

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 80/TT/2016**

**Coram:**

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

**Date of Order: 09.11.2021**

**In the matter of:**

Approval under Sections 61, 62 and 79(1)(c) & 79(1)(d) of the Electricity Act, 2003 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for approval of Annual Fixed Cost and determination of tariff for the licensed transmission business for financial years 2015-16, 2016-17, 2017-18 and 2018-19 for 400 kV Srinagar Sub-station as per Central Electricity Regulatory Commission's order dated 31.1.2013 in Petition No. 133/MP/2012.

**And in the matter of:**

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

**....Petitioner**

**Vs**

1. Power Grid Corporation of India Limited,  
"SAUDAMINI", Plot No.-2, Sector-29,  
Gurgaon-122001(Haryana).
2. North Delhi Power Limited,  
Power Trading & Load Dispatch Group,  
Cennet Building, Adjacent to 66/11kV Pitampura-3,  
Grid Building, Near PP Jewellers, Pitampura,  
New Delhi-110034.
3. Punjab State Electricity Board,  
The Mall,  
Patiala-147001.
4. BSES Yamuna Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi-110019.



5. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi-110019.
6. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110002.
7. Jodhpur Vidyut Vitran Nigam Limited,  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura,  
Jaipur-302024.
8. Jaipur Vidyut Vitran Nigam Limited,  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura,  
Jaipur-302024.
9. North Central Railway,  
Allahabad-211011.
10. Chandigarh Administration,  
Sector-9,  
Chandigarh-160009.
11. Ajmer Vidyut Vitran Nigam Limited,  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura,  
Jaipur-302024.
12. Uttar Pradesh Power Corporation Limited,  
10<sup>th</sup> Floor, Shakti Bhawan Extension, 14, Ashok Marg,  
Lucknow-226001.
13. Himachal Pradesh State Electricity Board Limited,  
Vidyut Bhawan, Kumar House Complex Building-II,  
Shimla-171004 (H.P.)
14. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector-6,  
Panchkula (Haryana)-134109.
15. Power Development Department,  
Government of Jammu and Kashmir,  
Mini Secretariat,  
Jammu (Tawi)180007.
16. Uttarakhand Power Corporation Limited,



Victoria Cross Vijeyta Gabar Singh Urja Bhawan,  
Kanwali Road, Balliwala Chowk,  
Dehradun-248001, Uttarakhand.

17. GVK Industries,  
Alaknanda Hydro Power Company Limited,  
Paigah House, 156-159, Sardar Patel Road,  
Secundrabad-500003, Telangana.
18. NTPC Limited,  
NTPC Bhawan,  
SCOPE Complex, 7, Institutional Area, Lodhi Road,  
New Delhi-110003.
19. THDC India Limited,  
Pragatipuram, Bypass Road,  
Rishikesh-249201, Uttarakhand.
20. Lanco Mandakini Hydro Energy Pvt. Limited,  
14-H, Pushpanjali Enclave,  
General Mahadev Singh Road,  
Dehradun-248001, Uttarakhand.
21. L&T Uttaranchal Hydro Power Limited,  
Landmark A, Ground Floor, Suren Road,  
Chakala, Andheri (E),  
Mumbai-400093.
22. GMR (Badrinath) Hydro Power Generation Pvt. Limited,  
New Sakthi Bhawan, Building No. 302, Near Terminal-3,  
IGI Airport,  
New Delhi-110037.
23. NHPC Limited,  
NHPC Office Complex,  
Sector-33, Faridabad-121003,  
Haryana.
24. SJVN Limited,  
SJVN Corporate Office Complex,  
Shanan, Shimla-171006  
Himachal Pradesh.
25. UJVN Limited,  
Maharani Bagh, G.M.S. Road,  
Dehradun-248006

.....Respondents



**For Petitioner:** Shri Aryaman Saxena, Advocate, PTCUL  
Shri Vikas Sharma, PTCUL  
Shri S.P. Arya, PTCUL

**For Respondents:** Shri Pradeep Misra, Advocate, UPCL  
Shri B.C.K. Mishra, UPCL

### **ORDER**

The present petition has been filed by the Petitioner, Power Transmission Corporation of Uttarakhand Limited (PTCUL), under Sections 61, 62, 79(1)(c) and 79(1)(d) of the Electricity Act, 2003 (hereinafter referred to as “the Act”) read with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for approval of Annual Fixed Cost and determination of tariff of the licensed transmission business for the financial years 2015-16, 2016-17, 2017-18 and 2018-19 in respect of 400 kV Srinagar sub-station in terms of the Commission’s order dated 31.1.2013 in Petition No. 133/MP/2012. Khandukhal sub-station and Srinagar sub-station are one and the same thing and have been inter-changeably used in this order.

