

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 478/TT/2020

Coram:

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

Date of Order: 20.01.2024

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 220 kV Srinagar-Baramwari line [Point of Interconnection (of Singoli-Bhatwari HEP from the proposed Baramwari-Srinagar 220 kV D/C line) to Khandukhal-Srinagar Sub-station] under Uttarakhand Integrated Transmission Project (UITP) Scheme (deemed ISTS).

And in the matter of:

Power Transmission Corporation of Uttarakhand Limited,
Vidyut Bhawan, Near ISBT Crossing, Saharanpur Road,
Majra, Dehradun-248002

.... Petitioner

Vs.

1. Power Grid Corporation of India Limited,
"SAUDAMINI", Plot No.02, Sector 29,
Gurgaon – 122001.
2. L&T Uttaranchal Hydro Power Limited,
Landmark A, Ground Floor. Suren Road,
Chakala, Andheri (E), Mumbai-400093.
3. Lanco Mandakini Hydro Energy Private Limited,
14-11, Pushpanjali Enclave, General Mahadev Singh Road,
Dehradun-248001, Uttarakhand.



4. North Delhi Power Limited,
Power Trading & Load Dispatch group,
Cennet Building, Adjacent to 66/11 kV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura. New Delhi 110034.
5. Punjab State Electricity Board,
Thermal Shed Tia,
Near 22 Phatak,
Patiala- 147001 (Punjab).
6. BSES Yamuna Power Limited,
B-Block, Shakti Kiran, Bldg. (Near Karkadoma Court),
Karkardoma 2nd Floor,
New Delhi- 110092.
7. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi 110019.
8. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi 110002.
9. Jodhpur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
10. Jaipur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
11. North Central Railway,
Allahabad (Uttar Pradesh)- 211011.
12. Chandigarh Administration,
Sector -9, Chandigarh- 160009.
13. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).



14. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow- 226001 (Uttar Pradesh).
 15. Himachal Pradesh State Electricity Board Limited,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
 16. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana) - 134109 (Haryana).
 17. Power Development Department,
Government of Jammu and Kashmir,
Mini Secretariat, Jammu (Tawi) 180007.
 18. Uttarakhand Power Corporation Limited,
Victoria Cross Vijeyta Gabar Singh Urja Bhawan,
Kanwali Road, Balliwala Chowk, Dehradun 248001, Uttarakhand.
 19. UJVN Limited,
Maharani Bagh, G.M.S. Road,
Dehradun-248006, Uttarakhand
- ...Respondent(s)**

For Petitioner : Shri Sitiesh Mukherjee, Advocate, PTCUL
Ms. Sonam Anand, Advocate, PTCUL
Ms. Deepshikha Sansanwal, Advocate, PTCUL
Shri Chandra Pant, PTCUL
Shri H.S. Hyanki, PTCUL

For Respondents : Shri Aniket Prasoon, Advocate, L&T Uttaranchal
Ms. Akanksha Tanvi, Advocate, L&T Uttaranchal
Shri Rishabh Bharadwaj, Advocate, L&T Uttaranchal
Shri Vikas Khitha, L&T Uttaranchal
Shri Lakshman Singh, L&T Uttaranchal



ORDER

Power Transmission Corporation of Uttarakhand Limited (PTCUL) has filed the instant petition, a deemed transmission licensee, for determination of transmission tariff for the period from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of 220 kV Srinagar-Baramwari line [Point of Interconnection (of Singoli-Bhatwari HEP from the proposed Baramwari-Srinagar 220 kV D/C line) to (Khandukhal) Srinagar Sub-station] (hereinafter referred to as the “transmission asset”) under Uttarakhand Integrated Transmission Project (UITP) Scheme (hereinafter referred to as “the transmission project”).

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

- “1. Approve the Annual Fixed Charges for the tariff block 2019-24 for the asset covered under this petition and allow the recovery of tariff.*
- 2. Approve IDC incurred on the project, as specified in Form 5 of tariff petitions enclosed herewith, due to delay caused by factors beyond the control of the petitioner.*
- 3. Allow the Petitioner to submit the inspection certificate from CEA, trial operation certificate from RLDC and COD letter after achieving actual COD for approval of CoD of instant asset as per Regulation 5 of CERC (Terms and Conditions of tariff) Regulations, 2019.*
- 4. Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*
- 5. Approve the reimbursement of expenditure by the generators/beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 6. Condone the delay in implementation of the instant asset in the light of justifications submitted as the hurdles faced by the Petitioner in the implementation of the project were uncontrollable in nature.*



7. *Condone any inadvertent omissions/errors/shortcomings and permit PTCUL to make further submissions as may be required at a future date to support this petition in terms of modification / clarification; and*
8. *Pass other such 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. PTCUL is a Government company within the meaning of Companies Act, 1956. In exercise of power under section 38(1) of the Electricity Act, 2003, the Government of Uttarakhand (GoU) declared PTCUL as the state transmission utility (STU) and it, being a STU, is deemed to be a transmission licensee under section 14 of the Electricity Act, 2003. Also, PTCUL, being a STU and deemed transmission licensee, is required to build, maintain and operate a co-ordinated and economical intra-State transmission system as per section 39 and section 40 of the Electricity Act, 2003.
 - b. The Petitioner has submitted that GoU, in terms of the powers conferred under Section 131(4) of the Electricity Act, 2003, vide transfer scheme dated 31.5.2004 vested all interests, rights and liabilities related to power transmission and load dispatch of Uttarakhand Power Corporation Limited (UPCL) unto itself and subsequently re-vested them into a new company, namely, "Power Transmission Corporation of Uttaranchal Limited", now "Power Transmission Corporation of Uttarakhand Limited (PTCUL)" after formation of the new state of Uttarakhand and also declared PTCUL as the State Transmission Utility (STU).



- c. The Petitioner has submitted that subsequent to re-structuring of UPCL and upon creation of a separate company for looking after the transmission related works, Uttarakhand Electricity Regulatory Commission (UERC), vide order dated 9.6.2004, amended the transmission and bulk supply licence granted to UPCL and vested it with PTCUL for execution of transmission related works in the State.
- d. GoU, Ministry of Power (MoP) and Central Electricity Authority (CEA) had defined an investment program for development of generation, transmission and distribution of power in the state of Uttarakhand. GoU identified hydropower potential in the state of Uttarakhand along four major river basins, namely, the Alaknanda, Bhagirathi, Yamuna and Sharda. For the development of hydro power projects in the river basins in the State, GoU signed MoUs with the Central Sector Generating Stations (CSGS) and IPPs. This required strengthening and augmentation of the intra-State and inter-State transmission systems for Uttarakhand. Accordingly, Uttarakhand Integrated Transmission Project (UITP) under the aegis of CEA was conceived as a feasible, economic and optimal plan for development of transmission system to pool power from several hydro generating projects in the state to the designated pooling points in Uttarakhand, from where inter-State network could be developed to convey such power to the beneficiaries situated outside the state of Uttarakhand. Thereafter, UITP was planned under the aegis of CEA as a means to develop an optimal evacuation system for



evacuating power from the cluster of hydro-electric generating stations such as Tapovan Vishnugad (520 MW), Lata Tapovan (171 MW), Pilpalkoti (444 MW), Badrinath (300 MW), Bawlanand Paryag (300 MW), Nand Prayag Langrasu (100 MW), Devsari (252 MW), etc.

- e. On the issue of Integrated Transmission System in Uttarakhand, in the letter number 12A/G/2006-SP&PA/39 dated 9.1.2007 written by CEA to Joint Secretary (Transmission), MoP and Director (Projects), PGCIL with a copy to the Managing Director, PTCUL it was mentioned that revised project proposal envisages power evacuation system for 5403.5 MW of generation projects in the basins of the Yamuna, Bhagirathi, Alaknanda and Sharda for an estimated cost of ₹244674 lakh based on the 4th quarter price of 2004 (excluding IDC).
- f. The Petitioner has submitted that UITP was proposed to envisage power evacuation system for 5406.5 MW from the generation projects proposed to be developed on the basins of the Alaknanda, Bhagirathi, Yamuna and Sharda. It was envisaged that about 15% of the power from the various generating projects that have already been approved [including Central Sector Generating Stations (CSGS) and private sector projects] would be available for Uttarakhand State (including free power) and balance about 85% power would be sold by the generators outside Uttarakhand State.
- g. The Petitioner has submitted that UITP involves constructing a system comprising of 22 transmission lines of 400/220/132kV, 8 new sub-



stations and sub-station extensions to evacuate power from hydro-generating plants to the pooling points in Kashipur, Pithoragarh and Dehradun. The power from Kashipur would be evacuated by PGCIL outside Uttarakhand to the beneficiaries of Northern Grid.

- h. UITP was ring-fenced from state transmission projects and expenses incurred on these projects have not been included in the ARRs (Annual Revenue Requirement) of the Petitioner. It was envisaged that cost incurred on implementation of UITP would be recovered separately through transmission charges from the respective generators.
- i. In the absence of any regulatory framework that could have ensured recovery of costs for the UITP Scheme, the Petitioner had filed Petition No. 133/MP/2012 under Section 79(1)(f) of the Electricity Act for open access to the Uttarakhand Integrated Transmission Project (UITP) for evacuating and transmitting power from Tapovan-Vishnugad and Lata Tapovan hydro power projects to the PGCIL Sub-station at Kashipur for onward supply to other states. The Petitioner had also sought, in the said Petition No. 133/MP/2012, for declaring UITP, being developed by the Petitioner, as deemed inter-State Transmission System (ISTS) under Section 79(1)(c) of the Electricity Act, 2003 read with Regulations 2(1)(k), 20 and 21 of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (hereinafter referred to as “the 2010 Sharing Regulations”). The Commission vide order dated 31.1.2013 in Petition No.133/MP/2012



granted the status of deemed ISTS for UITP Scheme. The relevant portion of the order dated 31.1.2013 is as follows:

“23. The petitioner has approached the Commission for approval of deemed ISTS status to the UITP scheme being executed by it. We have already come to the conclusion that the transmission system developed by the petitioner is part of inter State Transmission System and shall be used for wheeling power outside the State. Considering the fact that the petitioner is a deemed transmission licensee, we in exercise of power under section 12 of the Act authorise the petitioner to execute the UITP Scheme and also accord deemed ISTS status to the UITP scheme being executed by the petitioner to the extent it is used for transmission of inter-State power.”

- j. Pursuant to change of status of UITP scheme from intra-State to inter-State, PTCUL in consultation with CTUIL and CEA informed the various generators involved to apply for connectivity and LTA to the CTU i.e. PGCIL (being the Nodal agency) in terms of the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 (“Connectivity Regulations”). PTCUL signed model TSA and RSA dated 19.3.2013 with CTU as per direction of the Commission vide order dated 31.1.2013 in Petition No. 133/MP/2012.
- k. The Petitioner has already executed two assets under the UITP scheme in 2016 and has also filed tariff petitions with respect to the two assets for 2014-19 period in Petition No. 80/TT/2016 (400/220 kV Srinagar (Khandukhal) Sub-station) and Petition No. 81/TT/2016 (400 kV D/C Srinagar (Khandukhal) Srinagar HEP transmission line) under the 2014 Tariff Regulations.
- l. The Commission vide common interim order dated 15.3.2017 in Petition No. 80/TT/2016 and Petition No. 81/TT/2016 observed as follows:



“13. We have considered the submissions of the petitioner and PGCIL. Though, the transmission assets have been commissioned, there is delay in commissioning of the generation projects resulting in non-utilisation of the transmission assets. The representative of the petitioner has also submitted that several meetings were held with generators and CTU to match the commissioning of the transmission system with the generation but no agreement has been reached. The Commission is of the view that if no agreement could be reached with the generators for whom the transmission lines were being executed, the petitioner should have approached the Commission for further directions on whether in the changed scenario the transmission lines should be executed or not. It is observed that issues regarding connectivity agreement and the LTA have still not yet been sorted out. In order to sort out the issues, we direct that a committee headed by Chief (Engineering) of the Commission with members from CEA, CTU, NLDC, NTPC and other generators shall be constituted to look into all the issues with respect to connectivity agreement, LTA and Implementation Agreement and work out modalities for smooth implementation and recovery of the cost of the UITP within 60 days of issue of this order.

14. The matter shall be listed after the receipt of the report of the Committee.”

- m. The Committee headed by Chief (Engineering) of the Commission submitted its Report on 27.6.2019 which was uploaded on the Commission’s website for comments/ suggestions of the stakeholders.

The recommendations of the Committee are as follows:

Recommendations:

25. Part of the system of UITP Scheme in Alaknanda Basin is under construction whereas none of generators has signed the Tripartite Transmission Agreement for connectivity as well as Tripartite LTA agreement except in case of Tapovan-Vishnugad where some of the beneficiaries have signed the LTA.

26. Further, the 400 kV transmission line between Srinagar (now Khandukhal) Sub-station and Kashipur (now Rampura) Sub-station is required to be implemented matching with the commissioning schedule of generation projects.

27. With the completion of above line, the UITP scheme executed by the PTCUL shall achieve the status of ISTS. Since the entire UITP scheme is being implemented by PTCUL as deemed transmission licensee, the entire scheme may have to be considered as ISTS as already held by the Commission in petition No. 133/MP/2012.



