

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 270/TT/2021

Coram:

**Shri I.S. Jha, Member
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of Order: 20.10.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of 400 kV S/C Tehri (Generation)-Tehri (Koteshwar) (Quad) line along with associated bays at both ends under "Transmission system associated with Tehri Pump Storage Plant (PSP)".

And in the matter of:

Power Grid Corporation of India Limited,
SAUDAMINI, Plot No.2,
Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner

Vs.

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg, Jaipur - 302005.
2. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
4. Jodhpur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).



5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.
6. Punjab State Electricity Board,
The Mall, Patiala - 147001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana) 134109.
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226001.
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
13. Tata Power Delhi Distribution Limited,
33 kV Substation, Building,
Hudson Lane, Kingsway Camp,
North Delhi-110009.
14. Chandigarh Administration,
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation Limited.,
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,



New Delhi-110002.

18. Tehri PSP,
THDC India Limited, B Puram,
District Tehri Garhwal, Uttarakhand.

...Respondent(s)

For Petitioner : Shri S.S. Raju, PGCIL
Shri D.K. Biswal, PGCIL
Shri V.P. Rastogi, PGCIL
Shri A.K. Verma, PGCIL

For Respondent : Shri Tabrez Malawat, THDC
Smt. Ankita Bafna, THDC
Shri Syed Hamza, THDC
Shri Rajesh Sharma, THDC
Shri Neeraj Kumar Verma, THDC
Shri Mukesh Kumar Verma, THDC
Shri Ajay Vaish, THDC

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for determination of tariff from commercial date of operation (COD) to 31.3.2024 in respect of 400 kV S/C Tehri (Generation)-Tehri (Koteshwar) (Quad) line along with associated bays at both ends (hereinafter referred to as “the transmission asset”) under “Transmission system associated with Tehri Pump Storage Plant (PSP)” in the Northern Region (hereinafter referred to as “the transmission project”) under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”).

2. The Petitioner has made the following prayers in the instant petition:

“1) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.

2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered



under this petition.

- 3) *Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.*
- 4) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 5) *Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 6) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*
- 7) *Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.8 above.*
- 8) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 9) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
- 10) *Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.*

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

Background

3. The brief facts of the case are as follows:
 - a. Investment Approval (IA) of the transmission project was accorded by Board of Directors of the Petitioner in its 309th meeting held on 29.1.2015 vide Memorandum No. C/CP/TEHRI (PSP) dated 2.2.2015, at an estimated cost of ₹87162 lakh including an IDC of ₹5017 lakh based on December 2015 price level.



- b. The Revised Cost Estimate-I (RCE-I) in respect of the transmission project was approved by the competent authority (CMD) vide Memorandum dated 6.1.2021 at an estimated cost of ₹90249 lakh including an IDC of ₹8294 lakh based on June 2020 price level. The Petitioner has further submitted that RCE-II is under approval and will be submitted shortly.
- c. The scope of the transmission project was discussed and agreed in the 27th and 32nd meeting of Standing Committee on Transmission System Planning of Northern Region held on 30.5.2009 and 31.8.2013 respectively. The transmission system was agreed in 13th and 29th meetings of NRPC held on 27.6.2009 and 13.9.2013.
- d. Implementation agreement was signed on 23.9.2014 with THDC India Limited wherein zero date for the transmission project was agreed on 3.11.2017.
- e. The commissioning of THDC generating units got delayed. As per 6th JCC meeting held on 28.3.2019, the commissioning schedule of generating units was given as December 2020. As per 14th JCC meeting held on 29.6.2020, the commissioning schedule of generating units were revised to June 2022 to December 2022. In the 39th SCM in Northern Region held on 29.5.2017 and 30.5.2017, it was discussed and agreed that up-gradation of Tehri-Meerut 765 kV 2 x S/C lines (presently operated at 400 kV) which was identified with the commissioning of Tehri PSP generation project along with reactive compensation was delinked from the generation. In the 1st Meeting of Northern Regional Power Committee (Transmission Planning) (NRPCTP) held on 24.1.2020, and 2nd Meeting of NRPCTP held on 24.1.2020 and 1.9.2020 and a separate meeting held on 28.7.2020, the issue of delinking of assets was



discussed and it was deliberated and agreed that THDC will have to pay the transmission charges of the transmission asset including other generation linked assets covered under this transmission system till commissioning of generating units.

- f. As per the 18th JCC meeting held on 25.6.2021, the commissioning schedule of generating units of Tehri PSP have been revised to July, 2023 to December, 2023.
- g. The entire scope of work under the transmission project has been completed and the details of the scope of work covered in the instant petition is as follows:

Transmission Line

- 400 kV S/C Tehri Generation-Tehri Pooling Station (Quad line)
- Charging of Tehri Pooling-Meerut line at 765 kV level[#]
Note: Scope under this element Includes diversion of 765 kV S/C Koteshwar-Meerut line 1&2 at Meerut

Sub-stations

- i. 765/400 kV, 4 x 800 MVA Tehri GIS Pooling station

765 kV

- Line bays : 2 Numbers
- Bus Reactor bay : 1 Number
(1x240 MVAR bus reactor) (4 single phase units including 1 spare unit)
- 765/400 kV, 4x800 MVA ICTs (14 single phase units including 2 spare units)
- 765 kV ICT bays 4 Numbers

400 kV

- Line bays : 1 Number
- ICT bays : 2 + 2^{**} Numbers
*** Note: 2 numbers of 400 kV line bays vacated by Tehri Pooling station-Meerut lines would be used for termination of 765/400 kV ICTs.*

- ii. 765/400 kV Meerut Sub-station Extension



765 kV

- Line bays : 2 Numbers
- 2x240 MVAR Line reactor
- 765/400 kV, 1x1500 MVA ICTs along with associated 765 kV & 400 kV bays
- ICT bays : 1 Number
- Modification of Series Capacitors for operation at 765 kV level

400 kV

- ICT bays : 1 Number

h. The transmission assets were scheduled to be put into commercial operation within 33 months from the date of the IA i.e. 29.1.2015, matching with the zero date of the Implementation Agreement signed with THDC India Ltd. The Implementation Agreement between THDC India Ltd. and the Petitioner was signed on 23.9.2014 which specified 3.11.2017 as the zero date. Accordingly, the transmission assets were scheduled to be put into commercial operation (SCOD) on 3.11.2017 against which the transmission asset was put into commercial operation on 9.1.2021. Accordingly, there is a time over-run in declaring the COD of the transmission assets. The details of date of commercial operation (COD) of the transmission assets covered in the transmission project are as follows:

Sl. No.	Asset	SCOD	COD	Covered under petition
1	400 kV S/C Tehri (Generation)-Koteshwar (Tehri Pooling Station) (Quad) line along with associated bays at Koteshwar (Tehri Pooling Station).	3.11.2017	9.1.2021	Covered in the instant petition
2	Combined Asset of 1) Charging of Tehri Pooling-Meerut line Ckt-I at 765 kV level along with associated bays at Koteshwar (Tehri Pooling Station) end and 240 MVAR switchable line reactor and associated bays at Meerut end	3.11.2017	17.4.2020	Covered in Petition No. 673/TT/2020



Sl. No.	Asset	SCOD	COD	Covered under petition
	2) 765/400 kV 800 MVA ICT-II along with associated bays at Koteshwar (Tehri Pooling Station) 3) 765/400 kV 800 MVA ICT- III along with associated bays at Koteshwar (Tehri Pooling Station) 4) 765/400 kV 800 MVA ICT- IV along with associated bays at Koteshwar (Tehri Pooling Station).			
3	Combined Asset of 1) Charging of Tehri Pooling-Meerut line Ckt-II at 765kV level along with associated bays at Koteshwar (Tehri Pooling Station) end and 240 MVAR switchable line reactor and associated bays at Meerut end 2) 765/400kV 800 MVA ICT- I along with associated bays at Koteshwar (Tehri Pooling Station) 3) 765/400kV 1500 MVA ICT along with associated bays at Meerut Substation 4) Modification of series capacitor at Meerut Substation for operation at 765 kV level 5) 765 kV 240 MVAR Bus Reactor along with associated bays at Koteshwar (Tehri Pooling Station).	3.11.2017	30.6.2020	

4. The Respondents are distribution licensees, transmission licensees and power departments which are procuring transmission service from the Petitioner, mainly beneficiaries of the Northern Region.

5. The Petitioner has served the petition on the Respondents and THDC and notice regarding filing of this petition has also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. THDC India Ltd. (THDC) has filed its reply *vide affidavit* dated 10.8.2022 and 8.9.2022. THDC has raised issues regarding delinking of transmission assets from commissioning of Tehri PSP, tariff petition filed by the



Petitioner is premature and THDC not liable to pay the transmission charges till commissioning of Tehri PSP. The Petitioner has not filed rejoinder to the reply of THDC. The issues raised by THDC have been dealt in the relevant paragraphs of this order.

6. THDC in its reply filed affidavit dated 10.8.2022 has submitted that the instant petition is not maintainable as the tariff claimed by the Petitioner does not qualify under the touchstone provided in the Regulation 9 of the 2019 Tariff Regulations which provides that an application for determination of tariff for a group of elements shall be filed by the transmission licensee on incurring of expenditure of not less than 70% of the cost envisaged in the investment approval or ₹200 crore which is ever is lower. The Petitioner being unaware of the said fact has failed to comply with the requirements and quantum as necessitated under Regulation 9 of the 2019 Tariff Regulations. On this ground, the instant petition is not maintainable and is liable to be dismissed. The Petitioner has not filed any rejoinder to this reply.

7. We have considered the submissions of THDC. It is observed that the other three transmission assets covered in the transmission project have already been put into commercial operation in the year 2020 and tariff for those assets was also approved vide order dated 25.8.2022 in Petition No.673/TT/2020, as stated in paragraph 3 above. The instant transmission asset is the last asset of the transmission project and hence the contention of THDC that the Petitioner has not complied with requirements and quantum as necessitated under Regulation 9 of the 2019 Tariff Regulations does not hold good.

8. This order is issued considering the submissions made by the Petitioner in the petition and affidavits dated 27.11.2020 and 20.7.2022, reply filed by THDC vide affidavits dated 10.8.2022 and 8.9.2022.



9. The hearing in this matter was held on 26.7.2022 through video conference and the order was reserved.

10. Having heard the representatives of the Petitioner and THDC Ltd. and perused the material on record, we proceed to dispose of the petition.

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

11. The Petitioner has claimed the following transmission charges vide its affidavit dated 20.7.2022 for 2019-24 tariff period:

(₹ in lakh)				
Particulars	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
Depreciation	82.45	372.07	414.64	462.25
Interest on Loan	74.33	319.37	330.58	344.19
Return on Equity	89.00	401.71	447.37	498.35
O&M Expenses	7.60	35.04	36.26	37.54
Interest on Working Capital	3.77	16.80	18.25	19.83
Total	257.15	1144.99	1247.10	1362.16

12. The details of Interest on Working Capital (IWC) claimed by the Petitioner vide its affidavit dated 20.7.2022 for 2019-24 tariff period are as follows:

(₹ in lakh)				
Particulars	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
O & M Expenses	2.82	2.92	3.02	3.13
Maintenance Spares	5.08	5.26	5.44	5.63
Receivables	141.12	141.16	153.75	167.48
Total Working Capital	149.02	149.34	162.21	176.24
Rate of Interest (in %)	11.25	11.25	11.25	11.25
Interest on Working Capital	3.77	16.80	18.25	19.83

Date of Commercial Operation (“COD”)

13. The Petitioner has claimed COD of the transmission assets as 9.1.2021 under 5(2) of the 2019 Tariff Regulations as the associated generation under the scope of



THDC is not ready. The details of the COD of the transmission asset covered in the instant petition is as follows:

Asset	SCOD	COD
400 kV S/C Tehri (Generation)-Tehri (Koteshwar) (Quad) line along with associated bays at both ends	3.11.2017	9.1.2021 (Proposed under 5(2) of 2019 Tariff Regulations)

14. The Petitioner has submitted that 400 kV S/C Tehri (Generation)-Tehri (Koteshwar) (Quad) line along with associated bays was charged on 'No Load' on 7.1.2021 from Koteshwar end and it achieved COD on 9.1.2021. The notice for intimation of charging the transmission asset has been served on THDC. Accordingly, the Petitioner has invoked approval of COD of the transmission asset under Regulation 5(2) of the 2019 Tariff Regulations.