2. The Petitioner has made the following prayers:

- “• *Approve the Annual Fixed Charges for the assets covered under this petition, as per para-20 above.*
- *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.*
- *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*
- *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 Petitioner filed Petition No. 133/MP/2012 under Section 79(1)(f) of the 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 Powergrid Corporation of India Limited (PGCIL) sub-station at Kashipur for onward supply to other States. In Petition No. 133/MP/2012, the Petitioner had also sought declaration under Section 79(1)(c) of the Act 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”) for declaring UITP, being developed by the Petitioner, as deemed inter-State Transmission System (ISTS). The Commission vide order dated 31.1.2013 in Petition No.133/MP/2012 granted the status of deemed ISTS for UITP Scheme observing 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.”*

4. The Petitioner has submitted that Government of Uttarakhand (GoU), by virtue of powers conferred under Section 131(4) of the Act, 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 in PTCUL and also declared PTCUL as the State Transmission Utility (STU).



5. 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.

6. 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, Alaknanda, Bhagirathi, Yamuna and Sharda. 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.

7. 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 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.



8. Complete scope of work to be executed by the Petitioner under UITP scheme approved by CEA vide letter dated 9.1.2007 is as follows:

**“POWER TRANSMISSION CORPORATION OF UTTARANCHAL  
Integrated Power Transmission System of Uttaranchal  
XI PLAN (2007-2012)  
(CEA Letter No. 12A/G2006-SP&PA/39 Dated 09.01.2007)**

| Sl. No.                      | Generating Scheme  | Transmission Work   | Ckt. km/<br>Capacity/ No. | Project Cost<br>(Figures<br>in Crore) | Target<br>year |
|------------------------------|--|---|---------------------------|---------------------------------------|----------------|
| <b>(I) Yamuna Basin</b>      |  |   |                           |                                       |                |
|                              | Arokot (72 MW)<br>Tuni Plasu (42 MW)<br>Hanol Tuni (45 MW)<br>Mori Hanol (63 MW)<br>Jakhol Sankri (33 MW)<br>Natwar Mori (33 MW)<br>Vyasi (120 MW)<br>Lakhwar (300 MW) | 220 kV D.C. Mori –Nogaon – Lakhwar Line                         | 2x100                     | 80.00                                 | 10-11          |
|                              |  | 220 kV D.C. Arakot Tuni – Mori Line                             | 2x40                      | 32.00                                 | 10-11          |
|                              |  | LILO of 220 kV Arakot Tuni – Mori Line at Tuni Plasu            | 2x2                       | 1.60                                  | 10-11          |
|                              |  | LILO of 220 kV Arakot Tuni- Mori Line at Hanol Tuni             | 2x3                       | 2.40                                  | 10-11          |
|                              |  | LILO of 220 kV Arnkot Tuni –Mori Line at Mori Hanol             | 2x2                       | 1.60                                  | 10-11          |
|                              |  | 220 kV DC Jakhol Sankari- Mori (220 kV) Line                    | 2x30                      | 24.00                                 | 10-11          |
|                              |  | LILO of 220 kV Jakhol Sankari – Mori (220 kV) at Natwar         | 2x8                       | 6.30                                  | 10-11          |
|                              |  | LILO of 220 kV Lakhwar –Khodri Line at Vyasi                    | 2x5                       | 4.00                                  | 10-11          |
|                              |  | LILO of 220 kV Mori - Khodri Line at Nogaon                     | 2x5                       | 4.00                                  | 10-11          |
|                              |  | 220 kV Mori Sub-station   | 2x50                      | 60.00                                 | 09-10          |
|                              |  | 220 kV Sub-station Nogaon                                       | 2x50                      | 60.00                                 | 11-12          |
|                              | <b>Total (708 MW)</b>  |   | 200 MVA                   | 275.90                                |                |
| <b>(II) Bhagirathi Basin</b> |  |   |                           |                                       |                |
|                              | Loharinagpala (600 MW)<br>Pala Maneri (480 MW)<br>Kotlibhel IA (195 MW)<br>Kotlibhel IB  | 400 kV DC Loharinagapala Koteshwar Line & LILO of Loharinagpala | 2x92                      | 172.00                                | 10-11          |



