum load (in amperes) of each feeder for the last 02 years.
Reply 3:	Month wise maximum load detail of existing 06 No. (05 feeders on load & 01 feeder charged on No load) 33 KV feeders is attached.

Query 4:	<p>PTCUL submitted that the due to overloading of th 25 MVA T/F, UPCL has to manage the loads by way of roistering of non-continuous industrial feeders. In this regard, PTCUL is required to submit the details of major instances in the past 01 year of overload in the table below due to which roistering needs to be done for the 33 kV S/s:</p> <table><tr><th>S.No.</th><th>Date</th><th>Time of instance</th><th>Duration (in minutes)</th><th>Detail of Instance (Outage/Tripping)</th></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>	S.No.	Date	Time of instance	Duration (in minutes)	Detail of Instance (Outage/Tripping)					
S.No.	Date	Time of instance	Duration (in minutes)	Detail of Instance (Outage/Tripping)							
Reply 4:	<p>Detail of roistering due to over loading of 25 MVA Transformer is attached.</p>										
Query 5:	<p>PTCUL in its Petition submitted that after the augmentation of the S/s, the exponential load growth of the system can be met. In this regard, PTCUL is required to submit the details of load growth for the SIDCUL S/s in the next 03 years with supporting documents substantiating the projected load growth.</p>										
Reply 5:	<p>Detail of next 03 Year wise load growth forecast is attached.</p>										
Query 6:	<p>PTCUL in its Petition has provided the details of the 06 nos. 33 kV Feeders (05 nos. existing + 01 no. proposed), whereas, only 05 nos. 33 kV feeders (03 nos. existing + 02 no. proposed) were shown in the Single Line Diagram of 220/33 kV S/s SIDCUL. In this regard, PTCUL is required to justify the reason for the variation and submit the revised SLD for 220/33 kV S/s.</p>										
Reply 6:	<p>The variation was due to typographical error. However, Presently there are 06 Nos. 33 KV feeders (05 no. on Load & 01 no. on no Load) are commissioned & accordingly Single Line Diagram of 220/33 KV substation SIDCUL is attached.</p>										
Query 7:	<p>PTCUL in its Petition has submitted the Annual Financial Charges Sheet for the proposed works, in this regard, PTCUL is required to provide the reason for consideration of IoWC @ 13.70%, whereas, in the recent Tariff Order for FY 2024-25 the Commission has approved the IoWC @ 11.30%. Subsequently, in case of any changes, PTCUL is required to submit the revised sheet of Annual Financial Charges, Financial analysis and Breakeven Point analysis (in soft copy/excel format).</p>										
Reply 7:	<p>IoWC charges revised 11.30% in place of 13.70% and copy of Revise Annual Financial Charges, Financial Analysis and breakeven point analysis enclosed.</p>										

Query 8:	PTCUL in its Petition has not submitted the Cost Benefit Analysis of the project. In this regard, PTCUL is required to submit the Cost Benefit Analysis for the project.
Reply 8:	<i>Copy of Cost Benefit Analysis for the said project is attached.</i>

- 1.9 Further, on examination of the reply submitted by the Petitioner as mentioned above, certain additional deficiencies/shortcomings were observed as mentioned below, which were communicated to the Petitioner vide Commission's letter No. 1127 dated 20.11.2024. In reply to the deficiencies raised by the Commission, the Petitioner has submitted its reply vide letter no. 2067/Dir (Operations)/PTCU/UERC dated 04.12.2024. The queries raised by the Commission and subsequent clarification submitted by the Petitioner is as follows:

Query 1:	PTCUL in its reply to query no. 1(a) has submitted that there is an interconnection point between the 132/33 kV and 220/33 kV side via XLPE cable to take care of the T-1 contingency in the 220 kV S/s SIDCUL. In this regard, PTCUL is required to submit the revised SLD of S/s by clearly establishing the interconnection point between the 220/33 kV and 132/33 kV side, mentioning the current carrying capacity of the XLPE cable also.
Reply 1:	<i>Detailed Single Line Diagram (SLD) of 220 kV S/s SIDCUL, Haridwar is attached as page no. 1 to 2 including size & current carrying capacity of 33 kV XLPE cable.</i>
Query 2:	PTCUL in its reply to query no. 1(b) has submitted that the increase of transformer capacity from 25 MVA to 50 MVA is proposed as per the demand of UPCL, in this regard, PTCUL is required to submit the technical analysis report prepared by it in consideration of the long-term demand forecast scenario.
Reply 2:	<i>Detail technical analysis report is attached.</i>
Query 3:	PTCUL in its reply to query no. 1(c) has submitted that the existing 25 MVA transformer will be dismantled and received back as scrap since the transformer is 45 years old. In this regard, PTCUL is required to submit the Residual Life Assessment (RLA) report as per the CEA guidelines for the 25 MVA transformer. Further, PTCUL is required to evaluate that whether the outgoing transformer can be utilized in any upcoming substation or for any other augmentation work and any Petition for the said work is already filed or not.

Reply 3:	<i>Copy of Residual Life Assessment (RLA) report is attached as page -11 to 13. Presently dismantled 25 MVA Transformer is not utilized in any upcoming S/s or any other augmentation work.</i>
Query 4:	PTCUL in its reply to query no. 1(d) has submitted details of technical specifications of the individual transformers placed in the 220 kV S/s SIDCUL, Haridwar. In this regard, PTCUL is required to submit the datasheet/screenshot of the nameplate of the transformers in support of the information provided.
Reply 4:	<i>Datasheet/screenshot of the nameplated of 160 MVA – T/F – 1st & 2nd, 50 MVA T/F, 25 MVA T/F, 80 MVA – T/F – 1st & 2nd is attached.</i>
Query 5:	PTCUL in its reply to query no. 1(e) has submitted the reference documents for the specification of the proposed 50 MVA transformer, in this regard, PTCUL is required to submit the source of said reference documents with the year of publication and the technical specification of 50 MVA transformer only based on which bids will be invited in future.
Reply 5:	<i>Technical specification should be provided by Engineering wing of PTCUL is attached.</i>
Query 6:	<p>PTCUL in its reply to query no. 3 has submitted the maximum loading of 05 nos. of 33 kV lines emanating from 220/33 kV S/s of SIDCUL. In this regard, PTCUL is required to:</p> <ol style="list-style-type: none"> Provide the reason for showing zero maximum load for the month from April to July in FY 2023-24 for 33 kV line no. 11 and from April to August in FY 2024-25 for 33 kV line no. 13. Provide the feeder's names for lines No. 10 to 14, feeding the respective loads. Submit the maximum loading details of 02 nos. of 132/33 kV, 80 MVA transformers for the past 03 years, when both the transformers were working in normal condition and catering to the load. Submit the name and type of conductor with their current carrying capacity being used for 33 kV feeders and main/transfer bus system in the 220/33 kV and 132/33 kV S/s.
Reply 6:	<ol style="list-style-type: none"> <i>M/s ALPS feeded through line no. 11 in Nov-2022 Company shifted from SIDCUL Haridwar to other place that's why the load on line no. 11 is Zero. Load of line no. 13 was shifted on line no. 11 by UPCL in the month of Aug-2023, That's why load on line no. 13 shows Zero.</i> <i>Line No. 10: Sec – 7</i> <i>Line No. 11: ALPS Line No. 12: ULTIMATE</i> <i>Line No. 13: I.P. – 2</i> <i>Line No. 14: Sec – 5B</i>