28. In order to ensure the recovery of the transmission charges and proper utilization of the transmission system, the Tripartite Transmission Agreements for Connectivity and Tripartite LTA agreements should be put in place by PTCUL/Generators/Beneficiaries and CTU based on the transmission system identified in the intimations immediately.

29. The recovery of the cost of the deemed Inter-State Transmission System, as identified by the Central Transmission Utility followed by the Tripartite Transmission Agreement and Tripartite LTA Agreement, shall be dealt as per the CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 and subsequent amendment thereof.”

- n. The Commission, vide orders dated 9.11.2021 and 13.6.2021 in Petition Nos. 80/TT/2016 and 81/TT/2016, respectively, has allowed tariff and the methodology of sharing of transmission charges after deliberating the submissions of the Petitioner and the Respondents. The Commission vide order dated 9.11.2021 in Petition No. 80/TT/2016 with respect to ‘Sharing of Transmission Charges’ has held as follows:

“168. We have considered the submissions of the parties. It is observed that UITP was granted deemed ISTS status in order dated 31.1.2013 in Petition No. 133/MP/2012. The assets covered in the instant petition have been in regular service after successful trial operation. The Petitioner has furnished details of power flow through the transmission assets. The Commission in order dated 20.4.2018 while granting provisional tariff for the transmission assets held that the entire tariff approved for the transmission assets has to be borne by UPCL. However, considering the fact that the subject transmission asset has been in regular service with effect from 31.7.2016, is connected to the grid through Vishnuprayag-Muzzafarnagar Transmission Line and has been declared as deemed ISTS, the transmission charges of the said transmission assets shall be recovered from the ISTS charges pool.

169. Accordingly, the arrears of the transmission charges from the date of commercial operation till the billing period commensurate with the date of issue of this order shall be raised by the CTU in accordance with the provisions of the Regulation 15(2)(b) (second bill to the DICs) and bills for the subsequent billing periods shall be raised in accordance with the provisions of Regulation 15(2)(a) (first bill to the DICs) of the Central Electricity Regulatory Commission (Sharing of inter State transmission Charges and Losses) Regulations, 2020.”



- o. The Petitioner has filed the instant petition for determination of transmission tariff of 220 kV Srinagar-Baramwari transmission line [Point of Inter-connection (Singoli- Bhatwari HEP from the proposed Baramwari-Srinagar 220 kV D/C line) to (Khandukhal)Srinagar Sub-station] under UITP Scheme. 220 kV Ckt.-I of Srinagar-Baramwari D/C line and 220 kV Ckt-II of Srinagar-Baramwari D/C line was charged on 2.6.2020 and 3.6.2020 respectively on no load basis. Trial run operation certificate dated 29.6.2020 was issued by POSOCO to the effect that the subject transmission asset was charged on no load basis from Srinagar end.
- p. The Petitioner has sought approval of COD of Ckt-I and Ckt-II of the subject transmission line as 2.6.2020 and 3.6.2020 respectively under Regulation 5(2) of the 2019 Tariff Regulations since the generator (L&T) for whom the transmission line was made was not put into commercial operation on the said dates. The Petitioner gave notice to the generator and the Respondents as contemplated under Regulation 5 of the 2019 Tariff Regulations. The subject transmission asset was developed matching with timeline for commissioning of the generating station of L&T and the timeline was revised periodically from October, 2018 to March, 2020. Finally, the generation of L&T Uttaranchal (now, renamed as ReNew Jal Urja Limited- RJUL) achieved its commercial operation on 12.11.2020.



q. The Respondent No. 2, L&T Uttarakhand Hydro Power Limited (LTUHPL), has submitted that during the pendency of the instant Petition, LTUHPL has been acquired by Renew Power Services Private Limited from L&T Power Development Limited & Larsen and Toubro Limited (together "L&T") on 11.8.2021 and pursuant thereto, its name has now been changed to Renew Jal Urja Limited (RJUL). LTUHPL (now 'RJUL') has also submitted the Certificate of Incorporation to this effect. Accordingly, the Respondent No. 2 has been referred to as LTUHPL, L&T Uttarakhand Hydro Power Limited or RJUL alternatively in this order henceforth.

4. The Annual Fixed Charges (AFC) claimed by the Petitioner in respect of the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 302 days)	2021-22	2022-23	2023-24
Depreciation	577.53	781.26	781.26	781.26
Interest on Loan	926.54	1180.81	1092.92	1005.03
Return on Equity	720.74	974.98	974.98	974.98
Interest on working capital	26.75	42.54	41.35	40.05
O&M Expenses	24.28	30.32	31.44	32.49
Total	2275.84	3009.91	2921.95	2833.81

5. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset are as follows:

(₹ in lakh)

Particulars	2020-21 (Pro-rata for 302 days)	2021-22	2022-23	2023-24
O&M Expenses	2.45	2.53	2.62	2.71
Maintenance Spares	4.40	4.55	4.72	4.87



Particulars	2020-21 (Pro-rata for 302 days)	2021-22	2022-23	2023-24
Receivables	280.58	371.08	360.24	348.42
Total	287.43	378.16	367.58	356.00
Rate of Interest (in %)	11.25	11.25	11.25	11.25
Interest on Working Capital	26.75	42.54	41.35	40.05

6. The Respondents, mainly beneficiaries of the Northern Region, are generating companies, distribution licensees, power departments, transmission licensees and trading licensees, who are procuring transmission services from the Petitioner.

7. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in the 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 notices published in the newspapers by the Petitioner. Respondent No. 2, LTUHPL/ RJUL has filed replies and additional information vide affidavits dated 11.3.2020, 16.3.2020, 8.5.2021, 14.10.2021 and 16.12.2021. The Petitioner has filed its rejoinder vide affidavit dated 30.7.2021. Further, the Petitioner and Respondent No. 2 (RJUL) have filed their written submissions dated 17.12.2021 and 16.12.2021 respectively.

8. The matter was heard through video conference on 23.6.2022 wherein the parties submitted that the submissions made by them on 25.11.2021 may be considered while deciding the present petition. Accordingly, the Commission reserved the order in the matter.



9. Having heard the representatives of the parties and having perused the material on record, we proceed to dispose of the petition.

Investment Approval (“IA”) and Scheduled Date of Commercial Operation (“SCOD”)

10. Regulation 3(36) of the 2014 Tariff Regulations defines Investment Approval (IA) as follows:

“Investment Approval means approval by the Board of the generating company or the transmission licensee or Cabinet Committee on Economic Affairs (CCEA) or any other competent authority conveying administrative sanction for the project including funding of the project and the timeline for the implementation of the project. Provided that the date of Investment Approval shall reckon from the date of the resolution/minutes of the Board/approval by competent authority.”

11. As per the said Regulation, IA means approval by the Board of the generating company or the transmission licensee or Cabinet Committee on Economic Affairs (CCEA) or any other competent authority conveying administrative sanction for the project including funding of the project and the timeline for implementation of the project. It further provides that the date of IA would be the date of resolution/minutes of the Board/ approval by the competent authority.

12. The Integrated Power Transmission System of Uttarakhand has been approved vide CEA letter number 12A/G/2006-SP&PA/39 dated 9.1.2007 and MoP (GoI) OM No. 11/5/2004-IC dated 4.5.2007. Further, the approval of DPR of the subject transmission asset (220 kV D/C Srinagar-Baramwari line) and expenditure sanction to the transmission project was accorded by Board of Directors (BOD) of PTCUL, vide 49th meeting of BOD held on 26.3.2015 at an estimated cost of ₹25319 lakh including an IDC of ₹1806 lakh.



13. Further, on approval of UITP scheme by CEA in 2007 as intra-State and having been changed to deemed ISTS status vide the Commission's order dated 31.1.2013 in Petition No. 133/MP/2012, the implementation of transmission system for evacuation of power of 99 MW Singoli-Bhatwari HEP of LTUHPL/ RJUL was discussed and agreed by various constituents in the connectivity and LTA meeting held on 14.7.2015, 37th SCM meeting dated 20.1.2016 and 39th SCM meeting held on 29.5.2017 & 30.5.2017 and 2nd NRSCT meeting dated 13.11.2018. CTU vide letter dated 11.11.2016 vetted ISTS system being implemented by PTCUL for various generation projects. Following components of UITP scheme are to be implemented by PTCUL for evacuation of power of 99 MW Singoli- Bhatwari HEP of LTUHPL/ RJUL:

"I. Connectivity for Singoli Bhatwari HEP

Interim Arrangement:

a. *Singoli Bhatwari HEP-Srinagar 220 kV D/C line*

Final Arrangement:

b. *LILO of one circuit of Srinagar-Baramwari 220 kV D/C line at Singoli Bhatwari Generation switchyard.*

Note: Baramwari Substation along with Baramwari-Srinagar 220 kV D/C line is to be implemented by PTCUL under UITP. Baramwari substation shall not be required in time frame of singoli Bhatwari HEP. Therefore, Singoli Bhatwari HEP-Srinagar 220 kV D/C line was agreed as an interim arrangement for connectivity of Singoli Bhatwari HEP. It was also agreed that the transmission line from Singoli Bhatwari Generation switchyard upto the LILO point along with 220 kV bays at Singoli Bhatwari HEP would be implemented by the applicant and remaining portion of the 220 kV line along with the 220 kV bays at Srinagar Substation is to be implemented by PTCUL.

II. xxxxx

III. xxxxx

IV. Common transmission system for Tapovan Vishnugad, Piplakoti, Phata Byung & Singoli Bhatwari HEP

(i) *400/220 kV Substation at Srinagar (Required for connectivity)*

(ii) *400 kV Srinagar HEP-Srinagar 400 kV D/C line (Required for connectivity)*

(iii) *Srinagar-Kashipur 400 kV D/C line (Required for LTA of Tapovan Vishnugad & Patabyung"*



14. Further, during meeting at CEA on 25.9.2017, it was informed by CEA/CTU to PTCUL that the 76 MW Phatabyung HEP of Lanco has become uncertain. It was directed by CEA/ CTU that the PTCUL should implement the 220 KV Baramwari-Srinagar Line in two phases. The first phase will be implemented for 99 MW Singoli- Bhatwari HEP and the second phase of the line to be implemented matching with the commissioning of Phatabyung HEP.

15. The Petitioner has submitted that as per the IA dated 26.3.2015, the scheduled completion date as per approved DPR is 31.7.2017 for 220 kV Srinagar-Baramwari line (92.5 km). The Petitioner has also submitted minutes of 37th SCM on PSP of NR held on 20.1.2016, wherein the following was recorded:

“31.0 Connectivity to Singoli Bhatwari HEP (99 MW) of M/s L&T Uttarakhand Hydropower Ltd. in Uttarakhand.

31.1 AGM, CTU stated that L&T Uttarakhand Hydropower Ltd. had applied for Connectivity for 99 MW to Singoli Bhatwari HEP located in Uttarakhand w.e.f November, 2017. The commissioning schedule of the first unit is December, 2017. The application was agreed in the 7th LTA/connectivity meeting held on 14/7/2015. As per the application, the nearest substation present in the vicinity is Baramwari 220/33kV GIS substation under UITP (deemed ISTS).

31.2 Singoli Bhatwari generation has been identified to be evacuated through UITP system. The proposal of connectivity is as below:

- LILO of one circuit of Srinagar-Baramwari 220 kV D/C line at Singoli Bhatwari Generation switchyard.*

31.3 However, Baramwari 220/33kV substation to be implemented by PTCUL may get delayed as other hydro generations in the vicinity of Baramwari substation are delayed. Accordingly, interim connectivity to Singoli Bhatwar HEP may be provided as below:

- Singoli Bhatwari HEP - Srinagar 400/220/33 kV 220 kV D/C line*
- LILO to be implemented by the applicant i.e. M/s L&T Uttarakhand Hydropower Ltd.*
- Remaining portion of the 220kV line to be implemented by PTCUL.*

31.4 This would allow interim connectivity arrangement for Singoli Bhatwari generation. After commissioning of Baramwari substation, the final arrangement as mentioned at Para 31.2 to be taken up.

31.5 It was also informed that PTCUL shall sign Implementation Agreement with the generation developer. Further, grant of connectivity does not fulfil the condition of



adequacy of transmission system for transfer of power to target beneficiaries. The grant of connectivity shall not entitle to interchange power with the grid unless it obtains any type of access to the ISTS from CTU.

31.6 Transmission beyond immediate evacuation system is to be evolved once the applicant applies for the LTA.

Members agreed to the same.

16. We have considered the submissions of the Petitioner and relevant discussions/ minutes of meetings as brought out above. The transmission asset pertains to interim arrangement for connectivity and evacuation of 99 MW Singoli-Bhatwari HEP being implemented by the Respondent No. 2, LTUHPL/ RJUL. The said Respondent had applied for connectivity for 99 MW to Singoli-Bhatwari HEP w.e.f. November, 2017. The commissioning schedule of the first unit was December, 2017. The application was approved in the 7th LTA/ connectivity meeting held on 14.7.2015. The Petitioner has submitted that as per the IA dated 26.3.2015, the scheduled completion date of 220 kV Srinagar-Baramwari transmission line as per approved DPR is 31.7.2017. Accordingly, the SCOD of 220 kV Srinagar-Baramwari transmission line [Point of Inter-connection (Singoli-Bhatwari HEP from the proposed Baramwari-Srinagar 220 kV D/C line) to (Khandukhal) Srinagar Sub-station] under UITP Scheme (hereinafter, referred to as the “transmission asset”) is considered as 31.7.2017.