|                              |  |   |        |        |       |
|------------------------------|--|---|--------|--------|-------|
|                              | (320 MW),<br>Kotlibhel St. II  | Koteshwar Line at Pala – Maneri   |        |        |       |
|                              | (530 MW)<br>Bhilangana I<br>(22.5 MW)<br>Bhilangana II-<br>(49 MW)<br>Bhilangana III (24 MW)   | 220 kV DC Line from 400 kV Sub-station, Roorkee (PGCIL) – 220 kV Sub-station, Roorkee     | 2x15   | 12.00  | 11-12 |
|                              |  | 220 kV DC Kotlibhel St. II-Roorkee line   | 2x90   | 108.00 | 11-12 |
|                              |  | 220 kV DC Kotlibhel IB – Kotlibhel St. II Line & LILO of this line at Kotlibhel IA        | 2x34.5 | 28.00  | 11-12 |
|                              |  | 220 kV DC Bhilangana III-Ghansall Line  | 2x15   | 12.00  | 7-8   |
|                              |  | LILO of 220 kV DC Bhilangana III-Ghansall Line at Bhilangana II                           | 2x1    | 0.74   | 7-8   |
|                              |  | 220 kV Ghansali – Chamba Line   | 2x50   | 40.00  | 7-8   |
|                              |  | 220 kV Ghansali Sub-station   | 2x50   | 50.00  | 08-09 |
|                              |  | 220 kV Bay at Chamba  | 1      | 1.00   | 08-09 |
|                              | <b>Total 2220.5 MW)</b>  |   |        | 423.74 |       |
| <b>(III) Alaknanda Basin</b> |  |   |        |        |       |
|                              | Lata Tapovan (171 MW)<br>Badrinath (140 MW)<br>Vishugad (520 MW)<br>Pipalkoti (444 MW)<br>Bawala Nandprayag (132 MW)<br>Nandprayag Langrasu (141 MW)<br>Devsari (300 MW) | 400 kV DC Vishnugad - Kuwari pass (Pipalkoti) Line  | 20     | 40.00  | 10-11 |
|                              |  | LILO of 400 kV Vishnugad – Kuwari Pass (Pipalkoti) Line at Vishnugad Pipalkoti            | 3      | 6.00   | 11-12 |
|                              |  | LILO of 400 KV of Vishnu Prayag-Muzaffarnagar Line at Kuwari Pass (Pipalkoti) Sub-station | 5      | 10.00  | 11-12 |
|                              | Singoli Bhatwari (60 MW)<br>Gaurikund (19 MW)<br>Phatabyung (11 MW)  | 400 kV DC Kuwari Pass (Pipalkoti) – Karanprayag Line                                      | 45     | 90.00  | 10-11 |
|                              |  | 400 kV DC Srinagar 400 kV Sub-station Srinagar Power House (HEP)                          | 6      | 12.00  | 10-11 |