	<p><i>Maximum Load sheet of line no. 10 to 14 is attached as page no. 90.</i></p> <p><i>c. The maximum loading detail of 02 nos. 132/33 kV, 80 MVA transformers for the past 03 years is attached as page no. 91.</i></p> <p><i>d. Conductor used on:</i></p> <p><i>33 kV Main Bus: Quad Moose,</i></p> <p><i>33 kV Transfer Bus: Twin Moose,</i></p> <p><i>33 kV Feeders: Panther,</i></p> <p><i>Current carrying capacity of panther conductor: 560 Amp. At ambient temp. 45°C</i></p> <p><i>Current carrying capacity of Moose conductor: 980 Amp. Ambient temp. 45°C</i></p>
Query 7:	<p>PTCUL in its reply to query No. 4 has submitted overloading condition of 25 MVA 220/33 kV existing transformer in August 2024 only which suggested that prior to it the transformers were not overloaded, but even in the month of August, the reasons for trippings in line seems more due to individual feeder overloading rather than transformer overloading. Hence PTCUL is required to submit the supporting documents for that and also to inform that whether or not the load transfer to 132 /33 kV system was exercised in such situation.</p>
Reply 7:	<p><i>In the month of Aug-2024 feeders was opened for avoiding tripping of 50 MVA & 25 MVA T/F on overloading as per real time condition. Detail of loading of T/Fs is attached as page no. 92 to 93.</i></p> <p><i>As per availability of load at 132/33 kV system load may be shifted from 220/33 kV system towards 132/33 kV system through 33 kV XLPE underground cable by Line No. 13, which is spare and at present not in used by UPCL.</i></p>
Query 8:	<p>PTCUL in its reply to query no. 7 has submitted a revised break-even point analysis, in this regard, PTCUL is required to submit the:</p> <ol style="list-style-type: none"> Reason for consideration of load factor as 0.8 for the calculation of additional energy available especially when PTCUL has stated that the system will be N-1 contingency compliant. Reason for mentioning the “Cost of project excluding grant” while calculating the break-even point analysis, as in the present Petition, the calculation of financial analysis has done on the basis of the 70:30 debt-equity ratio excluding grant.
Reply 8:	<ol style="list-style-type: none"> <i>Average loading of 80% on the transformer is assumed considering all operating conditions of the transformer, therefore load factor of 0.8 is taken.</i> <i>Attached.</i>

2. Commission's Observations, Views and Directions:

2.1 Based on the submissions made in the Petition and subsequent submissions of the Petitioner, the Commission observed that:

2.1.1 The loading on the 220/33 kV, 50 MVA and 25 MVA transformers installed at the 220 kV substation in SIDCUL, Haridwar has reached full capacity by the middle of FY 2024-25, as per the maximum loading sheet provided in the reply. Further, the petitioner informed the Commission that during peak or overload conditions, they are compelled to rely on the Discom to manage the load from their end, which is not a desirable situation. Considering the load on the 220/33 kV transformers (50 MVA + 25 MVA), and the fact that the existing two 132/33 kV, 80 MVA transformers are also operating near full capacity and thus unable to share the load, along with the anticipated future load growth in the area particularly as SIDCUL is one of the State's major industrial estates, the proposal for replacing the 25 MVA transformer with a 50 MVA transformer appears to be justified.

2.1.2 The Petitioner, in its computation, has not accounted for the receipt of the outgoing 25 MVA transformer (220/33 kV). Upon the Commission's enquiry regarding this, the Petitioner informed that the transformer would be scrapped. This TELK make power transformer was manufactured in 1979 and commissioned at the 220 kV substation in SIDCUL, Haridwar in 2019. Accordingly, it has completed approximately 46 years of service against the normative useful life of 25 years, as per prevailing regulations. The Petitioner further submitted that the transformer would be dismantled and not utilized in any upcoming substations, and that the scrapping would be undertaken by the Material Management Wing of PTCUL. However, when the Commission requested a Residual Life Assessment (RLA) report of the transformer, the Petitioner casually submitted only the Depreciation Schedule provided under the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018. This submission is inadequate, as it does not address the specific requirement of an RLA report, especially when explicitly sought by the Commission. The matter of scrapping a functioning transformer which is currently operating at full capacity without any signs of failure is significant and must be evaluated

thoroughly. It is noteworthy that the Petitioner itself commissioned this transformer at the 220 kV SIDCUL substation in 2019, despite the asset being over 40 years old at the time. The present replacement is necessitated by load growth rather than any functional deficiency in the transformer. **Considering the above, the Commission expresses its disappointment with the Petitioner's approach. The Commission is of the view that a proper technical assessment of the transformer should be conducted before any decision to scrap it is made. Further, if the transformer is found to be in serviceable condition, it should be redeployed at another suitable location, especially considering the current market constraints regarding timely availability of new transformers.**