15. Regulation 5 of the 2019 Tariff Regulations provides as follows:

“5. Date of Commercial Operation: (1) *The date of commercial operation of a generating station or unit thereof or a transmission system or element thereof and associated communication system shall be determined in accordance with the provisions of the Grid Code.*

(2) *In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:*

Provided that the transmission licensee seeking the approval of the date of commercial operation under this clause shall give prior notice of at least one month, to the generating company or the other transmission licensee and the long term customers of its transmission system, as the case may be, regarding the date of commercial operation:

Provided further that the transmission licensee seeking the approval of the date of commercial operation of the transmission system under this clause shall be required to submit the following documents along with the petition:

- a) *Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;*
- b) *Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;*



- c) *Implementation Agreement, if any, executed by the parties;*
- d) *Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;*
- e) *Notice issued by the transmission licensee as per the first proviso under this clause and the response;*
- f) *Certificate of the CEO or MD of the company regarding the completion of the/ transmission system including associated communication system in all respects.”*

16. In support of the actual COD of the transmission asset, the Petitioner has submitted self-declaration of COD letter dated 2.2.2020, CEA Energisation certificates dated 30.12.2020, RLDC charging certificates dated 28.1.2021 in respect of first time charging of 400 kV Tehri PSP-Koteshwar (PG) line-3 charged up to the gantry of Tehri PSP through bay no. 401(Main) at Koteshwar (PG) on 7.1.2021 and CMD Certificate. The Petitioner has submitted that the line was charged from Koteshwar (PG) end through main bay number 401 upto the gantry of Tehri PSP only and there is no power flow in the line. As required under Regulation 5(2) of the 2019 Tariff Regulations, the Petitioner gave prior notice to Tehri PSP vide letter dated 13.10.2010 informing that 400 kV Tehri PSP-Koteshwar (PG) transmission line will be ready for charging on 31.10.2020.

17. We have considered the submissions of the Petitioner. Taking into consideration self-declaration of COD letter, CEA energisation certificate, 'No-load' RLDC charging certificate and CMD certificate submitted by the Petitioner and notice to Tehri PSP, COD of the transmission asset is approved as 9.1.2021 under Regulation 5(2) of the 2019 Tariff Regulations.

Capital Cost

18. Regulation 19 of the 2019 Tariff Regulations provides as follows:

“19. Capital Cost: (1) The Capital cost of the generating station or the transmission



system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.

(2) *The Capital Cost of a new project shall include the following:*

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) *Expenditure on account of change in law and force majeure events; and*
- (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

(3) *The Capital cost of an existing project shall include the following:*

- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) *Capital expenditure on account of renovation and modernisation as admitted*



- by this Commission in accordance with these regulations;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) The capital cost in case of existing or new hydro generating station shall also include:*
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) The following shall be excluded from the capital cost of the existing and new projects:*
- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;*
 - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.
 - (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
 - (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
 - (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."*

19. The Petitioner has claimed the following capital cost for the transmission asset and has submitted the Auditor's Certificate in support of the same:



(₹ in lakh)

FR approved apportioned cost	RCE-I approved apportioned cost	Cost up to COD	Projected Additional Expenditure				Estimated completion cost
			2020-21	2021-22	2022-23	2023-24	
12158.25	8875.63	7096.83	18.40	101.46	1447.71	361.93	9026.33

Cost Over-run

20. The Petitioner has submitted that RCE-I for the instant transmission project was approved by the competent authority (CMD) vide Memorandum dated 6.1.2021. The Petitioner has further submitted that RCE-II is under approval which the Petitioner will submit after its approval.

21. The Petitioner has submitted item wise cost variation in Form-5, which is as follows:

(₹ in lakh)

Sl. No.	Description	Cost as per FR	Actual capital cost	Difference
		(1)	(2)	(2)-(1)
1	Transmission line preliminary works including compensation	168.85	220.03	51.18
2	Transmission line material including taxes and duties	4939.86	4086.37	(853.49)
	Total – transmission line	5108.71	4306.40	(802.31)
3	Sub-station preliminary works, civil works and land	4752.26	2292.83	(2459.43)
4	Total sub-station including spares and taxes	791.61	457.73	(333.88)
	Total – sub-station	5543.87	2750.56	(2793.31)
5	Communication system preliminary works, equipment, taxes, P&M	11.65	8.48	(3.17)
6	Communication construction and pre-commissioning, contingency, overheads	794.28	164.72	(629.56)
	Total - communication systems	805.93	173.20	(632.73)
5	FERV, IDC and IEDC	699.74	1093.91	394.17
	Grand Total	12158.25	8324.07	(3834.18)

22. The Petitioner has further submitted that the Petitioner, being a government



enterprise, has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Through this process, lowest possible market prices for required product/ services/ as per detailed designing is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market forces, design and site requirements. Whereas, the estimates, are prepared by the Petitioner as per well-defined procedures. The FR cost estimate is broad indicative cost worked out generally based on average unit rates of recently awarded contracts/general practice.

23. We have considered the submissions of the Petitioner. As compared with FR cost of ₹12158.25 lakh, the estimated completion cost is lower by an amount of ₹3131.92 lakh. The Petitioner has submitted Revised Cost Estimate (RCE-I) approved by the CMD vide memorandum dated 6.1.2021. As per RCE-I, the Petitioner has revised the apportioned approved cost as ₹8875.63 lakh. As compared with RCE-I cost, the estimated completion cost is more by ₹150.70 lakh. The capital cost claimed by the Petitioner is restricted to revised apportioned approved cost of ₹8875.63 lakh subject to the Petitioner submitting RCE-II at the time of true-up.

Time Over-run

24. As per the IA dated 29.1.2015, the transmission asset was scheduled to be put into commercial operation within 33 months from the date of IA, matching with the zero date of the Implementation Agreement. As per Implementation Agreement signed between the Petitioner and THDC, the SCOD for the transmission assets was 3.11.2017. Accordingly, the SCOD for the transmission assets is considered as 3.11.2017, against which the approved COD of the transmission asset is 9.1.2021.



Hence, there is time over-run of 1162 days in execution of the transmission asset covered in the instant petition. The Petitioner *vide* affidavit dated 20.7.2022 has submitted the following justification for time over-run of the asset:

RoW issues

25. Since the beginning, local villagers near Koteshwar Pooling Station created severe hindrances in casting of the foundations of 4 number towers from location No. 33/0 to 36 /0. The local villagers did not allow the Petitioner to conduct survey work for a long period. Several attempts were made by the Petitioner to persuade landowners and local villagers. Numerous public meetings with villagers were also conducted by the Petitioner to apprise them the importance of the project. In all public meetings residents of village Sonthiyal, Fafran and Surkhet always raised demand for rehabilitation of village and opposed construction of the transmission line. The chronology of RoW issue is as follows:

SI. No.	Description of activity	Date
1	Tehsildar Gaja was informed that few villagers were hampering survey work.	24.9.2015
2	Administrative help was requested from SDM Narendranagar and DM Tehri Garhwal.	16.10.2015
3	Administrative help was requested from DM Tehri Garhwal.	2.11.2015
3	Tehsildar Gaja informed that even after village meeting survey work is hampered by few villagers and administrative help was sought.	11.12.2015
4	On 12.1.2016 and on 08.2.2016, SDM Narendranagar was requested to give necessary instructions so that Construction activities may be started.	12.1.16 & 8.2.2016
5	DM Tehri Garhwal was apprised about villagers hampering construction work and administrative direction was requested for construction of transmission line.	14.3.2016
6	Vide letter dated 8.4.2016, Tahsildar Gaja was requested to provide administrative help to complete survey and on 17.5.2016 SDM Narendranagar was requested to give necessary direction in this regard	8.4.2016 & 17.5.2016
7	On 21.6.2016, SDM Narendranagar was informed that the Petitioner had several round of talks with villagers but still the villagers opposed construction activities requested.	21.6.2016



Sl. No.	Description of activity	Date
8	On 19.7.2016 DM Tehri Garhwal was requested to give necessary directions for starting construction activities.	19.7.2016
9	On 17.8.2016, 12.9.2016 and 20.10.2016 SDM Narendranagar was requested to give necessary direction for starting construction activities.	17.8.2016 12.9.2016 20.10.2016
10	On 7.12.2016 DM Tehri Garhwal was informed that the Petitioner had requested administrative help from Tahsildar Gaja and SDM Narendranagar to start construction activities, but obstruction to construction activities of transmission line continued and request for necessary administrative direction was made.	7.12.2016
11	On 7.1.2017, Tehsildar Gaja was informed that most of the towers are constructed and only 4 Number tower foundations are pending in Fafran, Sonthiyaal and Surkhet village and administrative help was requested.	7.1.2017
12	Administrative help was requested on 22.2.2017 and 17.3.2017 from Tahsildar Gaja and from SDM Narendranagar on 18.4.2017	22.2.2017 17.3.2017 18.4.2017
13	On 10.5.2017 DM Tehri Garhwal was requested to give administrative direction to start construction activities.	10.5.2017
14	Tahsildar Gaja was requested to provide protection for survey work.	9.6.2017
15	Administrative help to start construction activities was asked from SDM Narendranagar on 24.8.2017 and again on 3.11.2017, from DM Tehri-Garhwal on 7.10.2017, 9.12.2017 and 6.1.2018 and from Tehsildar Gaja on 29.1.2018.	24.8.2017 3.11.2017 7.10.2017 9.12.2017 6.1.2018 29.1.2018
16	On 31.1.2018, Tehsildar Gaja called a meeting of villagers of Village Surkhet, Sonthiyal and Fafran to resolve the issue.	31.1.2018
17	On 7.2.2018, the Petitioner asked police protection from DM Tehri Garhwal for construction of Transmission Line.	7.2.2018
18	On 21.2.2018, the Petitioner requested Energy Secretary Uttarakhand to give necessary instruction to District Administration so that balance work of four foundations could be completed.	21.2.2018
19	Again, on 12.3.2018, the Petitioner sought help from DM Tehri Garhwal to resolve RoW issues, but issue was not resolved. Further, the Petitioner also requested Tehsildar Gaja on 6.4.2018 to resolve the RoW issues of four locations.	12.3.2018 and 6.4.2018
20	On 16.4.2018, the Petitioner again requested Energy Secretary Uttarakhand to give necessary instruction to Administration so that balance work of four foundations could be completed.	16.4.2018
21	On 23.4.2018, Tehsildar Gaja called a meeting of villagers of Village Surkhet, Sonthiyal and Fafran with Power Grid to resolve the issue.	23.4.2018
22	On 26.4.2018, the Petitioner asked administrative help from SDM Narendranagar for Construction work and then again asked protection from DM Tehri Garhwal on 29.7.2018.	26.4.2018 29.7.2018



Sl. No.	Description of activity	Date
23	On 31.7.2018, DM Tehri Garhwal directed SDM Narendranagar to conduct joint meeting with villagers and Power Grid. SDM Narendranagar conducted meeting with villagers on 17.8.2018.	31.7.2018 17.8.2018
24	On 18.9.2018, the Petitioner informed that SDM meeting with villagers did not break impasse and again requested to take administrative action so that construction work may be done.	18.9.2018
25	The Petitioner apprised status of RoW issue to DM, Tehri Garhwal and requested to take administrative action so that construction work may be done.	14.3.2019
26	The Petitioner requested DM Tehri Garhwal on 14.3.2019 and SDM Narendranagar on 15.3.2019 to take necessary action for construction of Transmission Line.	15.3.2019
27	On 12.4.2019, the Petitioner apprised Chief Secretary Uttarakhand on resistance to transmission line construction and requested to give necessary instruction to administrative officers.	12.4.2019
28	SDM, Narendranagar (Tehri Garhwal) and Tahsildar, Gaja was informed about the RoW issue and further requested to give protection for construction work.	18.5.2019 31.5.2019
29	On 6.5.2019 SDM Narendranagar was informed about the incident and administrative help was sought.	6.5.2019 and 18.5.2019
30	On 2.6.2019, Tehsildar Gaja called a meeting in Fafran village to resolve impasse in construction of Transmission line.	2.6.2019
31	On 4.6.2019, the Petitioner sought police protection from DM, Tehri Garhwal as meeting with villagers had failed and villagers remained adamant on their demand of rehabilitation.	4.6.2019
32	On 24.6.2019, the Petitioner sought police protection for construction work.	24.6.2019
33	On 26.6.2019, SDM Narendranagar directed CO Tehri to provide police protection to the Petitioner but later retracted.	26.6.2019
34	On 12.7.2019, the Petitioner sought administration help in Construction work of Transmission line.	12.7.2019
35	On 2.8.2019 Director (Project) the Petitioner wrote to The Chief Engineer (Transmission) Ministry of Power, Government of India for requesting support from Chief Secretary Government of Uttarakhand.	2.8.2019
37	On 30.9.2019, Additional Secretary Ministry of Power wrote to Chief Secretary Government of Uttarakhand for facilitating expeditious completion of the project.	30.9.2019
38	On 12.11.2019, SDM Narendranagar convened a meeting with villagers and the Petitioner to resolve their opposition.	12.11.2019
39	SDM, Narendranagar wrote letter to DM, Tihri Garhwal to resolve the issue	22.11.2019
40	On 27.11.2019, the Petitioner sought administration help from DM Tehri to facilitate Construction work of Transmission line.	27.11.2019
41	On 5.12.2019, the Petitioner sought police protection for construction work from Tehsildar, Gaja, Distt. Tehri Garhwal	5.12.2019
42	On 8.1.2020, the Petitioner sought police protection from DM Narendranagar to facilitate Construction work of Transmission line.	8.1.2020
43	The Petitioner wrote letter to SDM, Narendranagar	24.1.2020