|  |   |          |        |       |
|--|---|----------|--------|-------|
|  | 220 kV DC<br>Tapovan –<br>Joshimath Line  | 21       | 18.00  | 10-11 |
|  | LILO of 220 kV<br>Tapovan –<br>Joshimath Line at<br>Badrinath                             | 62       | 50.00  | 10-11 |
|  | 220 kV DC<br>Joshimath –<br>Kuwaripass<br>(Pipalkoti) Line                                | 30       | 36.00  | 10-11 |
|  | 220 kV DC<br>Devsari-<br>Karanprayag Line   | 26       | 19.60  | 10-11 |
|  | 220 kV DC<br>Nandprayag-<br>Karanprayag Line.   | 20       | 16.00  | 10-11 |
|  | LILO of 220 kV<br>Nandprayag-<br>Karanprayag Line<br>at Langrasu                          | 8        | 6.50   | 10-11 |
|  | 220 kV DC<br>Baramwari –<br>Srinagar Line   | 70       | 56.00  | 10-11 |
|  | LILO of 400 kV<br>(Ckt.I) Kuwari<br>pass (Pipalkoti)-<br>Srinagar Line at<br>Karanprayag  | 10       | 20.00  | 11-12 |
|  | LILO of 400 kV<br>(Ckt.II) Kuwari<br>pass (Pipalkoti)-<br>Srinagar Line at<br>Karanprayag | 16       | 32.00  | 11-12 |
|  | LILO of 220 kV<br>Baramwari –<br>Srinagar Line at<br>Singoli Bhatwari                     | 10       | 8.00   | 10-11 |
|  | 132 kV DC<br>Gaurikund –<br>Baramwari line  | 30       | 20.00  | 10-11 |
|  | LILO of 132 kV<br>Gaurikund –<br>Baramwari Line at<br>Phata Byung                         | 5        | 3.00   | 10-11 |
|  | 400 kV Sub-<br>station<br>Karanprayag   | 2x240MVA | 149.00 | 11-12 |
|  | 400 kV Sub-<br>station,<br>Kuwaripass<br>(Pipalkoti)                                      | 2x240    | 125.00 | 10-11 |
|  | 400 kV Sub-<br>station Srinagar   | 2x240    | 80.00  | 10-11 |
|  | 400 kV Srinagar<br>Bay at 400 kV<br>Sub-station   | 1        | 4.00   | 10-11 |



|                          |  |  |           |                  |       |
|--------------------------|--|--|-----------|------------------|-------|
|                          |  | Kashipur   |           |                  |       |
|                          |  | 220 kV Sub-station Baramwari   | 2x50      | 60.00            | 09-10 |
|                          |  | 220 kV Bays at Srinagar  | 2         | 2.00             | 10-11 |
|                          | <b>Total (1938 MW)</b>                       |  |           | 863.10           |       |
| <b>(IV) Sharda Basin</b> |  |  |           |                  |       |
|                          | Khasiabara (260 MW)<br>Urthingsobla (280 MW) | 400 kV DC Karanprayag-Srinagar Line                                  | 70        | 140.00           | 11-12 |
|                          |  | 400 kV DC Srinagar – Kashipur Line                                   | 140       | 176.00           | 11-12 |
|                          |  | 220 kV Madkot – Khaslabara Line                                      | 12        | 10.00            | 10-11 |
|                          |  | 400 kV DC Urthing Sobla – Pithoragarh                                | 105       | 148.00           | 11-12 |
|                          |  | LILO (220 kV) of 400 kV Urthing Sobla-Pithoragarh line at Dharchulla | 10        | 20.00            | 11-12 |
|                          |  | 400 kV Khaslabara – Pithoragarh Line                                 | 95        | 176.00           | 10-11 |
|                          |  | 220 kV DC Pithoragarh (PGCIL)-Almora                                 | 80        | 64.00            | 10-11 |
|                          |  | 220 kV Madkot Sub-station  | 2x25 MVA  | 50.00            | 10-11 |
|                          |  | 220 kV Sub-station, Dharchulla                                       | 2x50 MVA  | 50.00            | 10-11 |
|                          |  | 220 kV Sub-station, Almora   | 2x100 MVA | 50.00            | 10-11 |
|                          | <b>Total (540 MW)</b>                        |  |           | <b>884.00</b>    |       |
|                          | <b>Grand Total (5406.5 MW)*</b>              |  |           | <b>**2446.74</b> |       |

\*Excluding small hydro electric projects

\*\*Cost is based on 4<sup>th</sup> quarter, 2004 price level

9. The Petitioner has submitted that UITP involves constructing a system comprising of 22 transmission lines of 400/220/132 kV, 8 new sub-stations and sub-station extension 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.



10. 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.

11. 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.”*

12. 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) Substation and Kashipur (now Rampura) Substation 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.”

13. BSES Rajdhani Power Limited (BRPL) vide letter dated 17.7.2019 has submitted the following comments/ suggestions on the report of the Committee:

a) BRPL has signed PPA with the plants whose power evacuation network will be developed under UITP.

b) The Committee report reveals that UITP was proposed for evacuation of 5406 MW which was later revised to 1451 MW. If any generator under revised scheme gets scrapped or delayed, there should not be liability on beneficiaries due to its stranded capacity, cost of transmission assets built for such capacity and their time over-run cost.

c) 2019 Tariff Regulations contemplates that if any generating station for which agreement(s) have been executed for supply of electricity to the beneficiaries on or before 5.1.2011 and the financial closure for the said generating station has not been achieved by 31.3.2019, such projects shall not be eligible for determination of tariff as per the Central Electricity Regulatory Commission regulations unless fresh consent of the beneficiaries is obtained and furnished. The generator who does not meet the above criteria should not be considered under UITP.