Scope of the Project

17. The Petitioner vide affidavit dated 12.10.2020 has submitted approval of revised DPR as per 49th Meeting of the BOD of PTCUL held on 26.3.2015 in which the elements of the complete Project (Package-2) have been mentioned as follows:

Lines:



- i. 220 kV D/C HEP-Baramwari-Srinagar line (approximately 110 km)
- ii. 220kV D/C LILO line of Haridwar-Roorkee at 400 kV Sub-station, Roorkee (PGCIL)- (approximately . 6.64 km)

Sub-stations:

- iii. 220 kV GIS Sub-station Baramwari (2x50 MVA)

18. However, as per interim arrangement recorded in the 2nd Meeting of Northern Region Standing Committee on Transmission (NRSCT) held on 13.11.2018 the transmission system considered for evacuation of power from Singoli-Bhatwari HEP of LTUHPL/ RJUL is as follows:

Connectivity and LTA to Singoli-Bhatwari HEP (99 MW) of LTUHPL/ RJUL in Uttarakhand.

Interim Arrangement:

- (i) 220 kV D/C line from Generation switchyard to point of interconnection of Baramwari-Srinagar 220 kV D/C line (to be implemented by generation developer).
- (ii) 220 kV D/C line from point of interconnection of Baramwari-Srinagar 220 kV D/C line to Srinagar Sub-station (to be implemented by PTCUL as deemed ISTS).

19. Accordingly, the transmission line covered in the instant petition and considered for tariff in the present order is as follows:

Name of Transmission Line	Type of line AC/HVDC	S/C or D/C	Number of Sub-Conductors	Voltage level (kV)	Line length km
Baramwari Line - Srinagar 220 kV DC Line (Point of Interconnection of Singoli Bhatwari HEP from the proposed Baramwari-Srinagar 220 kV DC Line to (Khandukhal) Srinagar Sub-station)	AC	D/C	Single Zebra	220	75.02

20. The Commission vide RoP of hearing dated 15.6.2021 directed the Petitioner



to implead all the necessary parties and file revised “Memo of Parties” and serve a copy of the petition on all the Respondents.

21. The Petitioner, vide affidavit dated 28.6.2021, has filed revised “Memo of Parties” consisting of 19 numbers of Respondents. The Petitioner has confirmed that the petition has been served on the Respondents.

Date of Commercial Operation (“COD”)

22. The Petitioner has claimed COD of the transmission asset under Regulation 5(2) of the 2019 Tariff Regulations as the associated generating station i.e. Singoli-Bhatwari HEP (99 MW) executed by of LTUHPL/ RJUL was not commissioned whereas the Petitioner’s transmission line was ready. The transmission assets- 220 kV Ckt.-I of Srinagar-Baramwari D/C line and 220 kV Ckt-II of Srinagar-Baramwari D/C line was charged on 2.6.2020 and 3.6.2020 respectively on ‘no load’ basis. Trial run operation certificate dated 29.6.2020 was issued by POSOCO to the effect that the subject transmission asset was charged on no load basis from Srinagar end. LTUHPL/ RJUL, has submitted that Unit I, II and III of its Singoli-Bhatwari HEP project were commissioned on 13.11.2020, 21.12.2020 and 25.12.2020 respectively and further Unit I of the transmission project achieved its commercial operation on 18.11.2020 while Units II and III achieved their commercial operation on 31.12.2020. As the Petitioner was not able to put its transmission asset into commercial operation because of the delay in commissioning of generation by LTUHPL/ RJUL, the Petitioner has claimed COD of Ckt-1 and Ckt-2 of the transmission asset as 2.6.2020 and 3.6.2020 respectively



under Regulation 5(2) of the 2019 Tariff Regulations as follows:

SCOD for the transmission asset	Completion of trial run	COD claimed for the transmission asset
31.7.2017	2.6.2020*	2/3.6.2020

*No load charging

23. 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.”*

24. In response to the Commission’s queries in ROP of hearing dated 31.7.2020, the Petitioner vide affidavit dated 12.10.2020 made the following submissions:

(i) Energisation certificate issued by CEA



25. In support of the proposed COD of 2.6.2020 (Ckt-1) and 3.6.2020 (Ckt-2), the Petitioner has submitted that the Electrical Inspector of CEA carried out the inspection of 220 kV D/C Baramwari-Srinagar transmission line (76 km) of PTCUL from interconnection point of Singoli-Bhatwari HEP of LTUHPL/ RJUL to 400 kV AIS Srinagar (Khandukhal) Sub-station of PTCUL on 19.2.2020 and 20.2.2020 respectively and issued provisional approval vide letter Number NRIO/PTCUL/Srinagar/UK/2020/684 dated 28.4.2020 for energization of the aforesaid transmission asset under Section 43 of CEA (Measures of Safety and Electrical Supply) Regulations, 2010 (as amended). CEA further directed the Petitioner to obtain Defence NOC for the aforementioned transmission line within three months and submit the same to CEA latest by 27.7.2020. As directed, the Petitioner obtained the Defence NOC vide letter number Air HQ/S 17726/5/ATS (Ty BM-DCCXVII) dated 3.7.2020 and submitted the same to CEA vide letter number 80/SE(PI)/PTCUL/L-19 dated 6.7.2020. The final energisation certificate for “220 kV D/C Baramwari-Srinagar transmission line (76 km) of PTCUL from interconnection point of Singoli-Bhatwari HEP of LTUHPL/ RJUL to 400 kV AIS Srinagar (Khandukhal) Sub-station of PTCUL” has been issued by CEA vide Ref: No. NRIO/PTCUL/Srinagar/UK/2020 dated 12.10.2020.

(ii) Trial Operation Certificate issued by NRLDC (with or without electrical load)

26. The Petitioner has submitted the trial operation certificate on ‘no load’ issued by NRLDC (POSOCO) vide Ref: NRLDC/SO-1/117/2020/02 dated 29.6.2020 subsequently revised vide Ref: NRLDC/SO-1/117/2020/02 dated 21.9.2020,



wherein it has been certified that 220 kV Srinagar-Baramwari D/C transmission line was successfully charged for the first time (on 'no load' basis) as follows:

Name of Transmission Line	NRLDC code	Date	Time of charging	Remarks
200 kV Ckt-1 of Srinagar-Baramwari D/C line (Bay number 206 at Srinagar)	NR 2006-184	2.6.2020	17:02	*Line was charged only from Srinagar end upto the point of interconnection of Singoli-Bhatwari HEP with proposed 220 kV Srinagar-Baramwari D/C line (upto dead end tower number 227, 75.04 km)
200 kV Ckt-2 of Srinagar-Baramwari D/C line (Bay number 204 at Srinagar)	NR 2006-296	3.6.2020	16:28	

**Note-Total length of the line is 76.84 km, however line was first time charged upto 75.04 Km.*

27. Further in response to the direction of the Commission in ROP of hearing dated 25.11.2021, the Petitioner vide affidavit dated 16.12.2021, submitted Certificate of Completion of Trial Operation of 220 kV D/C Srinagar-Baramwari transmission line (Interconnection point of Singoli-Bhatwari HEP to 400 kV Srinagar (Khandukhal) Sub-station) issued by NRLDC (POSOCO) vide Ref: POSOCO/NRLDC/SO-1/291 dated 22.1.2021, wherein it has been certified that following transmission elements have successfully completed trial operation:

Name of Transmission Asset:	<ol style="list-style-type: none"> 220 kV D/C Srinagar-Baramwari line-1 along with associated bay number 206 at Srinagar (upto Inter-connection point of Singoli Bhatwari HEP to 400 kV Srinagar (Khandukhal) Sub-station). 220 kV D/C Srinagar-Baramwari line-1 along with associated bay number 206 at Srinagar (upto Inter-connection point of Singoli Bhatwari HEP to 400 kV Srinagar (Khandukhal) Sub-station).
Owner of Transmission Asset:	PTCUL



Date and Time of Energisation for commencement of trial run operation:	12.11.2020/11:00 hrs.
Date and time of completion of commencement of trial run operation:	13.11.2020/11:00 hrs.

(iii) Implementation Agreement, if any, executed by the parties

28. The Petitioner has submitted the Implementation Agreement dated 1.12.2016 signed between LTUHPL/ RJUL and PTCUL as per which the commissioning schedule of Singoli-Bhatwari HEP (3x33 MW) was October 2018-December 2018, whereas the commissioning schedule of 220 kV D/C Srinagar-Baramwari transmission line was March 2019. The Petitioner has also submitted the Implementation Agreement dated 12.7.2016 and Supplementary Implementation Agreement dated 29.11.2016 signed between Lanco Mandakini Hydro Energy Private Limited and PTCUL as per which the commissioning schedule of Phata Byung HEP (76 MW) is September 2018, whereas the commissioning schedule of 220 kV D/C Srinagar-Baramwari transmission line is March 2019.

(iv) Minutes of the coordination meetings and related correspondence regarding the monitoring of progress of the generating station and transmission systems

29. The Petitioner has submitted the minutes of various Joint Co-ordination Committee (JCC) Meetings for High Capacity Corridor and Generation Projects in Northern Region, ranging from 4th JCC meeting dated 20.9.2017 to 14th JCC meeting dated 29.6.2020, wherein regular review of the status of generation and transmission projects of NR has been done under the aegis of CTU and in the



presence of representatives of generating companies and transmission licensees.

(v) Notice issued by the Petitioner under Regulation 5 of the 2019 Tariff Regulations to the Respondents and response received thereto, if any.

30. The Petitioner has submitted that they had issued prior notice under the Regulation 5(2) of the 2019 Tariff Regulation to LTUHPL/ RJUL vide letter number 1259/SE(PI)/PTCUL/DDN dated 28.12.2019, regarding declaration of commercial operation of “Baramwari-Srinagar 220 kV D/C transmission line (Point of Interconnection (of Singoli-Bhatwari HEP with proposed Baramwari-Srinagar 220 kV D/C transmission line) to Srinagar Sub-station)” by 31.1.2020. However, due to rain and snow fall in the month of December and January 2020 in the project site and due to severe ROW issue at tower location number 75 of above transmission line, the construction work of transmission line could not be completed by 31.1.2020. Subsequently, fresh notice was served to LTUHPL/ RJUL vide letter number 83/SE(PI)/PTCUL/L-19 dated 3.2.2020, regarding declaration of commercial operation of above transmission line by 28.2.2020.

31. After successful commissioning of the above transmission line, the Petitioner vide letter number 57/SE(PI)/PTCUL/L-19 dated 5.6.2020 intimated LTUHPL/ RJUL that Circuit-1 and Circuit-2 of “Baramwari-Srinagar 220 kV D/C transmission line (Point of Interconnection (of Singoli-Bhatwari HEP with proposed Baramwari-Srinagar 220 kV D/C transmission line) to Srinagar Sub-station)” under UITP scheme (Deemed ISTS) has been put into commercial operation from 400 kV Srinagar Sub-station on 2.6.2020 and 3.6.2020, respectively.



(vi) Certificate of the CEO/MD of the Company regarding the completion of the Transmission System including associated communication system in all respects.

32. The Petitioner vide Reference No. 1486/MD/PTCUL/CERC dated 15.7.2020 has submitted the certificate of MD of PTCUL as per Regulation 5(2)(f) of the 2019 Regulations and Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Fourth Amendment) Regulations 2016 (hereinafter, referred to as “Grid Code”) to the effect that the Circuit-1 and Circuit-2 of the subject line was completed and ready with associated communication system & capable of operation to its full capacity with effect from 2.6.2020 and 3.6.2020, respectively.

33. The Respondent No. 2, LTUHPL/ RJUL has submitted that prior notices served by the Petitioner do not confirm to Regulation 5(2) of the 2019 Tariff Regulations. The one month’s prior notice dated 28.12.2019 served for expected COD by 31.1.2020 lapsed and subsequent notice dated 3.2.2020 for expected COD by 28.2.2020 also lapsed since the transmission asset could be finally charged on 2.6.2020 (Ckt-1) and 3.6.2020 (Ckt-2). The Petitioner has undertaken the construction activity without obtaining Defence NOC, whereas the NOC ought to have been obtained prior to the commencement of the subject transmission line. In any event, PTCUL cannot be allowed to consider the date of 2.6.2020 and 3.6.2020, as the date for commercial operation considering that it only managed to submit the NOC on 6.7.2020 to CEA. Despite submission of the Defence NOC dated 3.7.2020 to the Electrical Inspector, CEA on 6.7.2020, the final approval for energization was accorded to PTCUL for Srinagar-Baramwari transmission line by CEA only on 12.10.2020 (“final approval”). It is apparent from the review of the final



approval that PTCUL was required to complete compliance of certain conditions which were raised by CEA during the inspection on 27.3.2020 and that the said compliance was only undertaken and reported on 12.10.2020, based on which the final approval was granted by CEA to PTCUL on 12.10.2020. The energization of Srinagar-Baramwari transmission line on 2/3.6.2020 was a de facto energization while the de jure energization of the said transmission line can only be considered w.e.f. 12.10.2020 i.e., the date when the final approval for energization was accorded by CEA pursuant to submission of Compliance Report-III. Further, the de facto energization is of no consequence, and it is only de jure energization that is of consequence/relevance. Thus, PTCUL is not entitled to claim transmission charges with effect from 2/3.6.2010 as it only managed to get the final approval on 12.10.2020 and therefore, the said plea ought to be rejected.