- 2.1.3 Regarding the T-1 contingency for the 220/33 kV substation at SIDCUL, Haridwar, Petitioner submitted that currently, there are two 80 MVA (132/33 kV) transformers available for feeding the 33 kV system. This 33 kV system is interconnected with the 220/33 kV side through XLPE cables, enabling the transfer of approximately 20-25 MVA load between the two voltage levels as required.

However, such load transfer is currently not feasible due to the existing 25 MVA (220/33 kV) transformer operating under full load or overload conditions. The T-1 contingency compliance can only be ensured once the existing 25 MVA transformer is replaced with a 50 MVA transformer on the 220/33 kV side of the substation.

In this context, the Commission is of the view that, as discussed in the preceding paragraphs, the current overloading/full load condition of the 25 MVA transformer prevents any meaningful load transfer between the 220/33 kV and 132/33 kV systems. Consequently, the substation fails to meet the T-1 contingency requirements.

Therefore, the proposal to replace the existing 25 MVA transformer with a 50 MVA unit on the 220/33 kV side appears to be justified in order to achieve compliance with the T-1 contingency norms.

- 2.1.4 The Petitioner has considered the Price Contingencies @ 6.8%, Contingency @ 3% and Project Overheads @ 5% in the DPR. In this regard, in order to maintain uniformity with recent investment approvals, **the Commission has not considered Price Contingencies @ 6.8% and instead it has calculated the**

total project cost by considering the contingency @ 3% and project overheads @ 5% based on the past practice of the Commission.

Further as the issue of SoR revisions is presently under deliberation before the Commission, the rates considered in SoR of FY 2024-25 cannot be considered as final and accordingly the estimates based on these rates are also provisional in nature. Hence, the Commission after finalization on the issue of SoR, based upon its finding shall carry out the strict prudence check of the cost incurred and financing thereof in accordance with the conditions of Licence and MYT Regulations at the time of scrutiny of ARR.

2.2 The Commission hereby grants In-Principle approval for the investment of Rs 15.40 Crore only as per the table given below with the direction that the Petitioner should go ahead with the aforesaid works subject to the fulfilment of the conditions mentioned below:

Particulars	Total Project Cost as per DPR (including IDC) (in Crore)	Cost considered by the Commission (including IDC) (in Crore)
Investment Approval for DPR of "Augmentation of Transformer Capacity at 220 kV S/s SIDCUL Haridwar from 2x80 MVA (132/33 kV) + 1x50 MVA (220/33 kV)+1x25 MVA (220x33 kV) to 2x80 MVA (132/33 kV) + 2x50 MVA (220/33 kV)."	16.86	15.40

- (i) All the loan conditions as may be laid down by the funding agency in their detailed sanction letter are strictly complied with.
- (ii) The Petitioner shall, within one month of the Order, submit a 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 projects.
- (iii) After completion of the aforesaid projects, the Petitioner shall submit the completed cost and financing of the projects.
- (iv) 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 the prudence check of cost incurred and subject to the decision in SoR matter, stated above.

- (v) The Petitioner should conduct a proper technical assessment of the outgoing transformer before making any decision to scrap it. If the transformer is found to be in serviceable condition, it should be redeployed at another suitable location. The details of the same shall be informed to the Commission once a decision in this regard is taken.

2.3 The approval is given subject to the above conditions and on the basis of submissions and statement of facts made by the Petitioner in the Petition under affidavit, therefore, violations of the condition and in case any information provided, if at any time, later on, is found to be incorrect, incomplete or relevant information was not disclosed, and which materially affects the basis for granting the approvals, in such cases the Commission may cancel the approval or refuse to allow the expenses incurred in the ARR/True-up apart from initiating plenary action.

Ordered accordingly.

(Anurag Sharma)
Member (Law)

(M.L. Prasad)
Chairman