14. Uttarakhand Power Corporation Limited (UPCL) vide letter dated 18.7.2019 has submitted the following comments/ suggestions on the report of the Committee:

a) The recommendations of the Report dated 27.6.2019 does not affect or have any implication upon UPCL.

b) UPCL accepted the recommendations made in paragraph 26 of the Report and requested the Commission to direct the authorities responsible for ensuring the matching of the commissioning schedule of the generating projects, the said 400 kV transmission line and the responsibility for such deviations should be fixed so that no other utility suffers due to their inaction.

c) UITP shall achieve the status of ISTS with the completion of 400 kV Srinagar Sub-station-Kashipur Sub-station transmission line. The said infrastructure should be considered as ISTS as was proposed and permitted. It should not be considered as commissioned because it has not yet achieved the purpose for which it has been constructed and does not qualify to be considered as commissioned as per law. The Committee has not recommended considering the said line as intra-State network before the completion of Srinagar-Kashipur line. The Commission should clarify before completion of the said line that it should not be considered as an intra-State network.

d) The recommendations in paragraph 28 of the Report are in line with the submissions made by UPCL and are fully acceptable to UPCL. UPCL has submitted that the Commission should direct for execution of agreements on urgent basis so that the responsibilities and liabilities are defined and later on the defaulting parties may not try to shift their burden on others. If these necessary requirements were complied with earlier, the complication created after order dated 20.4.2018 would not have arisen and UPCL would not have been burdened with liability for which it is not responsible.



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

15. 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.”*

16. 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.

17. The Petitioner vide affidavit dated 28.7.2020 has placed on record letter No. 12A/G/SP&PA-08/1124 dated 27.11.2008 of CEA in support of IA for the 400 kV Srinagar sub-station, wherein it was recorded that ED (Projects) of the Petitioner through its letter dated 22.11.2008 had furnished Detailed Project Report (DPR) in respect of construction of (i) Lohari Nagpala-Koteshwar 400 kV D/C Transmission Line, and (ii) 400 kV Srinagar sub-station by the Petitioner. These works were presented by the Petitioner for approval of MoP and to forward the same to Department of Economic Affairs. CEA in its comments indicated the capital cost of around ₹51427 lakh (₹34219 lakh for Lohari Nagpala-Koteshwar 400 kV D/C Transmission Line and ₹17208 lakh for 400 kV Sub-station at Srinagar, inclusive of IDC and other charges) in DPR (detailed project report). CEA opined that the scheme



was in order and observed that overheads of the scheme should be considered @3% instead of 8% as conceived by the Petitioner.

18. The Petitioner vide affidavit dated 23.12.2019 has also placed on record DPR in respect of 400 kV Lohari Nagpala-Koteshwar Line and 400 kV Srinagar sub-station wherein it is recorded that the scheme was approved by Board of Directors of the Petitioner on 29.9.2005. Copy of approval by Board of Directors dated 29.9.2005 has been filed vide affidavit dated 28.7.2020.

19. Relevant extract of the minutes of 6<sup>th</sup> meeting of the Petitioner's Board of Directors dated 29.9.2005 is as follows:

“.....

*Item No. 6.01 Confirmation of Minutes of the last Board Meeting held on 10.6.2005. Board passed the following resolution to confirm the Minutes of 5<sup>th</sup> Board of Directors Meeting.*

*“RESOLVED THAT Minutes of 5<sup>th</sup> Board of Directors Meeting held on 10<sup>th</sup> June, 2005 are hereby confirmed and be signed by the Chairman.”*

*ITEM NO.6.02 MATTERS ARISING FROM THE DECISIONS TAKEN IN PREVIOUS BOARD MEETINGS.*

*The Board took note of the actions taken on the decisions taken in the previous Board Meeting and further directed as below:*

*ITEM NO. 6.09 BUDGET FOR THE YEAR 2005-06*

*Budget for the year 2005-06 placed before the Board, the same was considered. The Board was of the view that UERC be requested to consider the expenses which are higher than the approved as they are essential.*