34. We have considered the submissions of the Petitioner. The Petitioner has claimed the COD of Circuit-1 and Circuit-2 as 2.6.2020 and 3.6.2020 respectively under Regulation 5(2) of the 2019 Tariff Regulations. The Petitioner has submitted that the associated generation of Singoli-Bhatwari HEP (3x33 MW) under the scope of LTUHPL/ RJUL was not ready on the said dates.

35. The Respondent No. 2, LTUHPL/ RJUL has contended that the one month prior notice dated 28.12.2019 and 3.2.2020 of PTCUL is not valid as it has lapsed multiple times. RJUL has further submitted that the Petitioner should have obtained the NOC of Defence prior to commencement of the construction. Despite submission of the Defence NOC dated 3.7.2020 to the Electrical Inspector, CEA on 6.7.2020, the final approval for energization was accorded to PTCUL for Srinagar-



Baramwari Line by CEA only on 12.10.2020. Thus, PTCUL is not entitled to claim transmission charges with effect from 2/3.6.2010 as it only managed to get the final CEA approval on 12.10.2020.

36. It is observed that the Petitioner and LTUHPL/ RJUL signed implementation Agreement dated 1.12.2016. The implementation Agreement provides as follows:

“1. Indemnification

iv. In the event of respective units of Generating station are not commissioned (COD) by scheduled commissioning date of the Associated Transmission System (ATS) as per Annexure-I, 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).”

37. The relevant extracts of the above said ‘Annexure-I’ to implement agreement between the Petitioner and LTUHPL/ RJUL wherein the scheduled commissioning of generating station and scheduled COD of ATS is as follows:

<i>Schedule commissioning of generating station</i>	<i>Schedule commissioning of ATS</i>
<i>Unit-1 (33 MW)- October,2018, Unit-2 (33 MW): November,2018, Unit-3(33 MW): December,2018</i>	<i>(i) 220 kV Baramwari Sub-station-June 2019 (ii) 220 kV D/C line on single zebra conductor from Baramwari (Rudrapur)-Srinagar via Ghansali-March,2019 (iii) 400 kV D/C Srinagar-Kasipur line-December, 2019 (iv) 400 kV Srinagar Sub-station - Srinagar PH line-Already Commissioned (v) 400 kV Srinagar-Already Commissioned (vi) 02 number 400 kV bays at 400 kV Sub-station Kashipur-December,2019</i>

In case Commissioning Schedule of either the Generating Station or Associated Transmission System (ATS) is expected to be delayed by more than Three (03) months beyond the Commercial operation date (COD), the revised Commercial Operation date (COD) shall be mutually fixed in the quarterly Coordination Meeting between PTCUL & M/s L&T Uttaranchal Hydropower Ltd, such changes in Commercial Operation Date (COD) can be made up to one year prior to the previously commercial operation date (COD).”



letter dated 3.7.2020 has obtained defence NOC for the instant transmission line and applied for CEA energisation of the instant transmission line and CEA vide letter dated 12.10.2020 has granted approval for energisation of the instant transmission line.

42. From the above, we conclude that for approval of COD, there is no provision for issue of provisional energisation certificate under the 2019 Tariff Regulations, 2019. The Petitioner is required to submit energisation certificate without any conditions for claiming the COD of the asset. In the instant case, the Petitioner has submitted the unconditional energisation certificate dated 12.10.2020. Therefore, we consider the energisation certificate dated 12.10.2020.

43. From the above, we are of the view that as the Petitioner has implemented the instant asset under interim arrangement and has submitted CEA energisation certificate dated 12.10.2020. Therefore, the Petitioner's claim for COD of the transmission asset under the Regulation 5(2) of the 2019 Tariff Regulations is not allowed.

44. Taking into consideration the CEA energisation certificate dated 12.10.2020 and the trial operation certificate dated 22.1.2021, certifying that the successful trial operation was completed on load on 13.11.2020, the COD of the transmission asset is approved as 13.11.2020.

45. Accordingly, tariff in respect of the transmission asset has been considered from the approved COD i.e. 13.11.2020 in the instant Petition.

46. The Respondent No. 2, RJUL, in its written submissions dated 16.12.2021, has submitted that Unit I, II and III of the Project were commissioned on



13.11.2020, 21.12.2020 and 25.12.2020 respectively and further Unit I of the Project achieved its commercial operation on 18.11.2020 while Units II and III achieved their commercial operation on 31.12.2020. Pursuant to the commissioning of the Singoli-Bhatwari HEP of RJUL, the line was energized for commencement of trial run operation on 12.11.2020 and the same was completed on 13.11.2020.

47. It is observed that minimum transmission system is required for evacuation of 99 MW of power of the Singoli-Bhatwari HEP of LTUHPL/ RJUL. Accordingly, the Petitioner has commissioned the instant transmission system because of which the generator LTUHPL/ RJUL is able to evacuate power without any bottle necks. The COD of the asset is approved as 13.11.2020 and the transmission asset is put into use from 13.11.2020. Accordingly, the transmission charges from 13.11.2020 shall be included in common pool.

Capital Cost

48. 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 Asset-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 ash disposal and utilization including handling and transportation facility;
- (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 up to 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 Asset-forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalised Asset-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 decapitalised 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 asset.

- (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."*

49. The Petitioner vide affidavit dated 12.10.2020 has submitted details of apportioned approved cost, capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2020-21 along with estimated completion cost and submitted Auditor's certificate dated 26.9.2020 in support of the same. The apportioned approved cost as per FR and RCE, capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2020-21 for the instant asset, are as follows:



(₹ in lakh)

FR Apportioned Approved Cost	RCE Apportioned Revised Cost	Expenditure up to COD	Estimated Expenditure from COD to 31.3.2021	Estimated Completion Cost
12962.88	21189.21	14530.78	1846.78	16377.56

Cost Over-run

50. The Petitioner has submitted that the estimated completion cost is ₹16377.56 lakh against the apportioned approved cost as per FR of ₹12962.88 and RCE cost of ₹21189.21 lakh. Hence, there is a cost over-run of ₹3414.68 lakh w.r.t. FR cost. However, there is no cost over-run w.r.t. RCE.

51. The Commission vide RoP dated 31.7.2020 directed the Petitioner to submit the reasons for cost variation. In response, the Petitioner vide reply dated 13.10.2020 has submitted following reason(s) for cost variation in RCE vis-à-vis FR cost:

- (i) Original DPR was based on preliminary route survey so quantities of different items were provisional but the revised DPR was based on detail route survey.
- (ii) At the time of original DPR(FR), tower design of 220 kV D/C Tower was not available and weight of Tower material was tentative. In revised DPR, weight of tower material was taken as per tower design and there was difference of 959.87 MT in weight of tower material between original DPR (2226.13 MT) and revised DPR (3186 MT).
- (iii) Due to revised rates and inflationary trends of indices, the rate of tower material in original DPR was ₹0.82 lakh per MT while in revised DPR rates are ₹0.96 lakh per MT, the rate of conductor in original DPR is ₹2.68 lakh per km



while in revised DPR ₹3.47 lakh per km etc. resulted into increase in cost variation of transmission line material in revised DPR compared to Original DPR.

(iv) Provision for quantity variation was not envisaged in original DPR but provision of ₹2087 lakh for quantity variation was envisaged in revised DPR. In original DPR there was provision of ₹2115 lakh for price variation and in revised DPR there was provision of ₹3176 lakh for price variation. In original DPR there was provision of ₹1007 lakh for Audit & Accounts/Establishment and in revised DPR there was provision of ₹1935 lakh for Audit & Accounts/Establishment. In original; DPR there was provision of ₹1094 lakh for IDC and in revised DPR there was provision of ₹1464 lakh for IDC.

(v) There is difference of ₹1799 lakh in erection, stringing & civil works including foundation as per original DPR and Revised DPR. The Original DPR is based on preliminary route survey so quantities of different items were provisional but the revised DPR was based on detail route survey.

52. The Petitioner has summarised that the capital cost is discovered through a transparent Open Competitive Bidding process and cost represents the lowest prices available at the time of bidding of two packages. The item wise reasons for cost variation between FR cost, the RCE and completion cost is submitted in the revised Form-5. The Petitioner has submitted that the estimated completion cost is within the RCE and has requested to allow the tariff based on the cost claimed in the instant petition.

53. We have considered the submissions made by Petitioner. The initial DPR



cost of the project is ₹17850 lakh . The revised DPR of the project was approved in 49th BOD of PTCUL held on 26.3.2015 at an estimated cost of ₹25319 lakh including IDC of ₹1806 lakh. The Petitioner has reapportioned the project cost between the instant transmission asset and balance work of 220 kV D/C line on Single Zebra conductor from inter connection point of Singoli-Bhatwari HEP to proposed 220 kV Rudrapur (Baramwari) Sub-station (line length is about 15.517 km). Based on the information submitted by the Petitioner, there is reapportionment of the capital cost between the instant transmission asset and cost of balance work. The Petitioner is directed to clarify the basis of reapportionment of capital cost of the instant transmission asset and cost of balance work at the time of truing-up.

54. It is observed that the cost variation of about ₹3500 lakh between FR and estimated completion cost is mainly due to (i) additional cost of about ₹2000 lakh for forest clearance related activities such as cost of Net Present Value (NPV), compensatory afforestation (CA), plantation of dwarf species trees, land premium and lease rent, tree cutting etc. (ii) additional cost of about ₹1100 lakh due to actual tower, conductor and other line material quantity used as per actual site conditions and price variation due to bidding prices vis-à-vis DPR estimated quantity/prices and (iii) about ₹400 lakh due to increase in actual crop compensation paid, land compensation as per new Ministry of Power guideline dated 15.10.2015 and other miscellaneous expenses as per actuals. Thus, the increase in cost of procuring RoW, cost of forest clearance and various price variation factors due to inflationary trends and market forces prevailing from time to



time and high price received through competitive bidding led to overall increase in price and were beyond the control of the Petitioner. The Petitioner has submitted Form-5 wherein the Petitioner has submitted the reasons for cost variation.

55. The cost variation on account of forest clearance related activities as per new Ministry of Power guideline dated 15.10.2015 is allowed. It is further observed that the revised cost estimate was duly approved in 49th BOD held on 26.3.2015. Against the RCE apportioned approved cost of ₹21189.21 lakh, the completion cost including additional capital expenditure as on 31.3.2021 is ₹16377.56 lakh and it is within the RCE cost. Therefore, cost variation is allowed and considered for tariff purpose.

Time Over-run

56. The Petitioner has submitted that it awarded the construction of the line to HPCL on 7.4.2011 and contract agreement was signed on 23.4.2011 and the line was to be constructed within two years from the date of award i.e. 23.4.2013. However, PTCUL terminated the contract with HPCL on 26.8.2014 due to filing of bankruptcy by HPCL. Thereafter, the Board of Directors of PTCUL on 26.3.2015 approved the Revised DPR. As per the Revised DPR dated 26.3.2015, the SCOD of the transmission asset was 31.7.2017 against which COD is approved as 3.6.2020. Therefore, there is a time over-run of 1038 days in case of the transmission asset.

57. For the purpose of time overrun, submissions prior to the revised DPR dated 26.3.2015 is not considered and not analysed in the instant tariff petition and submission from 26.3.2015 to upto COD of the asset is analysed in the instant tariff



petition.

58. The Petitioner has submitted that the time over-run is mainly on account of delay in grant of (a) forest clearance; (b) unprecedented floods and natural disasters in Uttarakhand causing large scale devastation in the Alaknanda basin in June, 2013; (c) cancellation of the initial contract to HPCL and the subsequent contract Lanco Infratech Limited due to filing of bankruptcy by HPCL and Lanco Infratech; (d) delay in availability of suitable land for compensatory afforestation required under the forest approval; (e) RoW and law and order problem created by the sub-contractors of previous contractors on account of unpaid claims; (f) RoW and law and order problem created by landowners and local villagers; (g) delay in tree cutting and stringing work in some tower locations; (h) adverse climatic conditions and (i) uncertainty in implementation of complete scope and splitting of original scope in two phases etc.

59. The detailed reasons submitted by the Petitioner for time over-run are as follows:

(a) Forest clearance

(i) Forest clearance was granted for the transmission asset by MoEF&CC, New Delhi on 2.4.2013 .

(ii) PTCUL, vide letter no. 268 dated 9.4.2015, requested the District Magistrate (DM), Tehri Garhwal for transfer of 108.613 hectare Civil Soyam land in the name of forest department for Compensatory Afforestation (CA). The land provided by the DM, Tehri Garhwal was rejected by the forest department during joint inspection citing



unsuitability of the land for CA. Since no other land was available in district Tehri Garhwal, PTCUL vide letter no. 160 dated 15.2.2016 requested the DM, Pauri Garhwal for transfer of 108.613 hectare Civil Soyam land in the name of forest department for CA.