Sl. No.	Description of activity	Date
44	On 22.3.2020, Complete lock down in state of Uttharakhand was ordered, due to COVID-19 epidemic. Based on request by the Petitioner, DM/SDM accorded permission for conditional working permission on dated 20.4.2020.	22.3.2020 to 22.4.2020

26. The Petitioner has submitted that it has been facing continuous RoW issues since September 2015. The Petitioner has completed all the works except few locations due to RoW issues. The Petitioner has made all required efforts to resolve the RoW issue and raised the issue to the level of Chief Secretary, Uttarakhand. After putting all efforts RoW issue was resolved in April 2020. Subsequently, after RoW issues were resolved, the Petitioner started the work and the transmission asset was anticipated to be executed by 31.10.2020. The Petitioner started the work in May, 2020 with limited staff due to Covid-19 Pandemic situation and completed almost all work related to foundation and erection work of all four locations which were not completed due to RoW issue. However, the Petitioner faced RoW problem again in the months from July, 2020 to December, 2020 while doing the remaining stringing and related work. The detail chronology of RoW problems faced by the Petitioner since 15.7.2020 to 24.12.2020 is as follows:

Sl. No.	Description of activity	Date	Remarks
1.	The Petitioner sought security from District Magistrate of Tehri Garhwal to resume construction activity of Tehri-Koteshwar transmission line.	15.7.2020 31.7.2020	The Petitioner completed all the foundation and erection work and some of the stringing work was remaining. However, local villagers forced to stop the work. Accordingly, the Petitioner asked District Magistrate of Tehri Garhwal to provide security.
2.	The Petitioner had again requested District Magistrate of Tehri Garhwal for providing security to resume construction activity of Tehri – Koteshwar transmission line	6.8.2020 7.9.2020 10.10.2020	The Petitioner completed all the foundation and erection work and some of the stringing work was remaining. However, local villagers forced to stop the work. Accordingly, the Petitioner asked District Magistrate of Tehri Garhwal to provide security.



Sl. No.	Description of activity	Date	Remarks
3.	The Petitioner had demanded security from Tehsildar of Gaja to resume construction activity of Tehri-Koteshwar transmission line.	5.11.2020	The Petitioner completed all the foundation and erection work and some of the stringing work was remaining. However, local villagers forced to stop the work. Accordingly, the Petitioner asked Tehsildar, Gaja, District Tehri Garhwal to provide security.
4.	SDM, Narendra Nagar had requested to ADM, Tehri Garhwal for providing police protection to the Petitioner for completion of balance construction work of 400 kV S/C Tehri-Koteshwar (PG) line.	12.11.2020	Direction from administration given to provide the security to complete the remaining work.
5.	The Petitioner had informed DM, Tehri Garhwal about ROW issue and requested for providing security so that charging of 400 kV S/C Tehri-Koteshwar CKT Transmission line can be done.	24.12.2020 29.12.2020	RoW faced by the Petitioner at the time of charging of Transmission Line.
6.	400 kV S/C Tehri-Koteshwar transmission line was charged on no load on 7.1.2021 from Koteshwar (PG) end.	7.1.2021	Tehri-Koteshwar transmission line was charged on no load on 7.1.2021 and COD proposed on 9.1.2021.

ROW issues at Koteshwar Sub-station:

27. 400 kV Koteshwar GIS Pooling Station was executed in 2011 under the Project "Transmission System associated with Koteshwar HEP." At the time of the planning of Tehri and Koteshwar HEP, it was known that Koteshwar-Meerut 765 kV lines (which was initially operated at 400 kV level) shall be charged at 765 kV level with Tehri PSP. Investment Approval for this project was accorded in 2005 and land (for both 400 kV and 765 kV) at Koteshwar was acquired in 2006. The road for movement of the local villagers was coming inside the land premises (at 765 kV side) due to which boundary wall could not be constructed as the villagers protested against the same. Due to non-closure of the sub-station boundary, villager's movement could not be restricted, and they created frequent RoW issues during construction of 400 kV Koteshwar GIS which led to delay in completion of the said project. Due to priority of 400 kV GIS under the



said system and protest from the villagers, site levelling and slope protection work of only 400 kV land was carried out and the Petitioner was forced to stop the levelling of 765 kV land.

28. The Petitioner was continuously apprising about the above RoW issues to the district administration. District Magistrate, Tehri district vide letter dated 19.2.2013 informed the Petitioner to construct an alternate road for villagers to resolve RoW issue. Approval was taken from the competent authority and a MOU was signed with PWD, Narendranagar, Uttarakhand on 3.10.2013 for construction of alternate road. Due to strong opposition by house owners, there was difficulty in executing the road construction and it was advised by SDM Narendranagar to explore another route and seek the consent of the landowners. Meanwhile, on 22.6.2014, during a maintenance work in 11 kV Feeder of UPCL (near Koteshwar Sub-station), a flash-over occurred due to negligence on the part of UPCL causing injury to villagers of Saunthyal Gaon P.O. Pokhari, Tehsil-Narendra Nagar, District-Tehri Garhwal. Following this incident, some miscreants / local villagers manhandled the officials of the Petitioner for which FIR was lodged against them by the Petitioner. Due to the above incident, a PIL was filed at the Hon'ble High Court of Uttarakhand, Nainital on 3.7.2014 by a resident of Village Saunthyal Gaon requesting for rehabilitation of residents of Village Saunthyal Gaon and Fafran Gaon to some other place or shifting of high-tension transmission line of the Petitioner. On 5.7.2014, the Hon'ble High Court issued notice to the Petitioner and THDC instructing to give reply within 3 weeks regarding rehabilitation of villagers and shifting of Transmission line. Since then, the matter was sub-judice in the court. Police protection was also provided on 16.8.2014 by the District Administration to ensure safety of men and materials at Koteshwar Sub-station.



29. The land for 765 kV GIS was acquired at Koteshwar Sub-station, however, there was hindrance from the local villagers during levelling of the land. Meanwhile, augmentation work of 400 kV GIS Koteshwar Pooling Station under Tehri PSP was awarded to KEC on 31.3.2015. However, local villagers continued to create RoW problems. On 9.10.2015, SDM, Narendranagar held a meeting with the villagers for their consent in respect of land acquisition for construction of road. The landowners gave their consent after which land rate was finalized. The finalized rate was communicated by SDM, Narendranagar to DM, Tehri Garhwal vide letter dated 20.10.2015 requesting to instruct the Petitioner for paying this amount to the respective landowners. Again on 27.1.2016, SDM, Narendranagar intimated DM, Tehri Garhwal that land of some villagers was left out during survey and therefore re-survey was done. The revised rate was also intimated to DM, Tehri Garhwal *vide* above letter. The land record with details of concerned landowners was released on 29.12.2016 which was further revised on 2.5.2017. Finally, land was purchased through direct negotiation from the landowners on 27.5.2017 for construction of the road. Due to revision in estimate for construction of alternate road, MOU signed with PWD, Uttarakhand was no longer valid, and another MOU was signed on 4.10.2017 with PWD, Uttarakhand with completion schedule of 12 months from the date of signing of MOU.

30. Work under execution by Coastal Projects and KEC was frequently stopped by local villagers. On various occasions, the local villagers manhandled the site personnel of KEC. An FIR was also lodged on account of this incident. On 6.7.2018, Hon'ble High Court of Uttarakhand, Nainital instructed the Petitioner to consider shifting the alignment of the towers to protect the life and liberty of the residents of Village Saunthyal Gaon and Fafran Gaon, if technically feasible, within a period of 6 months. Thus, there has



been severe RoW issues since inception of the project which led to delay in completion of the transmission project. The chronology of RoW events after the Investment Approval is as follows:

Sl. No.	Particulars	Date	Remarks
1.	Local villagers raised their demands for rehabilitation and employment	February 2015 & March 2015	RoW issue created by the local villagers
2.	Finalized rate was communicated by SDM, Narendranagar to DM, Tehri Garhwal vide letter dated 20.10.2015	9.10.2015	SDM, Narendranagar held a meeting with the villagers for their consent in respect of land acquisition for construction of road
3.	SDM, Narendranagar intimated DM, Tehri Garhwal for revised survey	27.1.2016	SDM, Narendranagar intimated DM, Tehri Garhwal that land of some villagers was left out during survey and therefore re-survey was done
4.	Land Record issued	26.12.2016	--
5.	Notification of land acquisition issued	27.1.2017	--
6.	Revised Land Record issued	27.5.2017	Final land purchase
7.	DM Permission for purchase of land from SC	22.9.2017	Small portion of land purchase approval
8.	MOU with PWD	4.10.2017	--
Following ROW continued even after purchase of Land			
9.	Letter regarding forcible stoppage of work at Koteshwar site	31.1.2016	Work stopped by the local villagers for additional demand of compensation, relocations of the affected villagers and employment of local people and deployment of local contractors
10.	Letter regarding forcible stoppage of work at Koteshwar site	8.2.2016	Work stopped by the local villagers for additional demand of compensation, relocations of the affected villagers and employment of local people and deployment of local contractors
11.	Letter from Koteshwar Power Pooling (Prabhawit) Jan Hitashi Samiti, Village Fafaran, Tehri	2.3.2016	Letter regarding employment for local villagers.
12.	Letter from Koteshwar Power Pooling (Prabhawit) Jan Hitashi Samiti, Village Fafaran, Tehri	April 2016	Letter regarding employment for local villagers



Sl. No.	Particulars	Date	Remarks
13.	Letter regarding forcible stoppage of work at Koteshwar site	3.5.2016	Work stopped by the local laborers and local laborers misbehaved with the working staff
14.	Letter regarding lodging of F.I.R.	4.5.2016	Complaint was registered to against the local Villagers/Individuals who came inside the Petitioner premises and physically assaulted and abused the officials and workers
15.	Letter regarding forcible stoppage of work at Koteshwar site	5.5.2016	Work stopped by the local villagers for additional demand of compensation, relocations of the affected villagers and employment of local people and deployment of local contractors
16.	FIR lodged on account of incident held on 4.5.2016	5.5.2016	FIR filed
17.	Charge sheet filed against Project Manager of executing agency (KEC)	14.8.2016	FIR filed
18.	Court Case disposed of by the court	7.3.2018	Hon'ble High Court of Uttarakhand, Nainital instructed the Petitioner to consider shifting the alignment of the towers to protect the life and liberty of the residents of Village Saunthyal Gaon & Fafran Gaon, if technically feasible.

31. The Petitioner has submitted the details of activity wise timelines as per Form 12 and the same is as follows:

S. No.	Description of Activity/Works/ Service	Original schedule (as per planning)		Actual achieved (as per actual)		Time over-run Days	Agency responsible and whether such time over-run was beyond the control of the Transmission Licensee	Reasons for delay
		Start Date	Completion Date	Start Date	Completion Date			
1.	Investment Approval	29.1.2015	29.1.2015	29.1.2015	29.1.2015	1162	RoW problem created by local villagers	RoW problem created by local villagers
2.	NOA	29.1.2015	27.2.2015	9.2.2015	-			
3.	Supply	25.5.2015	21.4.2017	January, 2016	January, 2019			
4.	Foundation	6.7.2015	2.6.2017	December, 2016	September, 2020			
5.	Erection	26.10.2015	28.7.2017	December, 2016	September, 2020			



6.	Stringing	15.2.2016	28.9.2017	March, 2017	30.12.2020			
7.	Testing & Commissioning	29.9.2017	3.11.2017	31.12.2020	9.1.2021			

32. We have considered the submissions of the Petitioner. As per the Implementation Agreement signed between the Petitioner and THDC, the zero date for the project was decided as 3.11.2017, accordingly the SCOD for the transmission assets is considered as 3.11.2017 against which the transmission asset was put into commercial operation on 9.1.2021 with time over-run of about 1162 days. The Petitioner has submitted that the transmission asset is delayed due to RoW problems in construction of transmission line and Court cases pertaining to construction of transmission line.

33. It is observed that the Petitioner has faced RoW problems in execution of the transmission line and at Koteshwar sub-station. The last such RoW problem faced by the Petitioner was on 29.12.2020. Finally, the Petitioner has been able to charge 400 kV S/C Tehri-Koteshwar transmission line along with 400 kV line bays sub-station at Koteshwar on "No Load" basis on 7.1.2021. The Petitioner has furnished details of correspondences exchanged with various authorities along with supporting documents. From the submissions of the Petitioner, it is apparent that RoW issues continued from 24.9.2015 to 24.1.2020 (1583 days) at various locations affecting the execution of transmission asset. The time over-run of 1583 days on account of RoW problems was beyond the control of the Petitioner. However, the Petitioner has compressed the execution time and executed the transmission asset with time over-run of 1162 days. Therefore, the overall time over-run of 1162 days in execution of the transmission asset is condoned.



Interest during Construction (“IDC”)

34. The Petitioner has claimed the following IDC in respect of the transmission asset covered in the instant petition and has submitted the statement showing IDC claim, discharge of IDC liability as on the date of commercial operation which is summarised as under:

(₹ in lakh)			
IDC as per Auditor’s Certificate	IDC discharged upto COD	IDC discharged during 2020-21	IDC discharged during 2021-22
1093.91	1017.66	4.68	71.57

35. We have considered the submissions of the Petitioner. The allowable IDC has been worked out considering the information submitted by the Petitioner. Further, the loan amount as on COD has been mentioned in Form-6 and Form-9C. The allowable IDC has been worked out based on the information available on record and relying on loan amount as per Form-9C. IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination is as follows:

(₹ in lakh)						
IDC claimed as per Auditor’s Certificate	IDC allowed on accrual basis	IDC disallowed due to computational error	IDC allowed on cash basis as on COD	Un-discharged IDC liability as on COD	Discharge of IDC liability allowed as ACE	
					2020-21	2021-22
1093.91	984.90	109.01	907.70	77.20	4.68	72.52

Incidental Expenditure During Construction (“IEDC”)

36. The Petitioner has claimed IEDC of ₹164.72 lakh in respect of the transmission system covered in the instant petition and has submitted Auditor’s Certificate in this regard. Further, the Petitioner has submitted that entire IEDC claimed in the Auditor’s Certificates is on cash basis and is paid up to COD of the assets. IEDC considered in



respect of the transmission asset as on COD for the purpose of tariff determination in the instant order is as follows:

(₹ in lakh)

IEDC claimed as per Auditor's Certificate	IEDC discharged up to COD
164.72	164.72

Initial Spares

37. Regulation 23(d) of the 2019 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to cut-off date, subject to the following ceiling norms:

*“(d) Transmission System
 Transmission line: 1.00%
 Transmission sub-station (Green Field): 4.00%
 Transmission sub-station (Brown Field): 6.00%
 GIS Sub-station (Green Field): 5.00%
 GIS Sub-station (Brown Field): 7.00%
 Communication System: 3.50%”*

38. The Petitioner vide affidavit dated 20.7.2022 has claimed following Initial Spares for the transmission asset:

(₹ in lakh)

Plant and Machinery excluding IDC, IEDC, land cost and cost of civil works as on cut-off date (A)	Initial Spares claimed by the Petitioner (B)	Norm (in %) (C)	Initial Spares worked out by the Petitioner
			$D = [(A-B)*C/(100-C)]$
Transmission Line			
4313.59	40.11	1.00	43.17
Sub-station (Brownfield GIS) and PLCC			
3177.61	209.21	7.00	223.43

39. The Petitioner has submitted that the discharge of Initial Spares has been considered on cash basis in the Auditor's Certificate. The discharge statement of Initial Spares is submitted as follows:



(₹ in lakh)

Particulars	Total Spares claimed	Initial Spares discharged up to COD	Initial Spares discharged during		
			2021-22	2022-23	2023-24
Transmission Line	40.11	19.87	0.00	16.19	4.05
Sub-station and PLCC	209.21	50.73	4.36	123.30	30.82

40. We have considered the submissions of Petitioner. Initial Spares allowed in respect of the transmission asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Plant & Machinery cost excluding IDC, IEDC, land cost & civil works cost as on cut-off date as per Form-13 (A)	Initial Spares Claimed by the Petitioner (B)	Ceiling limit (in %) (C)	Initial Spares worked out	Initial Spares Allowed (₹ in lakh) (E)	Excess Initial Spares Disallowed (₹ in lakh) (F)
			$D = [(A-B) * C / (100-C)]$		
For Transmission Line					
4313.59	40.11	1.00	43.17	40.11	Nil
For Sub-station (GIS Brownfield) and PLCC					
3177.61	209.21	7.00	223.43	209.21	Nil

41. The details of capital cost allowed as on COD in respect of the transmission assets after adjusting disallowed/ undischarged IDC is as follows:

(₹ in lakh)

Capital Cost claimed as on COD (Auditor's Certificate) (A)	IDC disallowed due to computational error (B)	Undischarged IDC (C)	Capital Cost as on COD (D=A-B-C)
7096.83	109.01	77.20	6910.62

Additional Capital Expenditure ("ACE")

42. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

"24. Additional Capitalisation within the original scope and upto the cut-off date:



(1) *The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (a) *Undischarged liabilities recognized to be payable at a future date;*
- (b) *Works deferred for execution;*
- (c) *Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) *Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) *Change in law or compliance of any existing law; and*
- (f) *Force Majeure events:*

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) *The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.*

25. Additional Capitalisation within the original scope and after the cut-off date:

(1) *The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:*

- a) *Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- b) *Change in law or compliance of any existing law;*
- c) *Deferred works relating to ash pond or ash handling system in the original scope of work;*
- d) *Liability for works executed prior to the cut-off date;*
- e) *Force Majeure events;*
- f) *Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- g) *Raising of ash dyke as a part of ash disposal system.*

(2) *In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*

- (a) *The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations.*
- (b) *The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- (c) *The replacement of such asset or equipment is necessary on account of*
- (d) *The replacement of such asset or equipment has otherwise been allowed by the Commission.”*



43. The Petitioner in its submission *vide* affidavit dated 27.11.2020 had claimed ACE of ₹1660.76 lakh, ₹474.50 lakh, ₹237.50 lakh during 2020-21, 2021-22 and 2022-23 respectively. Subsequently, in its submission *vide* affidavit dated 20.7.2022 the Petitioner has claimed the following ACE in respect of the transmission asset for 2019-24 period in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations on account of undischarged liability towards final payment for works executed and for works deferred for execution within cut-off date and un-discharged IDC:

(₹ in lakh)

ACE claimed			
2020-21	2021-22	2022-23	2023-24
18.40	101.46	1447.71	361.93

44. Further, the Petitioner *vide* affidavit dated 20.7.2022 has submitted the package-wise and vendor-wise details of ACE claimed in respect of the transmission asset during 2019-24 tariff period and the same is as follows:

(₹ in lakh)

Particulars	Discharge of Liability during			
	2020-21	2021-22	2022-23	2023-24
Coastal Projects, Rajendra Singh	0.00	9.05	18.54	4.64
Tata Projects	5.00	56.07	61.02	15.26
KEC International, New Northeast Electric Group, ABB, M CGL	13.40	36.34	1362.94	340.73
KEC International	0.00	0.00	5.21	1.30
Total	18.40	101.46	1447.71	361.93

45. Package-wise and vendor-wise details of the Additional Capital Expenditure (ACE) claimed in 2019-24 period for the transmission asset is as follows:

Year	ACE (₹ In lakh)	Party Name	Package	Balance and Retention/ Deferred work
2020-21	4.24	Tata Projects	Transmission Line	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 tariff Regulations.



Year	ACE (₹ In lakh)	Party Name	Package	Balance and Retention/ Deferred work
	0.76	Tata Projects	Transmission Line	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.
	2.42	KEC International, New Notheast Electric Group, ABB, CGL	Sub-station	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
	10.98	KEC International, New Notheast Electric Group, ABB, CGL International	Sub-station	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.
2021-22	2.19	Coastal Projects	Civil & Building	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
	6.86	Coastal Projects	Civil & Building	Deferred work liability as per Regulation 24(1)(b) of the 2019 tariff Regulations.
	52.22	Tata Projects	Transmission Line	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
	3.85	Tata Projects	Transmission Line	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations 2019
	28.00	KEC International, New Notheast Electric Group, ABB, CGL	Sub-station	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations
	8.34	KEC International, New Notheast Electric Group, ABB, CGL	Sub-station	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.



Year	ACE (₹ In lakh)	Party Name	Package	Balance and Retention/ Deferred work
2022-23	9.60	Coastal Projects, Rajender Singh	Civil & Building	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
	8.94	Coastal Projects, Rajender Singh	Civil & Building	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.
	59.42	Tata Projects	Transmission Line	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
	1.60	Tata Projects	Transmission Line	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.
	1002.30	KEC International, New Notheast Electric Group, ABB, CGL	Sub-station	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
	360.64	KEC International, New Notheast Electric Group, ABB, CGL	Sub-station	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.
	0.44	KEC International	PLCC	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
	3.97	KEC International	PLCC	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.
	0.36	KEC International	IT	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
0.44	KEC International	IT	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.	
2023-24	4.64	Coastal Projects, Rajender Singh	Civil & Building	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations.
	14.28	Tata Projects	Transmission Line	Balance and Retention payment as per Regulation 24(1)(a) of Tariff Regulations 2019



Year	ACE (₹ In lakh)	Party Name	Package	Balance and Retention/ Deferred work
	0.98	Tata Projects	Transmission Line	Deferred work liability as per Regulation 24(1)(b) of Tariff Regulations 2019
	46.55	KEC International, New Notheast Electric Group, ABB,CGL	Sub-station	Balance and Retention payment as per Regulation 24(1)(a) of Tariff Regulations 2019
	294.18	KEC International, New Notheast Electric Group, ABB, CGL	Sub-station	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.
	0.41	KEC International	PLCC	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations
	0.69	KEC International	PLCC	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.
	0.18	KEC International	IT	Balance and Retention payment as per Regulation 24(1)(a) of the 2019 Tariff Regulations
	0.02	KEC International	IT	Deferred work liability as per Regulation 24(1)(b) of the 2019 Tariff Regulations.

46. We have considered the submissions of the Petitioner. As discussed above the capital cost is restricted to the RCE-I apportioned approved cost. Hence, the ACE allowed for 2023-24 is restricted by ₹150.70 lakh. Therefore the remaining ACE is allowed under Regulation 24(1)(a) (Balance and Retention payment) and Regulation 24(1)(b) (deferred work liability) of the 2019 Tariff Regulations, as it is towards undischarged liabilities recognised to be payable at a future date and balance work deferred for execution.



47. Accordingly, ACE approved for 2019-24 tariff period and capital cost as on 31.3.2024 considered for the purpose of tariff determination for 2019-24 tariff period are as follows:

Capital Cost as on COD	Projected Additional Expenditure				Capital Cost admitted as on 31.3.2024
	2020-21	2021-22	2022-23	2023-24	
6910.62	23.08	173.98	1447.71	211.23	8766.61

Debt-Equity ratio

48. Regulation 18 of the 2019 Tariff Regulations provides as follows:

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;



Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

49. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE for 2019-24 tariff period. Debt-equity ratio of 70:30 has been considered for ACE allowed during 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations. The details of debt-equity ratio considered for the purpose of computation of tariff for 2019-24 tariff period is as follows:

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	4837.43	70.00	1299.20	70.00	6136.63	70.00
Equity	2073.19	30.00	556.80	30.00	2629.98	30.00
Total	6910.62	100.00	1855.99	100.00	8766.61	100.00

Depreciation

50. Regulation 33 of the 2019 Tariff Regulations provides as follows:

“33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:



Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

*(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:*

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.