(iii) The DM, Pauri Garhwal vide letter no. 5255/26 dated 23.2.2016 directed all SDMs of district Pauri Garhwal for identification of land for CA and submit the proposal accordingly. PTCUL in coordination with revenue officials identified the land and vide letter no. 304 dated 11.4.2016 requested DFO, Pauri with request to issue suitability certificate for CA along with the details of the land. Due to pendency of the land transfer, PTCUL again requested DM, Pauri Garhwal vide letter no. 5 dated 6.8.2016 for transfer of 108.613 Hectare land in the name of forest department for CA.

(iv) DM, Pauri Garhwal, vide letter no. 412/26 dated November 9, 2016; issued order for transfer of 47.734 Hectare land for CA from Pauri tehshil and vide letter no. 816 dated 22.12.2016 issued order for transfer of 60.879 Hectare land from Satpuli tehshil.

(v) PTCUL, vide letter no. 50 dated 27.1.2017, requested SDM, Pauri for providing papers of land transfer for CA and subsequently informed SDM, Pauri vide letter no. 76 dated 4.3.2017 about typing error in area allotment of Khasra No. 1979 and requested the rectification of the same. DM, Pauri Garhwal issued the amendment vide letter no. 1549/26 dated 18.4.2017 and finally, mutation of land for CA was executed on 19.1.2017 in Satpuli tehshil and on 12.6.2017 in Pauri tehshil.

(vi) PTCUL, vide letter no. 115 dated 5.4.2017, requested DFO, Rudraprayag for taking DGPS coordinates of land boundary selected for the CA. SDM, Rudraprayag vide letter no. 95 dated 21.3.2017 requested DFO, Pauri and SDM, Pauri to direct their officers to complete the geo-fencing work. Subsequently, PTCUL vide letter no. 194 dated



13.6.2017 requested Nodal Officer for preparation of Geo reference boundary and digital map.

(vii) The Nodal Officer vide letter no. 1104 dated 22.9.2017 forwarded the proposal to MoEF, New Delhi and MoEF, New Delhi forwarded the same proposal to MoEF with CC to the regional office, Dehradun. MoEF regional office vide letter no. 8-89/2012/315 dated 18.5.2018 accorded final approval of the forest case of above transmission line.

(viii) Government of Uttarakhand vide letter no. 632 dated 13.8.2018 issued Government Order for final approval of forest case of above transmission line.

(ix) As detailed above, the process of land transfer for CA got delayed from revenue department due to unavailability of land bank in the State of Uttarakhand for CA. Since, it was very difficult to identify the land of 182.113 hectare suitable for CA, the mutation of land which was planned to complete within 3 months from the date of submission of proposal to DM, Tehri Garhwal i.e within 3 months from 9.4.2015 got completed on 6.6.2017, thereby resulting in a delay of 23 months which was beyond the control of PTCUL.

(x) There was also a delay of around 8 months at the MoEF end for final approval of forest case. MoEF should have issued the final approval within 3 months from the date of submission of proposal by nodal officer i.e from 22.9.2017 but final approval was accorded by MoEF on May 18, 2018 resulting in a net delay of 5 months.

(I) Delay in tree cutting and stringing work in some tower locations

(i) The final approval of the forest case for the transmission line was obtained on 13.8.2018. However, the progress of tree cutting was slow as



compared to the physical progress of the construction activity, which caused many issues in stringing activity. Also, due to restriction of cutting restricted variety of trees, minimum tree cutting/ looping of tree branches was allowed by the forest department only after completion of stringing work of the transmission line. Since the transmission line was passing through the dense forest, installation and stringing of conductor also became difficult due to obstruction by the branches of the trees .

(ii) Due to delay in tree cutting and stringing work in some tower locations, the project was delayed by 8 months.

(II) Delay due to unprecedented floods and natural disasters

(i) There was unprecedented floods and natural disasters in Uttarakhand causing large scale devastation in the Alaknanda basin in June 2013. These events of natural disaster severely affected the works of associated hydro projects namely, Singoli Bhatwari HEP (99 MW) of M/s L&T Uttaranchal, 76 MW Phata Byung HEP and 76 MW Rambara HEP of M/s LANCO Mandakini hydro power which were damaged. The site of 76 MW Rambara was completely washed out.

(ii) In view of large scale devastation, PTCUL requested the generators for declaration of revised COD. However, none of the above generators submitted the revised COD. Accordingly, the Petitioner decided to put the construction activities of the transmission line on hold even after compliance of in-principal approval of forest case, to safe guard the interest of PTCUL.



(III) Delay due to multiple cancellation of main contract

(i) PTCUL decided to terminate the contract with M/s HPCL on 26.8.2014 due to filing of bankruptcy case by M/s HPCL.

(ii) The construction of 220 kV Baramwari (Rudrapur)- Srinagar transmission line was awarded to M/s LANCO Infratech Ltd Gurgaon on 14.8.2015. They completed the design and engineering work including check survey well within the time and started the construction work of transmission line, thereby completing 70 nos. tower foundations in non-forest area and waited for the forest approval to commence the construction in the forest area. During this process, the LANCO group and all its associated companies including M/s LANCO Infratech Limited were referred to National Company Law Tribunal (NCLT) by the bankers, and all the bank accounts of the company got seized, resulting in halt of construction work at site. Due to non-performance of M/s LANCO Infratech Limited, PTCUL terminated the contract on 25.9.2017. The non-performance of M/s LANCO Infra-tech Ltd alone resulted in a delayed of more than 12 months

(iii) The balance work of above transmission line was then awarded to M/s L&T construction on 28.3.2018..

(IV) ROW and Law and Order issues

(a) Hindrance by the sub-contractors of previous contractors

(i) As per contract agreement, M/s L&T construction was scheduled to complete the construction work of above transmission line by 27.6.2019.



However, frequent hindrances were faced by M/s L&T since commencement of work by local sub-contractors who were earlier engaged by M/s Lanco Infratech Limited for construction of above transmission line. Incidents of manhandling with workmen and damage to material & T&P by these locals also reported in multiple instances. M/s L&T informed PTCUL about hindrances created by old sub-contractors of M/s LANCO through various letters and e-mails. These hindrances resulted in demobilization of manpower, thereby forcing the construction to halt for a month. After persuasions and assurance of settlement of their outstanding amounts, they agreed to resolve the issue within six months.

(ii) However, after six months in November, 2018, these sub-contractors again stopped all the activities at site and sought settlement of their outstanding payment. They forcibly stopped all the site activities by threatening, abusing and manhandling the staff of L&T and asked them to vacate the project site. They also demolished the labour camps and burned the material at site. It again resulted in demobilization of manpower, when the construction work was at its peak. PTCUL sought administrative intervention *vide* letter No 1402/SE(PI)/PTCUL/L-19, letter No 1403/SE(PI)/PTCUL/L-19, letter No 1404/SE(PI)/PTCUL/L-19, letter No. 524, letter No. 525, letter No. 606 and letter No. 544 dated 22.11.2018 from DM Rudraprayag, DM, Pauri Garhwal, DM, Tehri Garhwal, SDM, Bashukedar, SDM, Jakholi, SDM, Ghansali and SDM, Kirtinagar, respectively. This issue could only be controlled after intervention of local administration and further assurance of



payment settlement within 3 months but again resulted in delay of 3 months of peak working season.

(iii) To address the issue, PTCUL constituted a committee to prepare a report. The report was presented in 64th BOD meeting held 27.9.2018, which directed PTCUL to take the legal opinion on the matter. The legal opinion was obtained from senior counsels of the Supreme Court and the same was presented in 65th BoD meeting held on 28.11.2018. Subsequently, BOD directed to consult the legal department of GoU before taking any action in this respect. The proposal for obtaining Legal opinion was sent to Secretary, Energy GoU *vide* letter No 2543/MD/PTCUL /G-1 dated 29.11.2018. The Additional Secretary, GoU *vide* letter No 314/I(2)/2019/07(3)/14/2018 dated 27.5.2019 suggested to resolve the case as per the provisions of contract agreement.

(iv) The sub-contractors again stopped all the work throughout the transmission line in May 2019. For resolving the issue, Joint meeting with sub-contractors was held in presence of DM, Tehri Garhwal on 18.6.2019, wherein the DM, Tehri Garhwal directed the SDM, Kirtinagar for physical verification of work carried out by the sub-contractors and to prepare a joint report regarding hindrances created by them during the construction of above transmission line. The verification of work done by the sub-contractors of LANCO was carried out by the revenue officials, on the basis of physical verification of works and bills. A joint report was prepared by SDM, Kirtinagar



and EE(PI) PTCUL Srinagar. The report on the basis of the physical verification, correspondence of IRP, on the basis of humanity and for maintaining law and peace in the area, concluded to clear the dues of the sub-contractors.

(v) The proposal was presented in 68th BoD meeting of PTCUL on 26.6.2019, wherein the Board authorized the Managing Director to take decision in the matter based on the directions received from GoU on the subject.

(vi) This issue has a major impact on project completion schedule and has resulted in a delay of 8 months.

(b) Hindrance by landowners and local villagers

(i) There were RoW issues in 47 numbers of tower locations including severe RoW issues in 14 numbers of tower locations, thus hampering the construction activities. PTCUL was able to resolve these RoW issues with the help of local administration. There were severe RoW issues in Tower no. 75 and 76 which was resolved on 4.12.2019 with the help of district administration. The Petitioner has submitted relevant correspondences exchanged between local Administration and local land owners with PTCUL.

(V) Adverse Climatic Condition

(i) The transmission line is passing through districts Pauri Garhwal, Tehri Garhwal and Rudraprayag of Uttarakhand. In these regions, monsoon season was seen between 15.6.2018 and September 2018 and snowfall was



recorded during winters between 15.12.2018 to January 2019. The region also witnessed the forest fires during summers from May, 2019 to Mid-June, 2019. Also, this region is prone to all sorts of natural calamities such as cloud burst, unseasonal heavy rains etc. The combined effect of these climatic conditions reduces the effective working season to only 6-7 months in a year. The contract was awarded to M/s L&T in March 2018 and witnessed two rainy seasons and two winter seasons, which resulted in reduction of working time but the sufficient manpower was deployed at the site during these seasons in order to complete the project in time considering the commissioning schedule of 99 MW Singoli- Bhatwari HEP. Due to heavy rain and snow fall in project area in the month of December 2019 and January 2020, all construction activities were hampered.

(VI) Uncertainty in implementation of complete scope

(i) A meeting was held on 25.9.2017 in CEA, New Delhi to discuss the issues related to Uttarakhand Integrated Transmission Project (UITP) Scheme. PTCUL was advised to implement construction of 220 kV Baramwari– Srinagar transmission line in two phases. In Phase –I, from point of inter connection (of Singoli Bhatwari HEP with proposed Brahmwari – Srinagar 220 kV D/C transmission line) to Srinagar Sub-station matching with commissioning of Singoli Bhatwari HEP. In Phase –II, from Brahmwari to point of Interconnection (of Singoli Bhatwari HEP with proposed Brahmwari – Srinagar 220 kV D/C transmission line) to be taken up for implementation matching with commissioning schedule of Phatabyung HEP of M/s LANCO,



which was uncertain as the LANCO group was referred to NCLT by the Bankers.

(ii) Due to uncertain future of 76 MW Phatabyung HEP of LANCO, CTU *vide* letter No. C/CTU/N/PLG dated 5.12.2017 directed to construct above transmission line in two phases. In Phase –I from Srinagar to LILO point of Singoli – Bhatwari HEP matching with the commissioning schedule of Singoli – Bhatwari HEP and balance work from LILO point to 220 kV S/s Baramwari matching with commissioning schedule of Phatabyung HEP of M/s Lanco. Currently, the construction work of Phatabyung HEP is put on hold as the Lanco group has been referred to NCLT as per direction of CEA/CTU. In absence of any commissioning schedule of Phatabyung HEP, working clearances could not be given to M/s L&T construction (Power Transmission & Distribution) company for completion of balance work of line from LILO point of Singoli – Bhatwari HEP to 220 kV Sub-station Baramwari.

(iii) In light of the directions of CEA and CTU, construction work of above transmission line is being implemented from 400 kV Sub-station Srinagar to interconnection point of Singoli Bhatwari HEP (76.5 Km.) and the construction work of transmission line between interconnection point of Singoli Bhatwari HEP to proposed 220 kV switching S/s Baramwari (Rudrapur) (approx. 15.5 Km.) has been put on hold.

(iv) Pursuant to the execution of the implementation agreements with generators, the respective timelines as agreed in these , were not adhered to



by the generators. M/s L&T Uttaranchal kept on revising its commissioning schedule from December, 2017 (at the time of connectivity application to CTU) to September, 2018 (as per IA) and March, 2019 as per JCC meetings which was further revised to March, 2020. However, CEA/CTU advised PTCUL to implement the transmission system matching with generators.

(v) PTCUL has finally completed phase-1 of 220 kV D/C Srinagar-Baramwari transmission line before revised COD of 99 MW Singoli Bhatwari HEP of L&T of March, 2020 due to contractual obligations. Notice was served to L&T as per Regulation 5(2) of the 2019 Tariff Regulations. PTCUL filed Petition No. 106/MP/2019 on 15.3.2019 to resolve the issues related to signing of appropriate agreements on grounds including that there has been a non-inclusion of complete ATS to be implemented as deemed ISTS by the Petitioner as part of LTA.

(vi) Construction work of transmission line was completed on 15.2.2020 and testing of transmission line was completed on 4.3.2020. The electrical inspector of CEA, carried out inspection of above transmission line on 19.3.2020 and 20.3.2020 but due to lockdown of COVID – 19 pandemic certificate of energization of transmission line could not be issued by Electrical Inspector of CEA (GoI). Provisional approval for energization was issued on 28.4.2020 by electrical inspector of CEA (GoI).

(vii) After clearance from NRLDC, PTCUL energized both circuits of transmission line on date 22.5.2020 but circuits got tripped. After that



patrolling of complete transmission line was carried out and some trees were found near transmission line conductors and same were cutdown and action taken report and request for energization of transmission line was submitted to NRLDC through SLDC Uttarakhand on 31.5.2020. After clearance from NRLDC, 1st circuit was energized on 2.6.2020 and 2nd circuit was energized on 3.6.2020.

(viii) The hurdles faced by the Petitioner in the implementation of the project were uncontrollable in nature and the Petitioner prays to the Commission to see the delay in the implementation in the same light.

60. The Petitioner has submitted Form-12 as per the 2019 Tariff Regulations, and has submitted the copies of letters and other documents in support of the reasons for time over-run. The details of activity-wise schedule vs actual completion are as follows:

S. No.	Description of activity/ works/ services	Original Schedule (As per Planning)		Actual Achieved (As per actual)		Time over-run (Months)	Agency responsible and whether such time over-run was beyond the control of the Transmission Licensee	Reasons for delay (other activity affected- mention S.N. of activity affected)
		Start Date	Completion Date	Start Date	Completion Date			
1	Notification under Section 68 of EA, 2003				18.12.15			
2	Award of Forest Proposal, submission, clearance & tree cutting order		14.8.15		13.8.18	36	Forest & Revenue Department	(*) (All construction activities affected due to delay in Forest clearance.)
3	Land acquisition	N.A.	N.A.	N.A.	N.A.	N.A.		



4	Award of tower supply erection & package	1.10.17	31.12.17	1.10.17	28.3.18	3		
5	Tower supply, supply of Hardware & Accessories	26.9.18	28.2.19	3.7.18	22.9.19	7		
6	Supply of Conductor	1.10.18	28.2.19	6.10.18	29.8.19	6		
7	Supply of Insulators	1.10.18	28.2.19	29.11.18	18.6.19	4		
8	Tower Foundation and erection	16.5.18	31.5.19	15.5.18	31.1.20	6		
9	Stringing	1.10.18	19.6.19	27.1.19	10.2.20	7		
10	Final Testing & Commissioning	20.6.19	25.6.19	22.5.20	Ckt I 2.6.2020 Ckt II 3.6.2020	11 months 8 days		

(*) Reasons of delay pertaining to Sl. No. 2 of above table:

- (1) Delay of more than 23 months in transfer of land for Compensatory Afforestation by Revenue Department.
- (2) Delay of 7 months in obtaining FRA Certificates. Villagers signed in NoC after lot of efforts as they were not willing for construction of transmission line in their village area.
- (3) Delay of 8 months in processing of case at MOEF and CC Regional Office, Dehradun and other Forest offices of GoU.

() Reasons of delay pertaining to Sl. No. 4 to 10 of above table:**

- (1) The work was awarded on 14.8.2015 to Lanco Infratech Limited and the firm completed foundation of 70 Towers out of 266.
- (2) Lanco group referred to NCLT by the Bankers and all construction activities were stopped at site since August 2017.
- (3) Due to non-performance contract with Lanco was terminated on 25.10.2017.
- (4) Contract for balance work was awarded to L&T on 28.3.2018.
- (5) LANCO did not pay its sub-contractors and they created hindrance in construction of transmission line.
- (6) The proposal for direct payment to the subcontractors was put up in BoD meeting of PTCUL and as per direction of Board, the proposal for legal opinion was submitted to GoU vide letter dated 29.11.2018.
- (7) Energy Department, GoU vide letter dated 27.5.2019 advised that it will be preferable to resolve the proposal as per conditions of contract agreement.
- (8) As per report of DM, Tehri proposal to review the matter was submitted to GoU on 26.6.2016.
- (9) As per direction of GoU proposal was put up in 68th BoD meeting held on 26.9.19 and BoD authorized the Managing Director to take decision in the matter.
- (10) Time to time sub-contractors created hindrance in construction of transmission line due to which work got delayed by approximately 7 months against scheduled completion.



(11) Land owners of 48 nos. of tower locations created hurdles in construction of transmission line out of which land owners of 14 tower locations created severe RoW issue and resolving the same have taken long time and work in these locations got delayed by approximate 10 months.

(12) Severe RoW issue of Tower no. 75 of transmission line was resolved on 4.12.2019 with the help of District Administration of Tehri Garhwal and after that work in this location was started.

(13) Forest Department/Van Vikas Nigam could not cut down trees timely. Tree cutting of 3544 trees was required for construction of transmission line but progress of tree cutting was slow as compared to the progress of construction work of transmission line. Due to delay in tree cutting, construction activities in forest area was delayed by 4 months.

(14) Due to heavy rain and snow fall in Project area progress of construction work was hampered in the month of December 2019 and January 2020.

Analysis and decision on time over-run

61. We have considered the submissions of the Petitioner. The Petitioner initially awarded the contract for construction of the line to HPCL and as per the agreement dated 23.4.2011, the scheduled date of completion of the transmission lines was 23.4.2013. However, HPCL went bankrupt. Therefore, the Petitioner terminated the contract. Thereafter, the Petitioner's Board approved the revised DPR. As per the Revised DPR dated 26.3.2015, the SCOD of the transmission assets is 31.7.2017 against which the COD of the transmission is approved as 13.11.2020. Considering the Revised DPR, the Petitioner has claimed that the time over-run of 1038 days in case of the transmission asset, however as per the actual COD approved in this order, there is time overrun of 1201 days.

62. Taking into consideration of the submissions of the petitioner, the revised DPR which was approved by Board of Directors of PTCUL is considered for the analysis of time overrun. As per the Revised DPR dated 26.3.2015, the SCOD of the transmission assets is 31.7.2017 against which the COD of the transmission is approved as 13.11.2020. The time overrun from revised DPR date i.e. 26.3.2015 to upto COD of the asset i.e. 13.11.2020 is analysed below and prior to revised DPR is not considered for the analysis of time overrun.



63. The Petitioner has submitted that the time over-run is on account of (1) delay in forest clearance including delay in availability of suitable land for compensatory afforestation required for forest approval, including delay in tree cutting and stringing work in some tower locations, (2) hindrance caused by sub-contractors and other land owners, (3) delay due to multiple cancellation of main contract, (4) delay due to unprecedented floods and natural disasters, (4) adverse climatic condition and (5) delay due to COVID 19 impact on transmission system and other reasons etc.

64. The reasons submitted by the Petitioner for time over-run are analysed in the following paragraphs.

(a) Delay in forest clearance including delay in availability of suitable land for compensatory afforestation required under the Forest Conservation Act.

The IA was accorded on 26.3.2015, and immediately thereafter, the Petitioner, vide letter dated 9.4.2015, requested to the revenue authorities for acquisition of land for compensatory afforestation (CA). However, there were instances of delay due to non-availability of suitable land for CA purpose. Finally, after searching multiple land parcels, the process of land acquisition was completed on 12.6.2017 with mutation of land in favour of forest department. Thus, the land acquisition took about 26 months between 9.4.2015 to 12.6.2017 (795 days). Thereafter, the Nodal Officer vide letter dated 22.9.2017 requested MoEF&CC, New Delhi for according final forest approval, since the compliance to 'in-principle approval' letter dated 2.4.2013 has been met. In response, the MoEF&CC's Regional Office, vide



letter dated 18.5.2018, accorded final approval of forest case of above transmission line. Thus, the final clearance of forest proposal took about 8 months, 22.9.2017 to 18.5.2018 (238 days).

It is observed from the chronology of forest clearance submitted by the Petitioner, the schedule of completion of forest activity is 14.8.2015 against which the forest clearance including delay in availability of suitable land for compensatory afforestation required under the forest approval including delay in tree cutting and stringing work in some tower locations was completed on 18.5.2018. Therefore, the total period of 1008 days was taken for forest clearance related issues. As per the Forest (Conservation) Amendment Rules, 2014 notified by MOEF&CC in the official Gazette on 14.3.2014, the timeline for forest approval after submission of proposal is 300 days (including processing by State Government and Central Government officials). Therefore, forest clearance took about 708 days more than the stipulated 300 days. The additional time delay of 708 days due to forest approval and associated activities had a cascading effect on the execution of the transmission asset. Therefore, the time over-run of 708 days due to delay caused by forest clearance is beyond the control of the Petitioner and is condoned in line with Regulation 22(2) of the 2019 Tariff Regulations.

(b) Delay due to scope of work put under hold by CEA.

It is observed that meeting was held on 25.9.2017 under the aegis of CEA to discuss the issues related to UITP. PTCUL was advised to implement the



220 kV Baramwari-Srinagar transmission line in two phases. In Phase-I, from point of inter connection (of Singoli-Bhatwari HEP with proposed Brahmwari-Srinagar 220 kV D/C transmission line) to Srinagar Sub-station matching with commissioning of Singoli-Bhatwari HEP. In Phase-II, from Brahmwari to point of Inter-connection (of Singoli-Bhatwari HEP with proposed Brahmwari–Srinagar 220 kV D/C Transmission Line) to be taken up for implementation matching with schedule of the commercial operation of Phatabyung HEP of LANCO, which is uncertain as the LANCO group was referred to NCLT by the banks. Accordingly, CTU vide letter Number C/CTU/N/PLG dated 5.12.2017 directed to construct Phase-I from Srinagar to LILO point of Singoli-Bhatwari HEP matching with the commercial operation schedule of Singoli-Bhatwari HEP and balance work from LILO point to 220 kV Sub-station Baramwari matching with schedule of the start of commercial operation of Phatabyung HEP of Lanco. Currently, the construction work of Phatabyung HEP is put on hold as per the direction of CEA and CTU, as the Lanco group has been referred to NCLT.

In light of the directions of CEA and CTU, construction work of the transmission asset is being implemented from 400 kV Sub-station Srinagar to inter-connection point of Singoli-Bhatwari HEP (76.5 km) and the construction work of transmission line between inter-connection point of Singoli-Bhatwari HEP to proposed 220 kV switching Sub-station Baramwari (Rudrapur) (approximately 15.5 km) has been put on hold. Therefore, the Petitioner has claimed that the delay from 25.9.2017 to 5.12.2017 (71 days)



on account of putting the execution of transmission line under hold and recommencing only Phase-I as per the direction of CEA and CTU has affected the execution of transmission asset.

We have gone through the submissions of the Petitioner. Minutes of the meeting dated 25.9.2017 wherein issues related to Uttarakhand Integrated Transmission Project (UITP) scheme has been discussed. The relevant extracts of the minutes is as follows:

“2.5. Baramwari-Srinagar 220 kV D/C line

PTCUL informed that the line was awarded to M/S LANCO Infotech in August 2015, with implementation time of two years. Out of total 270 tower locations, foundation works for about seventy locations has already been completed. Due to non-performance of the contract, final termination notice has been served to the contractor. Retendering activities for the line has also been started. The line is proposed to be awarded in two phases:

- *Phase I: Point of interconnection (of Singoli Bhatwari HEP with proposed Baramwari-Srinagar 220 kV D/C line) to Srinagar Sub-station (matching with the commissioning of Singoli-Bhatwari HEP). Dedicated line from Singoli Bhatwari switchyard to point of interconnection would be built by M/S L&T as an interim connectivity. With implementation of Baramwari switching station, M/S L&T would be required to construct 220 kV D/C line from point of interconnection to Baramwari Switching station (as a part of final connectivity)*
- *Phase-II: Baramwari to Point of interconnection (of Singoli Bhatwari HEP with proposed Baramwari- Srinagar 220 kV D/C line) (to be taken up for implementation matching with the commissioning schedule of Phatabyoung HEP)”*

As per the above minutes, the Petitioner itself acknowledged that due to non-performance of the contractor, the project is terminated and retendering for the line has been initiated. The Petitioner further suggested to implement the project in two phases. The additional time delay of 71 days is not due to change in the scope of the work and also not due to direction of CEA and



CTU and it is purely on account of the Petitioner. Accordingly the time over-run from 25.9.2017 to 5.12.2017 (71 days) is not condoned

(c) RoW issues - Hindrance caused by sub-contractors of previously terminated contract of Lanco.