(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

- a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or
- b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
- c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof s completed its useful life.”

51. The Weighted Average Rate of Depreciation (WAROD) at Annexure-I has been worked out considering the depreciation rates of the transmission asset as specified in the 2019 Tariff Regulations. Depreciation has been worked out considering capital cost as on COD and ACE in 2019-24 tariff period. Depreciation allowed in respect of the transmission asset is as follows:

Particulars	(₹ in lakh)			
	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
Opening Gross Block	6910.62	6933.70	7107.68	8555.39
ACE	23.08	173.98	1447.71	211.23
Closing Gross Block	6933.70	7107.68	8555.39	8766.61
Average Gross Block	6922.16	7020.69	7831.53	8661.00
Freehold land	3.99	3.99	3.99	3.99
Weighted average rate of Depreciation (WAROD) (in %)	5.22	5.22	5.22	5.23



Particulars	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
Balance useful life of the asset	32	32	31	30
Elapsed life	0	0	1	2
Depreciable Value	6227.29	6315.97	7045.78	7792.34
Combined Depreciation during the year	81.16	366.35	408.94	452.60
Cumulative depreciation at the end of the year	81.16	447.51	856.44	1309.04
Remaining Depreciable Value at the end of the year	6146.13	5868.46	6189.33	6483.30

Interest on Loan (“IoL”)

52. Regulation 32 of the 2019 Tariff Regulations provides as follows:

“32. Interest on loan capital: (1) *The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

(2) *The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*

(3) *The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

(4) *Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

(5) *The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:*

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(5a) *The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the*



generating company as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”

53. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2020. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period may be adjusted. Accordingly, floating rate of interest, if any, shall be considered at the time of true-up. IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset for 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)			
	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
Gross Normative Loan	4837.43	4853.59	4975.37	5988.77
Cumulative Repayments up to Previous Year	0.00	81.16	447.51	856.44
Net Loan-Opening	4837.43	4772.43	4527.86	5132.33
Additions due to ACE	16.16	121.79	1013.40	147.86
Repayment during the year	81.16	366.35	408.94	452.60
Net Loan-Closing	4772.43	4527.86	5132.33	4827.59
Average Loan	4804.93	4650.15	4830.10	4979.96
Weighted Average Rate of Interest on Loan (in %)	6.7781	6.7622	6.7510	6.7597
Interest on Loan	73.17	314.45	326.08	336.63

Return on Equity (“RoE”)

54. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as follows:

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river



generating station with pondage:

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;*
- iii. in case of a thermal generating station, with effect from 1.4.2020:*
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%;”

31. Tax on Return on Equity. (1) *The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.*



(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;
- (d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

55. The Petitioner has submitted that MAT rate is applicable to it. Accordingly, MAT rate applicable in 2020-21 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission asset is as follows:



(₹ in lakh)

Particulars	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
Opening Equity	2073.19	2080.11	2132.30	2566.62
Additions due to ACE	6.92	52.19	434.31	63.37
Closing Equity	2080.11	2132.30	2566.62	2629.98
Average Equity	2076.65	2106.21	2349.46	2598.30
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782
Return on Equity	87.62	395.59	441.28	488.01

Operation & Maintenance Expenses (“O&M Expenses”)

56. O&M Expenses claimed by the Petitioner in respect of the transmission asset for 2019-24 period is as follows:

Particulars	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
400 kV GIS line bay at Tehri – Koteshwar Sub-station				
Number of bays	1	1	1	1
Norms (₹ lakh/Bay)	23.296	24.115	24.962	25.837
Tehri Generation – Tehri Pooling Station Transmission Line				
S/C (Bundled conductor with four sub conductors) (km)	13.50	13.50	13.50	13.50
Norms (₹ lakh/km)	0.781	0.809	0.837	0.867
Total O&M Expense (₹ in lakh)	7.60	35.04	36.26	37.54

57. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provide as follows:

“35. Operation and Maintenance Expenses:

...

(3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942



Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

(4) Communication system: *The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”*



58. We have considered the submissions of the Petitioner. O&M Expenses allowed as per the 2019 Tariff Regulations for the transmission asset are as follows:

Particulars	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
400 kV GIS line bay at Tehri – Koteshwar Sub-station				
Number of bays	1	1	1	1
Norms (₹ lakh/Bay)	23.296	24.115	24.962	25.837
Tehri Generation – Tehri Pooling Station Transmission Line				
S/C (Bundled conductor with four sub conductors) (km)	13.50	13.50	13.50	13.50
Norms (₹ lakh/km)	0.781	0.809	0.837	0.867
Total O&M Expense (₹ in lakh)	7.60	35.04	36.26	37.54

Interest on Working Capital (“IWC”)

59. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provides as follows:

“34. Interest on Working Capital: (1) *The working capital shall cover:*

.....

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

- (i) *Receivables equivalent to 45 days of annual fixed cost;*
- (ii) *Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*

Operation and maintenance expenses, including security expenses for one month.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

“3. Definitions. - *In these regulations, unless the context otherwise requires:-*



‘Bank Rate’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

60. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2020. The Petitioner has considered the rate of IWC as 11.25%.

61. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) considered is 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-2021 and from 2021-22 onwards as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon in respect of the transmission asset are as follows:

(₹ in lakh)				
Particulars	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	2.82	2.92	3.02	3.13
Working Capital for Maintenance Spares (15% of O&M Expenses)	5.08	5.26	5.44	5.63
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	138.99	138.93	151.56	163.88
Total Working Capital	146.88	147.10	160.03	172.64
Rate of Interest (in %)	11.25	10.50	10.50	10.50
Interest on Working Capital	3.71	15.45	16.80	18.13

Annual Fixed Charges of 2019-24 Tariff Period

62. The transmission charges allowed in respect of the transmission asset for 2019-24 tariff period are as follows:



(₹ in lakh)

Particulars	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
Depreciation	81.16	366.35	408.94	452.60
Interest on Loan	73.17	314.45	326.08	336.63
Return on Equity	87.62	395.59	441.28	488.01
O&M Expenses	7.60	35.04	36.26	37.54
Interest on Working Capital	3.71	15.45	16.80	18.13
Total	253.26	1126.88	1229.36	1332.91

Filing Fee and the Publication Expenses

63. The Petitioner has sought reimbursement of fees paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

64. The Petitioner shall be entitled for reimbursement of licence fees in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fees and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for 2019-24 tariff period.

Security Expenses

65. The Petitioner has submitted that security expenses for the transmission asset are not claimed in the instant petition, and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

66. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on



projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Goods and Services Tax

67. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/Statutory Authorities, the same may be allowed to be recovered from the beneficiaries.

68. We have considered the submissions of the Petitioner. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

Capital Spares

69. The Petitioner has sought reimbursement of capital spares at the end of tariff block. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

70. The Petitioner has prayed that transmission charges in respect of the transmission asset from COD to 31.3.2024 may be allowed to be recovered on monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations and may be



shared by the beneficiaries and long-term transmission customers in accordance with 2010 Sharing Regulations or as amended from time to time.

71. THDC vide reply dated 10.8.2022 and additional submissions dated 8.9.2022 has made the following submissions:

- i. On 6.6.2005, during 18th meeting of Standing Committee on Power System Planning in Northern Region (“SCPSPNR”) it was agreed that Tehri-Meerut transmission system would be upgraded to 765 kV for evacuation of power from Tehri PSP, Lohari Nagpala (4X150 MW) and Pala Maneri (416 MW). As per the said meeting, it was agreed that charging/upgrading of 765 kV line of KPS would match with generation of Tehri PSP. Similar Agreement was reached during 27th, Meeting of SCPSPNR, held on 11.6.2009, wherein it was re-affirmed that charging/upgradation of Tehri-Meerut 756 kV 2XS/C line at 765 kV would match with commissioning of Tehri PSP.
- ii. In the 39th Meeting of Power System Planning of Northern Region dated 29-30 May 2017, the proposal for de-linking of upgradation of Tehri-Meerut 765 kV S/C line (which was operated at 400 kV) with the commissioning of the Tehri PSP generation project was approved. Further, during the 1st Meeting of Northern Region Power Committee (Transmission Planning) held on 24.1.2020, it was agreed that charging of 4th ICT and associated transmission line between Tehri PSP and Koteshwar Pooling Station shall match with Tehri PSP generation.
- iii. THDC had been regularly apprising the Petitioner regarding the status and progress of the Tehri PSP through various communications and also Joint Co-ordination Committee Meetings (“JCC”). Despite being aware of the fact that the commissioning schedule of Tehri PSP as well as the transmission system was



delayed and the said delay had been discussed and deliberated upon by the parties on several occasions. The Petitioner vide its letter dated 26.8.2020 intimated that the date of commissioning of the Inter-State Transmission System (“ISTS”) associated with Tehri PSP as October, 2020.

- iv. The Petitioner vide communication dated 26.8.2020 asserted that Long-Term Agreement (“LTA”) would be made effective from 1.11.2020, thereby averred that THDC will liable to pay transmission charges for delayed period of commissioning of Tehri PSP. Hence, the Petitioner was attempting to resile from the agreed position on the said issue.
- v. THDC placing reliance on its various letters dated 7.12.2022, 21.1.2021 submitted chronology of discussions and deliberations taken place at various meeting on the subject matter and requested the Petitioner to abide by the agreed position on the issue.
- vi. Hence, it was established that the execution of the transmission asset was not linked to commissioning of the Tehri PSP. A complete transparency has also been maintained by THDC with regard to commissioning schedule of Tehri PSP since the award of contract. Placing reliance on Record of Proceeding (RoP) dated 29.10.2021, wherein the Petitioner agreed that Tehri PSP was not linked with scheduled commissioning of the generating asset and the Petitioner did not wait for the commissioning of the generating asset.
- vii. As per order No.23/12/2016-R&R dated 23.11.2021 issued by the Ministry of Power (MoP), Government of India, waiver of inter-state transmission charges is applicable for hydro pumped storage projects commissioned up to 30.6.2025.



Tehri PSP qualifies under the same and is exempted from payment of applicable transmission charges for delayed generation.

- viii. Further, as per order No. 23/12/2016-R&R dated 30.11.2021 issued by MoP, Government of India, a renewable energy generation capacity eligible for ISTS waiver is granted extension in COD by the Competent Authority, the commencement and period of LTA shall also be extended accordingly. Considering this, LTA is deemed to be extended till COD of the Tehri PSP, resultantly THDC is not liable to pay transmission charges till commissioning of Tehri PSP. THDC has submitted that the expected date of commissioning of Tehri PSP is June, 2023. Since THDC would achieve COD of Tehri PSP on or before 20.6.2025, therefore, in view of MoP orders dated 23.11.2021 and 30.11.2021, no transmission charges are required to be paid by THDC.
- ix. The commissioning of Tehri PSP was delayed due to *force majeure* events like Covid-19 pandemic and subsequent effect like labour problem as the Tehri PSP is labour intensive project, varied geological conditions with respect to Geological Baseline Report (“GBR”), to ensure safety of adjacent Tehri HPP Project, additional work beam, column and buttress removal by non-blasting methods and strengthening measures of its affected area in Butterfly Valve Chamber (“BVC”) and other such issues arising on account of the geological surprises for which delays were not within the reasonable control of THDC. Thus, the delay in commissioning of Tehri PSP is beyond the control of THDC and therefore not attributable to THDC. THDC has taken all required steps to ensure timely commissioning of the Tehri PSP.



- x. Placing reliance on Clause 4 of the Implementation Agreement dated 23.9.2014 entered between THDCIL and PGCIL which also provides for 'force majeure clause' lays down that *"No party shall be liable for any claim for the default or delay due to force majeure event over which POWERGRID/THDC has no control"*. Accordingly, THDC has prayed that no transmission charges ought to be imposed on THDC on account of delay in COD of the Tehri PSP. The said position relating to no charges to be levied on the THDC is also in accordance with Clause 4 (a) of the Implementation Agreement which clearly provides for no liability of any claim for the delay due to *force majeure* event.