The Petitioner has submitted that frequent hindrances were caused by local sub-contractors of previously terminated contract of Lanco between 7.5.2018 to 10.6.2019 on the plea of non-settlement of their accounts by the previous contractor (Lanco Infratech Limited) engaged for construction of transmission line. Incidents of manhandling with workmen and damage to material and T&P by these locals also reported in multiple instances. In support of disturbance caused by the personnel of the sub-contractors, the Petitioner has submitted various letters as documentary evidence. We are of the view that the issue of hindrance caused by the sub-contractor(s) of previously terminated contractor is a matter between sub-contractors which was to be resolved by the Petitioner and its contractors/ agencies and cannot be said to be beyond the control of the Petitioner. Therefore, the delay on the above count of hindrance caused due to rival sub-contractors in the execution of transmission line is not condoned.

(d) RoW issues - Hindrance caused by land owners and local villagers.

It is observed from the chronology/Form-12 that the Petitioner has claimed a over-run of 6 months in the tower foundation and erection activity and a over-run of 7 months in the stringing activity. It is observed that the scheduled date for commencement of tower foundation and erection activity



is 16.5.2018 against which the actual commencement date is 15.5.2018. Hence, the tower foundation and erection activities commenced as per schedule. However, the actual completion of tower foundation and erection activities is indicated as 31.1.2020 against the scheduled completion of 31.5.2019. The Petitioner has submitted letters dated 12.9.2018, 31.12.2018, 11.1.2019, 11.2.2019, 16.2.2019, 25.2.2019, 8.3.2019, 24.8.2019, 12.10.2019, 23.11.2019 etc. as documentary evidence in support of time over-run. It is observed from the documents that the RoW of few locations was resolved on 4.12.2019. We are convinced that the Petitioner has made regular follow-up with the concerned authorities for resolving the hindrances caused by land owners and local villagers at tower foundation and erection locations. Hence, the over-run due to hindrance caused by land owners and local villagers from 12.9.2018 to 4.12.2019 (448 days) at various locations affected the execution of transmission asset. It is observed that the as per the revised DPR dated 26.3.2015 the petitioner has to complete the transmission line on 31.7.2017. As per the Form-12 submitted by the petitioner, tower supply of Hardware & accessories started on 3.7.2018, supply of conductor started on 29.08.2019, supply of insulators started on 29.11.2018, tower erection started on 15.05.2018, stringing started on 27.01.2019. The petitioner has not submitted the reasons for not started work after approval of revised DPR and petitioner only started the work after SCOD of the asset which means that the petitioner have casual approach in implementation of the project. As per Regulation 22(a) of the



2019 Tariff Regulations the controllable factors is as follows:

“22. Controllable and Uncontrollable factors: The following shall be considered as controllable and uncontrollable factors for deciding time over-run, cost escalation, IDC and IEDC of the project:

(1) The “controllable factors” shall include but shall not be limited to the following: a. Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or change in law or force majeure events; and

b. Delay in execution of the project on account of contractor or supplier or agency of the generating company or transmission licensee.”

We, therefore hold that the in efficiency in implementation of the project lead to delay the transmission asset and accordingly we are not inclined to condone the time overrun from 12.9.2018 to 4.12.2019 (448 days) on account of RoW problems is not condoned.

(e) Delay in stringing work in some tower locations due to tree cutting.

The Petitioner has submitted that the final approval of forest case was approved on 13.8.2018. Thereafter, the Petitioner proceeded to execute the transmission line construction in the concerned forest stretch. In this connection, cutting of about 3544 number of trees was required for construction of transmission line. However, the Petitioner faced hindrance due to slow pace of tree cutting being done by the agencies deputed by forest department/Van Vikas Nigam vis-à-vis the physical progress of stringing work. Moreover, there were issues like restriction imposed in cutting of certain restricted variety of trees, minimum tree cutting/ loping of tree branches by the forest department which led to slow progress of tree cutting as compared to the progress of construction work of transmission line. The delay in tree cutting has led to the delay in execution of transmission asset. The Petitioner has submitted letters dated 22.3.2019,



18.4.2019, 29.6.2019, 16.11.2019, etc. in support of time over-run on account of delay in permission for tree cutting. It is observed from the documents that it is not clear when he has applied for tree cutting and when he obtained final approval of tree cutting and no.of locations affected due to non approval of tree cutting. It is further observed that vide Form -12, the petitioner himself agreed that award of forest proposal submission, Clearance & tree cutting order completed on 28.03.2018. Therefore we are of the view that the tree cutting activity was under the control of the petitioner.

We are not convinced with the Petitioner and if the petitioner has made regular follow-up with the concerned authorities for expediting the tree cutting activity, the petitioner can able to complete the transmission line . Hence, we hold that the delay due to tree cutting by forest department/Van Vikas Nigam from 22.3.2019 to 16.11.2019 (239 days) at various locations is not condoned.

(f) Adverse Climatic Condition

The Petitioner has submitted that the transmission asset was being implemented in Pauri Garhwal, Tehri Garhwal and Rudraprayag Districts of Uttarakhand. These areas witnessed extreme weather conditions like monsoon and snowfall and natural calamities like forest fires, cloud burst, unseasonal heavy rains etc. As a result, the effective working season of about 6-7 months is available during a year. Further, due to heavy rain and snowfall in Project area in the month of December 2019 and January 2020, all construction activities were hampered.



We have considered the submission of the Petitioner. We are of the view that the Petitioner is expected to be aware of the local conditions and take them into consideration while arriving at the project completion schedule at DPR stage itself. It is observed that the Petitioner has submitted documents such as newspaper cuttings etc. in support of climatic conditions causing hardship to common public and disruption of movement etc. However, the Petitioner has not submitted any official record of Meteorological Department or other authorities in this regard. Further, the Petitioner has not substantiated as to how such adversities of weather and natural calamities have caused the time over-run by linking specific project activities to the events of climatic conditions. In the absence of such corroboration, it is difficult to quantify the extent of delay caused in the execution of transmission asset. Therefore, we are not inclined to consider the Petitioner's claim that there was a over-run in project execution due to adverse climatic conditions. Accordingly, the time over-run on this count is not condoned.

(g) Delay due to COVID-2019 Pandemic

The Petitioner has submitted that the construction work of transmission line was completed on 15.2.2020 and testing of transmission line was completed on 4.3.2020. The Electrical Inspector of CEA, carried out inspection of above transmission line on 19.3.2020 and 20.3.2020 but due to lockdown of COVID - 19 Pandemic, the CEA Energization Certificate was delayed and was issued on 28.4.2020. Therefore, we hold that the minimu time is



required to approve the CEA for issuing Energisation certificate and the additional time between 19.3.2020 to 28.4.2020 (40 days) due to delay in issue of CEA Energization Certificate due to Covid-2019 Pandemic is not beyond the control of the Petitioner and is not condoned.

(h) Delay due to multiple cancellation of main contract

The Petitioner has submitted that there was delay in project execution due to cancellation of main contracts. The initial contract with HPCL was terminated on 26.8.2014 due to filing of bankruptcy case the contractor (HPCL). Thereafter, the contract was awarded to LANCO Infra-Tech Limited on 14.8.2015. After completing a portion of the work, the contract of LANCO Infra-Tech Limited was also terminated on 25.9.2017 as the company was referred to NCLT by the bankers. Thereafter, the contract of execution of balance work of transmission line was awarded to L&T Construction on 28.3.2018. The Petitioner has submitted that non-performance of LANCO Infra-tech Limited alone resulted in over-run of more than 12 months.

We have considered the submissions of the Petitioner. It is observed that the delay caused due to the failure of the contractor is an inter-se issue between the Petitioner and its contractors and it is a controllable factor under the Regulation 22(1) of the 2019 Tariff Regulations, which provides as follows:

“22. Controllable and Uncontrollable factors: *The following shall be considered as controllable and uncontrollable factors for deciding time over-run, cost escalation, IDC and IEDC of the project:*

(1) The “controllable factors” shall include but shall not be limited to the following:



- a. *Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or change in law or force majeure events; and*
- b. *Delay in execution of the project on account of contractor or supplier or agency of the generating company or transmission licensee.”*

Therefore, the delay in execution of instant asset by the contractors is attributable to the Petitioner and no relief on this count can be granted to the Petitioner. The Petitioner can take recourse to the provisions of contract agreement executed between the contractor and Petitioner to claim/recover damages, if any. Accordingly, the delay due to multiple cancellation of main contract is not condoned.

(i) Time over-run due to regulatory issues.

The Petitioner has submitted that the UITP has faced constant legal hurdles since its inception. The issues regarding granting of open access for evacuation of hydro generation in Uttarakhand to PGCIL sub-stations and onward supply to other states and declaring the UITP of PTCUL as deemed ISTS have been deliberated in various forums time and again and it was finally resolved vide the Commission's order dated 31.1.2013 in Petition No. 133/MP/2012. The Petitioner has submitted that the generators during CEA and CTU meetings have been revising the time lines already agreed to in the Implementation Agreement. However, the CTU has advised them to implement the transmission system in a phased manner matching to the commissioning of concerned generating station. In this connection, the Petitioner has filed Petition No. 106/MP/2019 on 15.3.2019 before the Commission seeking issuance of appropriate directions to the generators, to



execute the revised Implementation Agreements (IAs) with fresh timelines for expedient and efficient execution of the generation plants and the associated transmission system, which is being implemented by the Petitioner under the UITP as deemed Inter-State Transmission System (ISTS). The issue involves providing Long Term Open Access (LTOA) for evacuation of power from the said generation plants and to also enter into tripartite Long Term Access (LTA) Agreements with the Petitioner and the Central Transmission Utility (CTU).

We have considered the submissions of the Petitioner. It is observed that the initial issue of open access (LTA) and deemed ISTS status to UITP was resolved vide Commission's order dated 31.1.2013 in Petitioner No. 133/MP/2012, which is prior to the IA dated 26.3.2015. Further, the matter related to Petition No. 106/MP/2019 has already been dealt by the Commission in order dated 15.3.2021. The issues with regard to revised intimation of connectivity, LTA, revised IAs/time lines, deemed ISTS status of complete UITP, recovery of transmission charges etc. has been discussed in details and the relevant portion of the findings of the Commission is as follows:

"54. However, it is clear that once the system implemented by the Petitioner has been declared as deemed ISTS vide Order dated 31.1.2013 in Petition No. 133/MP/2012, the payment of transmission charges and treatment of delay and other provisions shall be governed in accordance with the provisions of the CERC (Sharing of inter-state transmission charges and losses) Regulations, 2010 or the CERC (Sharing of inter-state transmission charges and losses) Regulations, 2020, as applicable.

Summary of decisions



55. (a) *Revision in the intimation for the grant of Connectivity incorporating the complete associated Transmission System as being insisted by PTCUL is not warranted.*

(b) *Signing of Implementation Agreement and associated timeline is an inter-se issue between generators and the Petitioner, and no direction of the Commission is warranted.*

(c) *The Petitioner, CTU and generators are required to enter into tripartite LTA Agreements in accordance with the provisions of the Connectivity Regulations. In cases where beneficiaries are required to enter into LTA Agreements, the signing of same may be coordinated by the respective generators.*

(d) *Payment of transmission charges and treatment of delay as regards the transmission system under the UITP Scheme shall be in accordance with provisions of the CERC (Sharing of inter-State transmission charges and losses) Regulations, 2010 or the CERC (Sharing of inter-State transmission charges and losses) Regulations, 2020, as applicable.”*

Therefore, we do not find any merit in the submissions of the Petitioner that the Regulatory issues had adverse impact on the timely completion of the transmission assets. Accordingly, we hold that over-run, if any, on account of regulatory/legal issues is attributable to the Petitioner. Therefore, the over-run on this account is not condoned.

65. The Petitioner has claimed COD of the Asset as 2/ 3.6.2020 under regulation 5(2) of 2019 tariff regulations, however the commission has not approved the COD of the Asset under regulation 5(2) of 2019 tariff regulations and approved the actual COD of the Asset as 13.11.2020. We are of the view that CEA vide energisation letter dated 28.04.2020 has given liberty to the petitioner to obtain Defence NOC within three months and thereafter the petitioner has obtained Defence NOC on 3.07.2020. Based on the defence NOC, CEA vide letter dated 12.10.2020 has approved the energisation of 220 kV D/C Baramwari-Srinagar transmission line (76 Km) and finally completed successful trial operation on



13.11.2020. It is, however, clarified that we have allowed capitalisation of IDC and IEDC of the for the period 3.6.2020 to 13.11.2020 in the peculiar nature of the facts in the present case where the the delay was not within the control of the petitioner. The decision in this case would not be considered as a precedent in other cases of allocation of liability for the delay in commercial operation of any transmission asset, whether pending before the Commission or to be filed in future, and such cases will be decided on their own merit in accordance with law.