72. The Petitioner did not file any rejoinder to the reply of THDC. However, the Petitioner in its affidavit dated 20.7.2022 given in response to the Technical Validation letter of the Commission has made the following submissions:

- (a) Discussions and deliberations with respect to de-linking of some of the assets from the generation of THDC in various SCM/NRPC/NRPCTP is as follows:

Sl. No.	IA/SCM/RPC	Date	Remarks
1.	39 th SCM of Power System Planning of NR	29 th -30 th May, 2017	Matter of urgency of commissioning of Tehri-Meerut 765 kV 2* S/C line was discussed due to oscillations observed at Tehri and Koteshwar Hydro Projects during planned shut-down of one circuit of 400 kV Tehri Pooling Station-Meerut line and at power level of 1150 MW and oscillations were damped on reduction of generation. Further, generating units were also getting delayed. Therefore, to avoid oscillations and generation shut-down, de-linking of Tehri-Meerut 765 kV 2* S/C line was discussed and agreed.
2.	40 th NRPC and 37 th TCC meeting	27 th -28 th October, 2017	De-linking of up-gradation of Tehri Pooling Station-Meerut 765 kV 2xS/C lines (operated at 400 kV) at its rated voltage with the



			commissioning of Tehri PSS generation scheme deliberated and agreed.
3.	1 st meeting of NRPCTP	24.1.2020	De-linking issue discussed and agreed. CTU stated that applicable transmission charges will be payable by THDC/ beneficiaries in accordance with the CERC Regulations.
4.	Special Meeting to discuss the up-gradation of Tehri Pooling Station-Meerut 765 kV 2* S/C lines (Operated at 400 kV) at its rated voltage	28.7.2020	CTU stated that already there is delay in commissioning of the elements from the effective schedule of November, 2017 and the associated elements are on the verge of commissioning. It would be difficult to further delay these transmission elements. Therefore, THDC has to bear the annual transmission charges corresponding to the transmission elements associated with the generation till the commissioning of the generation project.
5.	2 nd meeting of NRPCTP	1.9.2020	<p>After deliberations, following was agreed:</p> <ul style="list-style-type: none"> • 3x800 MVA ICTs at Tehri Pooling & Charging of Tehri-Meerut line at 765 kV along with upgradation of series capacitors, 240 MVA Line reactors at Meerut end and 240 MVA Bus reactor at Koteshwar PS to be considered with the strengthening scheme. <p>18 km line from Tehri PSP to the Pooling Station, 4th ICT at Tehri Pooling Station and the 3rd ICT at Meerut to be considered associated with Tehri PSP .</p> <ul style="list-style-type: none"> • THDC to expedite the commissioning of the Tehri PSP
6.	48 th NRPC	20.9.2020	De-linking issue discussed and agreed.

(b) As per the final discussion, details of assets linked with the generation of Tehri PSP and agreed as system strengthening is as under:



Sl. No.	Name of Asset	COD	System Strengthening/ ATS	Petition details
1.	400 kV S/C Tehri (Generation)-Tehri (Koteshwar) (Quad) line along with associated bays at both ends (Separate Petition filed vide Dairy No. 769/2020)	9.1.2021 (Proposed)	Generation Linked	Covered in the instant petition
Details of remaining assets covered in the instant project.				
2.	Asset-1: Combined Asset of 1) Charging of Tehri Pooling-Meerut line Ckt-I at 765 kV level along with associated bays at Koteshwar (Tehri Pooling Station) end and 240 MVAR switchable line reactor and associated bays at Meerut end. 2) 765/400 kV 800 MVA ICT- II alongwith associated bays at Koteshwar (Tehri Pooling Station). 3) 765/400 kV 800 MVA ICT- III alongwith associated bays at Koteshwar (Tehri Pooling Station) 4) 765/400 kV 800 MVA ICT-IV alongwith associated bays at Koteshwar (Tehri Pooling Station).	17.4.2020	System Strengthening	Covered in Petition No. 673/TT/2020
3.	Asset-2: Charging of Tehri Pooling-Meerut line Ckt-II at 765 kV level along with associated bays at Koteshwar (Tehri Pooling Station) end and 240 MVAR switchable line reactor and associated bays at Meerut end.	30.6.2020	System Strengthening	
4.	Asset-3: 765/400 kV 1500 MVA ICT along with associated bays at Meerut Sub-station.	30.6.2020	Generation Linked	
5.	Asset-4: 765 kV 240 MVAR Bus Reactor along with associated bays at Koteshwar (Tehri Pooling Station)	22.10.2020	System Strengthening	
6.	Asset-5: 765/400 kV 800 MVA ICT- I alongwith associated bays at Koteshwar (Tehri Pooling Station)	17.1.2021	Generation Linked	



7.	Asset-6: Modification of series capacitor at Meerut Sub-station for operation at 765 kV level	Not yet Commissioned	System Strengthening	
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73. We have considered the submissions of the Petitioner, THDC and have also gone through the record. The contentions of THDC for payment of transmission charges are threefold, firstly the execution of the transmission asset is not linked to commissioning of the Tehri PSP, secondly in terms of MoP orders dated 23.11.2021 and 30.11.2021, THDC is exempted from payment of applicable transmission charges for delayed period of generation and thirdly Clause 4 of the Implementation Agreement dated 23.9.2014 executed between THDC and PGCIL (Petitioner) provided that in the event of *force majeure* events over which parties to the Agreement have no control, no party shall be liable for any claim for the default or delay.

74. The Petitioner did not file any rejoinder to the reply of THDC. However, the Petitioner has filed reply to the technical validation letter of the Commission vide affidavit dated 20.7.2022 and referred to 39th SCM of Power System Planning of NR dated 29-30.5.2017, 40th NRPC and 37th TCC meeting dated 27-28.10.2017, 1st meeting of NRPCTP dated 24.1.2020 and Special Meeting to discuss the upgradation of Tehri Pooling Station-Meerut 765 kV 2* S/C lines dated 28.7.2020 to contend, inter alia, that the transmission asset is linked with generation of Tehri PSP.

Analysis and Decision

75. THDC has contended that execution of the transmission asset is not linked with the commissioning of the Tehri PSP and has relied on certain minutes of meetings which are being considered by us in the subsequent paragraphs of this order. THDC has also contended that the Petitioner has failed to execute the transmission asset



within the required time-frame, and that execution of the transmission asset of the Petitioner was de-linked from the commissioning of Tehri PSP. As against this, the contention of the Petitioner is that the transmission asset is linked with the generation of THDC.

76. It is admitted by THDC that power generated from Tehri is pooled at Koteshwar Pooling Station (KPS) which is owned and maintained by the Petitioner. On 6.6.2005 during the 18th meeting of Standing Committee on Power System Planning in Northern Region, it was agreed that Tehri-Meerut transmission system would be upgraded to 765 kV for evacuation of power from Tehri PSP, Lohari Nagpala (4 X 150 MW) and Pala Maneri (416 MW). It was further agreed in the said meeting that charging/upgradation of 765 kV line of KPS would match with generation of Tehri PSP. THDC further goes on to say that the above arrangement of charging/ upgradation of Tehri-Meerut 765 kV 2 x SC at 765 kV would match with the commissioning of Tehri PSP was re-affirmed in 27th meeting of SCPSNR on 11.6.2009. With reference to de-linking of up-gradation of Tehri-Meerut 765 kV 2xS/C lines, THDC has referred to 39th meeting of SCPSNR. Besides this, THDC has also relied on 1st meeting of Northern Region Power Committee (Transmission Planning) dated 24.1.2020 to contend that in view of evacuation of 1400 MW power from Tehri HEP, the transformer requirement was only 3 x 800 MVA and as such 3 x 800 MVA ICTs may be covered under strengthening scheme and 4th ICT should match with Tehri PSP generation and the same was agreed by the Members.

77. To resolve the controversy of the Petitioner that the transmission asset i.e. 400 kV S/C Tehri (Generation)-Tehri (Koteshwar) (Quad) line alongwith associated bays at both ends under the Transmission System associated with Tehri Pump Storage Plant (PSP) is linked with the generation of THDC and the counter claim of THDC that the



transmission asset is not linked with its generation, we feel it necessary to reproduce the following minutes of the meeting to arrive at an equitable decision:

(a) 39th Meeting of Standing Committee on Power System Planning in Northern Region dated 3.8.2013

“3.0 Delinking of up-gradation of Tehri Pooling Station–Meerut 765 kV 2xS/c lines (operated at 400 kV) at its rated voltage with the commissioning of Tehri PSS generation scheme.

3.1 CEA stated that in the 18th meeting of SCSPNR, the transmission system for Tehri PSP, Lohari Nagpala (4x150 MW) and Pala Maneri (416 MW) was agreed, which inter-alia included charging of Tehri-Meerut 765 kV 2 x S/C line at 765 kV (to be taken up matching with first of the three generation projects). The system was again discussed in 27th meeting of SCSPNR held on 11.06.2009, wherein, it was decided that charging of Tehri Meerut 765 kV 2 x S/C line at 765 kV would be taken up with Tehri PSP Generation. Presently, these lines are operating at 400 kV level. THDC vide their letter dated 14.2.2017 has informed that constraints are being observed in evacuation of power from Tehri / Koteshwar generation complex under contingency condition. THDC had mentioned that during planned shutdown of one circuit of 400kV Tehri pooling station (also called Koteshwar pooling station)-Meerut line, oscillations were observed at Tehri and Koteshwar hydro projects on 22.11.2016 at a power level of 1150 MW through single circuit. Subsequently, oscillations were damped on reduction of the generation. POWERGRID carried out the studies and observed that no oscillations were observed in the event of outage of one circuit of Tehri-Meerut 765 kV 2 x S/c lines, when the lines are operated at its rated voltage. Therefore, POWERGRID proposed that the up-gradation of this line at 765 kV level may be de-linked with Tehri PSP generation and carried out on priority.

3.2 POWERGRID informed that Tehri PSP generation project is anticipated to be commissioned by August-September 2019 and the work on the upgradation of these lines at 765 kV (including upgradation of FSC) is already under progress and is expected to be completed by August/ Sep. 2018. The time gap between anticipated completion date of upgradation works and commissioning of Tehri PSP is about one year. Therefore, the proposal of delinking of upgrading of Tehri-Meerut 765 kV 2xS/C lines with the commissioning of Tehri PSP may be agreed.

3.3 POSOCO stated that the issue of oscillations was also discussed in recent OCC meetings of Northern Region. He enquired about the condition of FSC's on these lines. POWERGRID informed that FSC's on these lines would be operational in next two three months.

3.4 UPPTCL observed that the performance of FSC's, wherever provided in the grid is not satisfactory. Therefore, we should avoid planning FSC in future.

3.5 Chief Engineer, PSPA-1, CEA stated that system studies carried out by POWERGRID indicate that in the event of outage of one circuit of Tehri-Meerut 765 kV 2 x S/C lines, when the lines are charged at 765 kV, no oscillations are observed.



Therefore, the upgradation works may be completed at the earliest to overcome any power evacuation constraints.

3.6 After further deliberations, members agreed to the proposal of de-linking of upgradation of Tehri-Meerut 765 kV 2 x S/C lines (presently operated at 400 kV) with the commissioning of Tehri PSP generation project alongwith reactive compensation.”

(b) Minutes of the 1st NRPCTP dated 24.1.2020

“20.0 Up-gradation of Tehri Pooling Station–Meerut 765 kV 2xS/c lines (operated at 400 kV) at its rated voltage

20.1 CTU stated that under Tehri PSP (1000 MW) transmission system, 4x800 MVA, 765/400 kV ICTs and GIS Tehri/Koteshwar Pooling station along with charging of Tehri-Meerut at 765 kV & modification of series capacitors for operation at 765 kV level were agreed. However, during the 39th SCM of NR, the issue of oscillations at Tehri complex (1400 MW existing) under contingency condition was discussed and it was agreed to de-link the upgradation of Tehri-Meerut 765 kV 2 x S/C lines (presently operated at 400 kV) along with reactive compensation with the commissioning of Tehri PSP generation project. Considering power evacuation requirement from Tehri generation complex is only 1400 MW so 3x800 MVA ICTs & charging of Tehri-Meerut at 765 kV is proposed to be covered as part of system strengthening and 4th 800 MVA ICT along with other associated elements is proposed to be covered as part of transmission system associated with Tehri PSP. CTU added that the above transmission system is under advance stage of implementation and upon operationalization of LTA granted to THDC for Tehri PSP, the applicable transmission charges shall be payable by THDC/beneficiaries in accordance with the CERC Regulations.