66. In view of above, the summary of the decision with respect to time over-run is as follows:

Delay in forest clearance including delay in availability of suitable land for compensatory afforestation required under the Forest Conservation Act.	Out of the 1008 days taken for obtaining the final forest clearance, the additional time of 708 days, which is beyond the statutory 300 days for issuing forest clearance is condoned.
Dealy due to scope of work put on hold by CEA	Not condoned
Hindrance caused by sub-contractors of previously terminated contract of Lanco.	Not condoned
RoW issues - Hindrance caused by land owners and local villagers.	448 days not condoned
Adverse climatic conditions	Not condoned
Delay in stringing work in some tower locations due to tree cutting	Not condoned
Delay due to COVID-2019 Pandemic	40 days not condoned
Delay due to multiple cancellation of main contract	Not condoned
Time over-run due to regulatory issues.	Not condoned

67. Accordingly, the decision with regard to time over-run in respect of instant asset is as follows:



SCOD	COD	Time over-run	Time over-run condoned	Time over-run not condoned
31. 7.2017	13.11.2020	1201 days	901 days	300

Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)

68. The Petitioner has claimed IDC and IEDC in respect of the transmission asset based on the COD of 2/3.6.2020. As discussed above, the Commission has approved the COD of the transmission asset as 13.11.2020 and has allowed the capitalisation of the IDC and IEDC for the period 3.6.2020 to 13.11.2020. The Petitioner vide Auditor's Certificate has claimed the IDC of Rs. 809.90 Lakh (upto 3.6.2020) for the transmission asset. Taking into consideration the fact that IDC and IEDC for the period 3.6.2020 to 13.11.2020 is required to be capitalised in addition to the IDC and IEDC claimed by the Petitioner, however, the details of the same are not available at this stage, we approve the IDC of Rs. 809.90 lakh (upto 3.6.2020) and IEDC of Rs. 1677.73 (upto 3.6.2020) lakh on provisional basis and the same shall be reviewed at the time of truing up. The Petitioner is directed to submit the details of IEDC and IDC based on the approved COD i.e. 13.11.2020 at the time of truing up for consideration of the Commission. The Petitioner is further directed to furnish detailed IDC statement containing amount of loan drawn, date of drawal and interest rate.

69. Accordingly, IDC considered on provisional basis are as follows:

(₹ in lakh)

IDC Claimed upto 3.6.2020	IDC allowed on provisional basis	IDC discharged as on COD
A	B	D
809.90	809.90	809.90



70. The IEDC allowed on provisional basis for transmission assets are as follows:

(₹ in lakh)

IEDC Claimed	IEDC Allowed	IEDC discharged as on COD	IEDC Un-discharged as on COD
1677.73*	1677.73	1378.77	298.96

*Petitioner has claimed IEDC of ₹1378.77 lakh as on COD and ₹298.96 lakh after COD

Initial Spares

71. The Petitioner has not claimed any initial spares separately as verified from the Auditor's Certificate dated 26.9.2020 submitted by the Petitioner. Accordingly, no initial spares are allowed.

Capital Cost allowed as on COD

72. Accordingly, capital cost allowed in respect of the transmission asset as on COD is as follows:

(₹ in lakh)

Capital Cost claimed vide Auditor Certificate (inclusive of IDC and IEDC) (A)	Capital Cost approved on provisional basis
12887.41	12887.41

Additional Capital Expenditure ("ACE")

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

"24. Additional Capitalization within the original scope and up to 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 ACE 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.”

74. The Petitioner has submitted its claim for additional capital expenditure of ₹1846.78 lakh for 2020-21 along with justification and has submitted Auditor Certificate dated 26.9.2020 and Form-7 vide affidavit dated 12.10.2020 in support of the same. The Petitioner has requested the Commission to admit the claimed additional capital expenditure under applicable clause of Regulation 24(1) of the 2019 Tariff Regulations.

75. The COD of the transmission asset is 13.11.2020. The Petitioner has claimed ACE in 2020-21, which is within the 'cut-off' date and has submitted the Auditor Certificate in support of the same.

76. The details additional capitalization are given in Form-7. We have considered the submission of the Petitioner and Form-7. The details of additional capital expenditure claimed by the Petitioner in Form-7 and allowed subject to true-up is as follows:



(₹ in lakh)

Work/ Equipment proposed to be added after COD upto cut-off date	Amount capitalized/ proposed to be capitalized	Justification	Regulation under which ACE allowed
Year: 2020-21			
Transmission Line	1643.37	Undischarged liabilities	24(1)(a)
Transmission Line	1846.78*	Balance and retention payment and work deferred for execution	24(1)(b)
Total	3490.15		

*include IEDC of ₹298.96 lakh

77. The additional capital expenditure allowed is as follows, which is subject to true up:

(₹ in lakh)

Particulars	ACE allowed for period 2020-21	Total ACE Allowed
Transmission Line	3490.15	3490.15

78. Accordingly, the capital cost of the transmission asset considered for the tariff period 2019-24, subject to true up, is as follows:

(₹ in lakh)

Capital cost allowed as on COD (including accrual costs)	ACE 2019-24	Total Estimated Completion cost allowed as on 31.3.2024
	2020-21	
12887.41	3490.15	16377.56

Debt-Equity Ratio

79. 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:

- (a) where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- (b) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:



- (c) 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.”

80. The details of debt-equity considered for the purpose of computation of tariff



for 2019-24 period in respect of the transmission asset is as follows:

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	9021.19	70.00	11464.29	70.00
Equity	3866.22	30.00	4913.27	30.00
Total	12887.41	100.00	16377.56	100.00

Depreciation

81. 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 Asset-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 asset”

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 has completed its useful life.”

82. We have considered the submissions of the Petitioner. WAROD has been worked out taking into account the depreciation rates of assets prescribed in the 2019 Tariff Regulations, and considering the admitted capital expenditure as on COD and ACE in 2019-24 period. Depreciation allowed in respect of the transmission asset is as follows:

(₹ in lakh)					
	Particulars	2020-21 (Pro-rata for 139 days)	2021-22	2022-23	2023-24
A	Opening Gross Block	12887.41	16377.56	16377.56	16377.56
B	Addition during the year 2019-24 due to projected ACE	3490.15	0.00	0.00	0.00
C	Closing Gross Block (A+B)	16377.56	16377.56	16377.56	16377.56
D	Average Gross Block (A+C)/2	14632.49	16377.56	16377.56	16377.56
E	Average Gross Block (90% depreciable assets)	14632.49	16377.56	16377.56	16377.56
F	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00	0.00
G	Depreciable value (excluding IT equipment and software)(E*90%)	13169.24	14739.80	14739.80	14739.80
H	Depreciable value of IT equipment and software	0.00	0.00	0.00	0.00
I	Total Depreciable Value (G+H)	13169.24	14739.80	14739.80	14739.80
J	Weighted average rate of Depreciation (WAROD) (in %)	4.77	4.77	4.77	4.77
K	Elapsed useful life at the beginning of the year (Year)	0.00	0.00	1.00	2.00
L	Balance useful life at the beginning of the year (Year)	35.00	35.00	34.00	33.00
M	Depreciation during the year(D*J)	265.82	781.26	781.26	781.26
N	Aggregate Cumulative Depreciation at the end of the year	265.82	1047.08	1828.33	2609.59
O	Remaining Aggregate	12903.42	13692.73	12911.47	12130.21



	Particulars	2020-21 (Pro-rata for 139 days)	2021-22	2022-23	2023-24
	Depreciable Value at the end of the year(I-N)				

Interest on Loan (“IoL”)

83. 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 asset, 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”.

84. The weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on COD for respective loans. IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset is as follows:

(₹ in lakh)					
	Particulars	2020-21 (Pro-rata for 139 days)	2021-22	2022-23	2023-24
A	Gross Normative Loan	9021.19	11464.29	11464.29	11464.29
B	Cumulative Repayments up to Previous Year	0.00	265.82	1047.08	1828.33
C	Net Loan-Opening (A-B)	9021.19	11198.47	10417.22	9635.96
D	Addition due to ACE	2443.11	0.00	0.00	0.00
E	Repayment during the year	265.82	781.26	781.26	781.26
F	Net Loan-Closing (C+D-E)	11198.47	10417.22	9635.96	8854.70
G	Average Loan (C+F)/2	10109.83	10807.84	10026.59	9245.33
H	Weighted Average Rate of Interest on Loan (in %)	11.25	11.25	11.25	11.25
I	Interest on Loan (G*H)	433.13	1215.88	1127.99	1040.10

Return on Equity (“RoE”)

85. 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 cut-off 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:
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.”

86. The Petitioner has submitted that MAT rate is applicable to it. MAT rate applicable in the year 2019-20 has been considered for the purpose of RoE which will 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 for 139 days)	2021-22	2022-23	2023-24
A	Opening Equity	3866.22	4913.27	4913.27	4913.27
B	Addition due to ACE	1047.05	0.00	0.00	0.00



	Particulars	2020-21 (Pro-rata for 139 days)	2021-22	2022-23	2023-24
C	Closing Equity (A+B)	4913.27	4913.27	4913.27	4913.27
D	Average Equity (A+C)/2	4389.75	4913.27	4913.27	4913.27
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472%	17.472%	17.472%	17.472%
G	Applicable ROE Rate (in %)	18.782%	18.782%	18.782%	18.782%
H	Return on Equity for the year (D*G)	313.97	922.79	922.79	922.79

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

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
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
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
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
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple	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	0.881	0.912	0.944	0.977	1.011



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Double Circuit (Single Conductor)</i>	0.377	0.391	0.404	0.419	0.433
<i>Multi Circuit (Bundled Conductor with four or more)</i>	2.319	2.401	2.485	2.572	2.662
<i>Multi Circuit (Twin & Triple)</i>	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTD)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (₹ Lakh per</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	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.”

88. The details of the O&M Expenses claimed by the Petitioner vide affidavit dated 12.10.2020 for the transmission asset are as follows:

Element	(₹ in lakh)			
	2020-21	2021-22	2022-23	2023-24
220 kV D/C (single zebra conductor) Baramwari (Rudrapur)-Srinagar transmission line (Interconnection point of Singoli Bhatwari HEP to 400/220 kV Srinagar (Khandukhal) Sub-station) (line length: 75.04 km)	29.34	30.32	31.44	32.49
Total O&M Expenses	29.34	30.32	31.44	32.49

89. The norms for the transmission asset specified under the Regulation 35(3) of the 2019 Tariff Regulations are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for AC Line					
Double Circuit (Single Conductor) (Rs lakh per km)	0.377	0.391	0.404	0.419	0.433

90. We have considered the submissions of Petitioner. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations.



The Petitioner has computed normative O&M Expenses as per 35(3) of the 2019 Tariff Regulations. However, the Petitioner has claimed full O&M for 2020-21, whereas pro-rata O&M is applicable for 2020-21 in view of COD of 3.6.2020. Accordingly, the O&M Expenses allowed is as follows:

Element	(₹ in lakh)			
	2020-21 (Pro-rata for 139 days)	2021-22	2022-23	2023-24
220 kV D/C Baramwari (Rudrapur) - Srinagar transmission line (Interconnection point of Singoli Bhatwari HEP to 400/220 kV Srinagar (Khandukhal) Sub-station) (single zebra conductor) (line length: 75.04 km)	0.391x 75.04x 302/365	0.404x 75.04	0.419x 75.04	0.433x 75.04
Total O&M Expenses	11.17	30.32	31.44	32.49

Interest on Working Capital (“IWC”)

91. Regulation 34(1)(c), Regulation 34(3) and Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide 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*

(iii) *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. **Definition** - In these regulations, unless the context otherwise requires:-

(7) ‘**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;”

92. 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%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 11.25% (SBI 1year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-22 and 2022-23 and 12.00% (SBI 1 year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for 2023-24. The components of the working capital and interest allowed thereon is as follows:

Particulars	(₹ in lakh)			
	2020-21 (Pro-rata for 139 days)	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for one month)	2.45	2.53	2.62	2.71
Working Capital for Maintenance Spares (15% of O&M expenses)	4.40	4.55	4.72	4.87
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	336.30	368.59	357.76	346.62
Total Working Capital	343.15	375.67	365.09	354.20
Rate of Interest for working capital (in %)	11.25	10.50	10.50	12.00
Interest of working capital	14.70	39.44	38.33	42.50



Annual Fixed Charges approved for the 2019-24 Tariff Period

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

Particulars	(₹ in lakh)			
	2020-21 (Pro-rata for 139 days)	2021-22	2022-23	2023-24
Depreciation	265.82	781.26	781.26	781.26
Interest on Loan	433.13	1215.88	1127.99	1040.10
Return on Equity	313.97	922.79	922.79	922.79
Operation and Maintenance Expense	11.17	30.32	31.44	32.49
Interest on Working Capital	14.70	39.44	38.33	42.50
Total	1038.80	2989.69	2901.81	2819.14

Filing Fee and the Publication Expenses

94. The Petitioner has sought reimbursement of fee 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.

Sharing of Transmission Charges

95. The Petitioner has prayed that tariff for the 2019-24 period 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 as per 2010 Sharing Regulations.



96. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (the 2020 Sharing Regulations). Accordingly, the billing, collection and disbursement of the transmission charges shall be recovered in terms of provisions of the 2010 Sharing Regulations and 2020 Sharing Regulations as provided in Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations respectively.

97. To summarise, the AFC allowed in respect of the transmission asset for the 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)			
2020-21 (Pro-rata for 139 days)	2021-22	2022-23	2023-24
1038.80	2989.69	2901.81	2819.14

98. This order disposes of Petition No. 478/TT/2020 in terms of the above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(I. S. Jha)
Member

sd/-
(Arun Goyal)
Member