20.2 CEA suggested that since commercial issue is involved, therefore consent from Tehri is needed.

20.3 CTU stated that for evacuation of 1400 MW power from Tehri HEP the transformer requirement is only 3x800 MVA, so, it is always beneficial from transmission tariff point of view to charge only three transformer instead of 4x800 MV. As such, the 4th 800 MVA ICT could be charged with the commissioning of Generation at Tehri PSS. Accordingly, following proposals were agreed:

- For power evacuation requirement from Tehri HEP, only 3x800 MVA ICTs may be covered under strengthening scheme along with charging of Tehri-Meerut at 765 kV & modification of series capacitors for operation at 765 kV level.
- Charging of 4th ICT should be matched with Tehri PSP generation. Members agreed to the above proposal subject to consent from THDC.”

(c) 2nd NRPCTP held on 24.1.2020

“9.0 Up-gradation of Tehri Pooling Station–Meerut 765kV 2xS/c lines (operated at 400 kV) at its rated voltage

9.1 CEA stated that the transmission system under Tehri PSP (1000 MW) includes 4x800 MVA, 765/400 kV ICTs and Tehri/Koteshwar Pooling station, charging of Tehri-Meerut at 765 kV 2xS/c line along with modification of series capacitors for



operation at 765 kV level, 240 MVAR on each circuit of above line at Meerut end & 240 MVAR bus reactor at Tehri/Koteshwar Pooling Station. However, during the 39th Meeting of SCPSPNR, the issue of oscillations at Tehri complex (1400 MW existing) under n-1 contingency condition was discussed and it was agreed to de-link the up gradation of Tehri - Meerut 765 kV 2 x S/C lines (presently operated at 400 kV) along with reactive compensation with the commissioning of Tehri PSP generation project. Subsequently, in 1st meeting of NRPCTP held on 24.01.2020, for evacuation of 1400 MW power from Tehri generation complex, following was agreed:

(i) 3x800 MVA ICTs & charging of Tehri-Meerut line at 765 kV may be covered as part of system strengthening

(ii) Charging of 4th 800 MVA ICT along with other associated elements to be matched with Tehri PSP 9.2 CEA further stated that the above decisions were to be intimated to THDC. Accordingly, a meeting was held among CEA, CTU and THDC on 28.07.2020 through VC, wherein THDC informed that they have no objection in this regard, however, their generation project has been delayed and is likely to be commissioned by June 2022. On this, it was also informed that charging of Tehri-Meerut line at 765 kV level and three ICTs have been completed. It was further informed that LTA granted to THDC would be operationalized with the charging of following transmission elements which are expected by Dec'20:

- 4th 800 MVA ICT at Tehri PS • Tehri PSP – Tehri PS 400kV S/c line Upon operationalization, THDC will have to pay the transmission charges of above elements till commissioning of generation project. After deliberations, following was agreed:

- 3x800 MVA ICTs at Tehri Pooling & charging of Tehri-Meerut line at 765 kV along with upgradation of series capacitors, 240 MVAR Line reactors at Meerut end and 240 MVAR Bus reactor at Koteshwar PS to be considered with the strengthening scheme.

9.2 CEA further stated that the above decisions were to be intimated to THDC. Accordingly, a meeting was held among CEA, CTU and THDC on 28.07.2020 through VC, wherein THDC informed that they have no objection in this regard, however, their generation project has been delayed and is likely to be commissioned by June 2022. On this, it was also informed that charging of Tehri-Meerut line at 765 kV level and three ICTs have been completed. It was further informed that LTA granted to THDC would be operationalized with the charging of following transmission elements which are expected by December'2020:

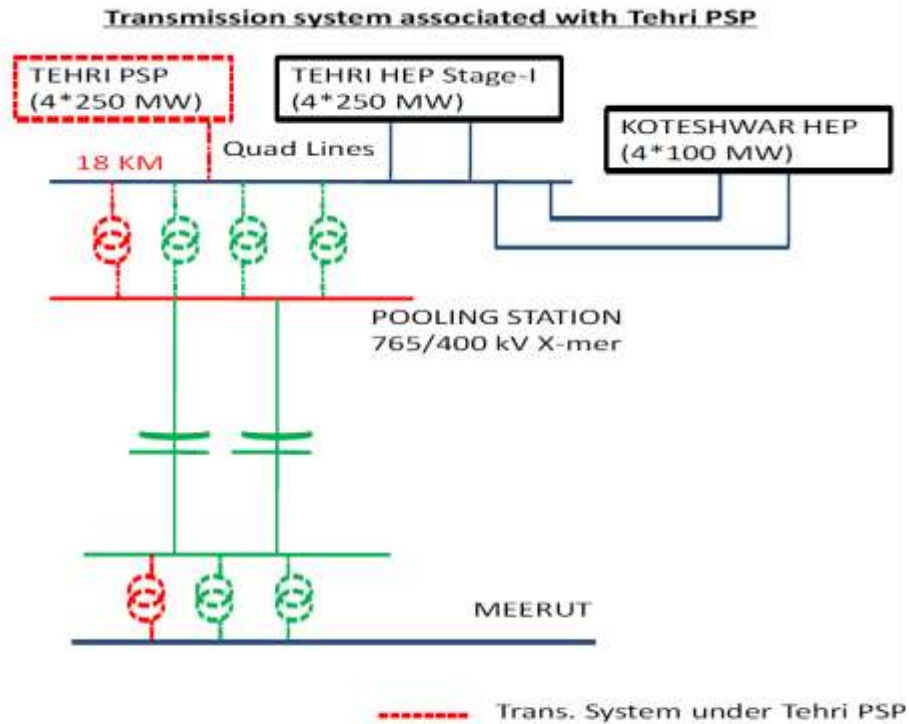
- 4th 800 MVA ICT at Tehri PS

- Tehri PSP – Tehri PS 400kV S/c line Upon operationalization, THDC will have to pay the transmission charges of above elements till commissioning of generation project. After deliberations, following was agreed:

- 3x800 MVA ICTs at Tehri Pooling & charging of Tehri-Meerut line at 765 kV along with upgradation of series capacitors, 240MVAR Line reactors at Meerut end and 240MVAR Bus reactor at Koteshwar PS to be considered with the strengthening scheme.

- 18km line from Tehri PSP to the Pooling station, the 4th ICT at Tehri Pooling station and the 3rd ICT at Meerut to be considered associated with Tehri PSP
- THDC to expedite the commissioning of the Tehri PSP





9.4 Regarding the progress of Tehri PSP, THDC informed that there is delay in the civil works due to the contractor issue in Tehri PSP, however, EM works have been started as per the original schedule, GSU have been installed for all 4 units and GIS works have been completed. Due to COVID, works may further get delayed to Dec, 2022.

9.5 CE, CEA further stated that with expected Dec, 2022 timeframe, transmission charges have to be paid for 2 years, i.e. from Dec, 2020 to Dec, 2022. THDC stated that the existing Tehri HEP faces evacuation problem and is forced to be backed down by NRLDC whenever one of the line goes out.

9.6 POSOCO stated that earlier when the system was at 400 kV, whenever there was a problem in FSC, restrictions were imposed as 1400 MW (plus overload) could not be evacuated on a single 400 kV circuit due to oscillations, therefore a shutdown was required. He further stated that now at 765 kV there would be no constraint as the loading of the line is increased. He then enquired about the requirement of FSC's with the coming of Tehri PSP and after the upgradation of Meerut – Koteshwar D/C at 765 kV level.

9.7 Regarding FSC, CTU stated that the total installed capacity will be 2400 MW at Tehri Complex, after the commissioning of Tehri PSP. There is a possibility that oscillations might occur in the complex, therefore FSC's would be required at 765 kV level also.

CTU further informed that as per the latest updates, the commissioning of the 4th ICT and the 18 km 400 kV S/c line from Tehri PSP to Tehri PS would be done by the end of October, 2020 and LTA will be effective from 1st November, 2020. Tariff for the same would be applicable as per the CERC regulations.



9.8 CE, CEA suggested THDC to resolve the issue with the contractor at the generation site at the earliest and expedite the charging of units at Tehri PSP, in order to reduce the burden of the transmission charges.

9.9 After deliberations, following was agreed:

(i) 3x800 MVA ICTs at Tehri Pooling Station & charging of Tehri-Meerut line at 765 kV along with upgradation of series reactors, 240MVAR Line reactors at Meerut end and 240 MVAR Bus reactor at Koteshwar PS to be considered with the strengthening scheme.

(ii) 18 km line from Tehri PSP to the Pooling station, the 4th ICT at Tehri Pooling station and the 3rd ICT at Meerut to be considered associated with Tehri PSP and after Commissioning of these transmission elements, THDC will have to pay the transmission Charges as per CERC regulations till the commissioning of their generation.”

78. Based on the minutes of the 1st NRPCTP held on 24.1.2020 and 2nd NRPCTP held on 24.1.2020, the transmission asset i.e. 400 kV S/C Tehri (Generation) –Tehri (Koteshwar) (Quad) line along with associated bays at both ends is linked with Tehri PSP generation.

79. Next contention of THDC is that it is not liable to pay any transmission charges in terms of Ministry of Power, Government of India order dated 23.11.2021 and order dated 30.11.2021, as it is eligible for waiver of inter-state transmission charges on transmission of electricity generated from solar and wind sources of energy and has prayed for relief from payment of transmission charges for the period of delay in the transmission project. THDC's main emphasis is on the order of Ministry of Power, Government of India dated 30.11.2021, based on which it is invoking the provision of the said order to contend that “where a Renewable Energy generation capacity which is eligible for ISTS waiver in terms of the extant order, is granted extension in COD by the competent authority, the commencement and the period of the LTA shall also get extended accordingly, and it will be deemed that the period of ISTS waiver is extended by the said period”.



80. Before we make analysis on the contentions of THDC with respect to order dated 23.11.2021 and order dated 30.11.2021 of MoP, Government of India, it is necessary for us to mention the relevant extracts of the same for decision on payment of transmission charges.

81. The relevant excerpts of Order No. 23/12/2016-R&R of Government of India, Ministry of Power dated 23.11.2021 on “Waiver of inter-state transmission charges on transmission of the electricity generated from solar and wind sources of energy” under Para 6.4 (6) of the Tariff Policy, 2016 is as follows:

“3.1 For the solar, wind, Hydro PSP and BESS Projects commissioned upto 30.6.2025, the waiver of inter-state transmission charges shall be applicable for the following:

- (i) Solar or wind energy generation set up by any person/entity. The power generated from such sources can be self consumed or sold to any entity either through competitive bidding. Power Exchange or through bilateral agreement.*
- (ii) Electricity from solar and/or wind sources used by Hydro Pumped Storage Plant (PSP) and Battery Energy Storage System (BESS) projects and subject to the following conditions:*
 - (a) At least 51% of the annual electricity requirement for pumping of water in the Hydro Pumped Storage Plant is met by use of electricity generated from solar and /or wind power plants.*
 - (b) At least 51% of the annual electricity requirement for charging of the Battery Energy Storage System is met by use of electricity generated from solar and/or wind power plants.*
 - (iii) Electricity generated/supplied from such Hydro PSP and BESS power plants as mentioned in (ii) above.*
 - (iv)*
 - (v)*
 - (vi)*”

82. The relevant excerpts of Order No. 23/12/2016-R&R of Government of India, Ministry of Power dated 30.11.2021 on “Waiver of inter-state transmission charges on



transmission of the electricity generated from solar and wind sources of energy” under Para 6.4 (6) of the Tariff Policy, 2016 is as follows:

“(vii) for any solar, wind and sources mentioned in para 3.1. (ii) and (iii) of the order dated 23.11.2021, which is eligible for waiver of inter-state transmission charges and is having its scheduled date of commissioning on or before 30th June, 2025 is granted extension of time from commissioning by Ministry of New and Renewable Energy after careful consideration, on account of Force Majeure or for delay on the part of the transmission provider in providing the transmission even after having taken the requisite steps in time, or on account of delays on the part of any Government Agency, and the power plant is commissioned before the extended date; it will get benefit of waiver inter-state transmission charges on the transmission of electricity generated by such power plant as if the said plant had been commissioned on or before 30th June, 2025:

Provided also that where a Renewable Energy generation capacity which is eligible for ISTS waiver in terms of the extant orders, is granted extension in COD by the competent authority, the commencement and the period of LTA shall also get extended accordingly, and it will be deemed that the period of ISTS waiver is extended by the said period.”

83. On consideration of Ministry of Power’s aforesaid order dated 23.11.2021, we find that intent as appears in para 3.1. of the said order is that to fall within the category of “Waiver of inter-state transmission charges on transmission of electricity generated from solar and wind sources of energy under para 6.4 (6) of the Tariff Policy, 2016, the requisite criteria are laid down in para 3.1 of the order. Para 3.1. of the said order clearly states that for Solar, Wind, Hydro PSP and BESS Projects which are commissioned upto 30.6.2025, the waiver shall be applicable subject to the conditions laid down in para under para 3.1 from (i) to (vi) of the said order. There is no dispute that THDC owns Hydro PSP which has yet not been commissioned. In other words, the condition as laid down by para 3.1 of the said order that the project should have been commissioned upto 30.6.2025 as against THDC in the present case is not satisfied. On further examination of the said order dated 23.11.2021, particularly, sub-paragraph (a) under paragraph 3.1 states that “at least 51% of the annual electricity requirement for pumping of water in the Hydro Pumped Storage Plant is met by use of electricity from solar and/or wind power plants. In other words, the requirement of 51% of the annual



electricity requirement for pumping of water in Hydro Pumped Storage Plant in the case of Tehri PSP owned by THDC can only be assessed only after commissioning of its Hydro PSP and not before that. The said order dated 23.11.2021 in sub-para (iii) under para 3.1 further prescribes that “electricity generated/supplied from such Hydro PSP and BESS power plants as mentioned in (ii) above” which in the context of THDC means that generation/supply from Hydro PSP is possible when it is commissioned. Thus, the relief as sought by THDC the under Ministry of Power’s aforesaid order dated 23.11.2021 for exemption from payment of transmission charges does not come to its rescue.

84. THDC has also relied on order dated 30.11.2021 of Ministry of Power, Government of India to contend that it is exempted from payment of transmission charges. On examination of the said order dated 30.11.2021, we find that para (vii) is added under para 3.1 of the order dated 23.11.2021 which provides that those solar, wind and sources whose mention is made in para 3.1 (ii) and (iii) of the order dated 23.11.2021, they qualify for waiver of inter -state transmission charges. This order of the MoP further lays down the condition that its scheduled date of commissioning should be on or before 30.6.2025 and the same should have been granted extension of time from the commissioning by the Ministry of New and Renewable Energy after careful examination of *force majeure* or delay on the part of the transmission provider in providing the transmission even after having taken the requisite steps in time or delay on the part of any Government Agency. The said order further states such power plant if commissioned before the extended date, it will get the benefit of such wavier. On perusal of record, we find that no such material is placed on record by THDC to show that it has been granted extension of time in commissioning by MNRE on account of



force majeure, or for delay on the part of transmission provider in providing transmission after taking requisite steps on time or delay on the part of any Government Agency. Thus, we conclude that, in the facts and circumstances of the case and in the absence of any material on record, the benefit of waiver of transmission charges on transmission of electricity as mentioned in orders dated 23.11.2021 and 30.11.2021 cannot be granted to THDC as of now.

85. It is further observed that the said orders dated 23.11.2021 and 30.11.2021 are issued by MoP under paragraph 6.4(6) of the Tariff Policy, 2016. Paragraph 6.4(6) of the Tariff Policy 2016 provides as follows:

“In order to further encourage renewable sources of energy, no inter-State transmission charges and losses may be levied till such period as may be notified by the Central Government on transmission of the electricity generated from solar and wind sources of energy through the inter-state transmission system for sale.”

86. On careful perusal of above said provision of Tariff Policy, 2016, it is clear that no transmission charges are to be levied for the purpose of “sale”. It is further observed that MoP orders dated 23.11.2021 and 30.11.2021 deal with the subject matter of “Waiver of inter-state transmission charges and losses on transmission of the electricity generated from solar and wind sources of energy under para 6.4(6) of the revised Tariff Policy, 2016”, which in our view means that waiver of transmission charges is on “electricity generated” and not otherwise.

87. Regulation 13 of the Central Electricity Regulation Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 (“the 2020 Sharing Regulations”) provides as follows:

“13. Treatment of transmission charges and losses in specific cases

*(1) No transmission charges and losses for the use of ISTS shall be payable for:
(a) generation based on solar power resource for the useful life of the projects*



commissioned during the period from 1.7.2011 to 30.6.2017.

(b) generation based on solar or wind power resources for a period of 25 years from the date of commercial operation, fulfilling the following conditions:

(i) Such generation capacity has been awarded through competitive bidding; and

(ii) Such generation capacity has been declared under commercial operation during the period from 1.7.2017 to 12.2.2018 for solar based resources or during the period from 30.9.2016 to 12.2.2018 for wind based resources; and

(iii) Power Purchase Agreement(s) have been executed for sale of power from such generation capacity to the Distribution Companies for compliance of their renewable purchase obligation.

(c) generation based on solar or wind power resources , for a period of 25 years from the date of commercial operation, fulfilling the following conditions:

(i) Such generation capacity has been awarded through competitive bidding process in accordance with the guidelines issued by the Central Government; and

(ii) Such generation capacity has been declared under commercial operation during the period from 13.2.2018 to 31.12.2022; and

(iii) Power Purchase Agreement(s) have been executed for sale of such generation capacity to all entities including Distribution Companies for compliance of their renewable purchase obligations.”

88. The 2020 Sharing Regulations clearly provide that waiver of transmission charges is for generation of electricity. The same cannot be read as providing relief from payment of transmission charges due to delay of the generation project.

89. Referring to Clause 4 of the Implementation Agreement dated 23.9.2014, which provides for *force majeure*, THDC has contended that no transmission charges ought to be imposed on THDC on account of delay in COD of Tehri PSP. The relevant extract of the Indemnification Agreement dated 23.9.2014 is as follows:

“4. No party shall be liable for any claim for the default or delay due to force majeure event over which POWERGRID/THDC has no control. Force Majeure event shall mean the event as detailed out in par 14.0 “Force Majeure” of Transmission Service Agreement”.



90. We have considered the above contention of THDC and have perused the record. THDC has contended that it is not liable for claims due to delay due to *force majeure* events as per the Indemnification Agreement between the Petitioner and THDC. The Hon'ble Supreme Court in its judgement dated 15.3.2010 in PTC India Ltd. vs CERC & Others held that all the regulated entities are required to align their existing and future contracts with the regulations notified by the Commission under Section 178 of the Act. The relevant portion of the judgement is extracted hereunder:

"59. (ii) A regulation under Section 178, as a part of regulatory framework, intervenes and even overrides the existing contracts between the regulated entities inasmuch as it casts a statutory obligation on the regulated entities to align their existing and future contracts with the said regulations."

91. In the instant case, the COD of the transmission asset has been approved as 9.1.2021 under Regulation 5(2) of the 2019 Tariff Regulations as the interconnected generating station of THDC has not been commissioned. Further, as per Regulation 6(1)(a) of the 2019 Tariff Regulations, if the generating station is not ready on the COD of the transmission line and if the COD of the transmission line has been approved under Regulation 5(2) of the 2019 Tariff Regulations, the generating company has to bear the transmission charges of the associated transmission system till the commissioning of the generating station or unit thereof. Regulation 5(2) and Regulation 6(1)(a) of the 2019 Tariff Regulations are extracted hereunder.

"5. (2) In case the transmission system or element thereof executed by a transmission licensee is ready for commercial operation but the interconnected generating station or the transmission system of other transmission licensee as per the agreed project implementation schedule is not ready for commercial operation, the transmission licensee may file petition before the Commission for approval of the date of commercial operation of such transmission system or element thereof:"

"6. Treatment of mismatch in date of commercial operation: (1) In case of mismatch of the date of commercial operation of the generating station and the transmission system, the liability for the transmission charges shall be determined as under:



(a) Where the generating station has not achieved the commercial operation as on the date of commercial operation of the associated transmission system (which is not before the SCOD of the generating station) and the Commission has approved the date of commercial operation of such transmission system in terms 24 of clause (2) of the Regulation 5 of these regulations, the generating company shall be liable to pay the transmission charges of the associated transmission system in accordance with clause (5) of Regulation 14 of these regulations to the transmission licensee till the generating station or unit thereof achieves commercial operation.”

92. As per the Hon’ble Supreme Court’s judgement dated 15.3.2020, THDC and the Petitioner are required to align their Indemnification Agreement to the above said provisions of the 2019 Tariff Regulations. The provisions of the 2019 Tariff Regulations does not provide for any exemption from any liability either for the generating company or the transmission licensee in case of any delay in completion of their projects including *force majeure* events as claimed by THDC. Thus, THDC’s contention that it is not liable to pay any transmission charges for the period of delay in commissioning of its generating station due to *force majeure* events is rejected.

93. Moreover, as the Implementation Agreement dated 23.9.2014 between the Petitioner and THDC, in case the generating station is not commissioned on the COD of the Associated Transmission System, the generating company has to bear the IDC or the transmission charges if the COD of the transmission asset is approved by the Commission under Regulation 4(3) of the 2014 Tariff Regulations (in the instant case, the transmission asset has been put into commercial operation in the 2019-24 tariff period and hence the COD of the transmission asset has to be approved under Regulation 5(2) of the 2019 Tariff Regulations). The relevant portion of the Implementation Agreement dated 23.9.2014 is extracted hereunder:

“1. Indemnification

i. In the event of 1st Unit of Generating Station is not commissioned (COD) by 03.11.2017 (Zero date) i.e. scheduled commissioning date of the Associated Transmission System



(ATS), the Generation Company shall bear the IDC or the Transmission charges if the transmission system is declared under commercial operation by the CERC in accordance with the Clause 3 of Regulation 4 of Tariff Regulations, 2014, till the Generating Station is Commissioned (COD).

ii. In the event of Transmission System is not commissioned by POWERGRID by 03.11.2017, POWERGRID shall arrange the evacuation from the Generating Station at its own arrangement and cost till the Associated Transmission System is commissioned, in line with the clause 3 of Regulation 4 of CERC Tariff Regulation, 2014.

iii. The terms and conditions of this Agreement shall be governed by provisions of CERC (Terms and Conditions of Tariff) Regulations, 2014 and any amendment made by CERC subsequently to said Regulations or CERC order in this regard.”

94. In the instant case, we have already approved the COD of the transmission asset as 9.1.2021 under Regulation 5(2) of the 2019 Tariff Regulations. Accordingly, THDC is liable to bear the transmission charges from 9.1.2021 till the commissioning of the generating station.

95. To summarise:

a) The Annual Fixed Charges (AFC) allowed in respect of the transmission asset for 2019-24 tariff period are as follows:

Particulars	Asset-I			
	2020-21 (pro-rata 82 days)	2021-22	2022-23	2023-24
AFC	253.26	1126.88	1229.36	1332.91

(₹ in lakh)

96. Annexure-I given hereinafter form part of the order.

97. This order disposes of Petition No. 270/TT/2021 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member



Annexure-I

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)					Admitt ed Capital Cost as on 31.3.20 24 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2020- 21	2021- 22	2022- 23	2023-24	Total			2020-21	2021-22	2022-23	2023-24	
Land - Freehold	3.99	-	-	-	-	-	3.99	-	-	-	-	-	
Building Civil Works & Colony	284.44	0.19	12.04	18.54	2.71	33.48	317.92	3.34%	9.50	9.71	10.22	16.41	
Transmission Line	4943.90	8.35	107.98	61.02	8.91	186.26	5130.15	5.28%	261.26	264.33	268.79	264.86	
Sub Station	1613.27	14.49	53.28	1362.94	198.85	629.57	3242.84	5.28%	85.56	87.35	124.74	167.42	
PLCC	55.62	0.04	0.58	4.41	0.64	5.67	61.29	6.33%	3.52	3.54	3.70	3.16	
IT Equipment (Incl. Software)	9.40	0.01	0.10	0.80	0.12	1.02	10.42	15.00%	1.41	1.42	1.49	1.55	
Total	6910.62	23.08	173.98	1447.71	211.23	855.99	8766.61		361.26	366.35	408.94	452.60	
									Average Gross Block (₹ in lakh)	6922.16	7020.69	7831.53	8661.00
									Weighted Average Rate of Depreciation	5.22%	5.22%	5.22%	5.23%