*The Board passed the Annual Revenue and Capital Budget for the year 2005-06.*

*ADDITIONAL ITEM NO. 6.10 LOAN FROM ADB*

*Board approved the proposal to borrow from the ADB for implementing Power Evacuation Integrated Transmission Development Plan covering 40 kV, 220 kV and 132 kV Transmission Lines and associated sub-stations.*

*The Board of Directors Meeting ended with a vote of thanks to the chair.*

**CHAIRMAN”**



20. The Petitioner has, vide affidavit dated 28.7.2020, also placed on record letter No. 12A/G/2006-SP&PA/39 dated 9.1.2007 written by CEA on the issue of Integrated Transmission System in Uttaranchal which was addressed to Joint Secretary (Transmission), MoP and Director (Projects), PGCIL with a copy to the Managing Director, PTCUL. It was mentioned in the said letter that revised project proposal envisages power evacuation system for 5403.5 MW of generation projects in the basins of Yamuna, Bhagirathi, Alaknanda and Sharda for an estimated cost of ₹244674 lakh based on the 4<sup>th</sup> quarter price of 2004 (excluding IDC).

21. The Petitioner, vide affidavit dated 28.7.2020, has placed on record another letter dated 4.5.2007 of MoP, wherein MoP opined that the construction of power evacuation system for 5406 MW in the four river basins of the State at an estimated cost of ₹244674 lakh was in order and requested that the same may be recommended by Department of Economic Affairs for assistance by ADB.

22. On examination of DPR of the project and letter dated 27.11.2008 of CEA, we find that works of Lohari Nagpala-Koteshwar 400 kV D/C line and 400 kV Srinagar sub-station were presented by the Petitioner for approval of MoP and DEA. The relevant portion of letter dated 27.11.2008 is as follows:

**“2. Construction of 400/220/132 kV Sub-station at Srinagar with 2 x 315 MVA ICT – Project-II.**

*PTCUL has proposed 400/220/132 kV S/S at Srinagar to pool the power of about 2500 MW from Alaknanda valley and also power amounting to about 270 MW to be injected in Srinagar at 220 kV. In the integrated transmission system in Uttrakhand agreed by CEA vide its letter dated 09.09.07 the Srinagar S/S was proposed to be constructed with 2 x 240 MVA ICT. However, with the given quantum of power required to be handled at these S/S and also considering ‘n-1’ outage conditions the proposal for 2 x 315 MVA transformer at 400/220 kV level and 2 x 160 MVA at 220/132 is generally in order.*

.....





#### **4. Cost aspect:**

*The total estimated cost of above works as indicated in DPR is around ₹514.27 crore (₹342.19 crore for Project-I and ₹172.08 crore for Project-II. This includes IDC and other charges.....*

*.....  
Further, it has been observed that a project overheads and contingencies @ 8% have been considered. This includes cost of forest clearance, crop compensation and PTCC clearance. This is to inform that the cost of forest clearance, crop compensation and PTCC clearance be taken on actual, delinking it from project overheads and contingencies and the project overheads and contingencies as per general provision be taken as @3% instead of @8.”*

23. In addition to this, minutes of 6<sup>th</sup> meeting of the Petitioner's Board of Directors dated 29.9.2005 in its Additional Item No. 6.10 under the heading Loan from ADB shows that the Petitioner's Board approved the proposal to borrow from ADB for implementing Power Evacuation Integrated Transmission Development Plan covering 400 kV, 220 kV and 132 kV transmission lines and associated sub-stations.

24. On combined reading of letter dated 27.11.2008 of CEA, DPR, copy of minutes of the 6<sup>th</sup> meeting of the Petitioner's Board of Directors dated 29.9.2005, letter dated 9.1.2007 of CEA and letter dated 4.5.2007 of MoP, we are of the view that approval for construction of the 400 kV Srinagar sub-station was available.

25. The Petitioner vide affidavit dated 28.7.2020 has submitted that commissioning of 400 kV Srinagar sub-station was required to be done in 900 days from the effective date as per the Contract Agreement (executed on 30.5.2009) between the Petitioner and ABB Ltd. and the same was as per the timeline provided in Appendix-I of the 2014 Tariff Regulations. In DPR that contained proposal for execution of 400 kV D/C Lohari Nagpala-Koteshwar Transmission Line and 400 kV Sub-station at Srinagar (2x315 MVA), completion date is mentioned as 30 months from the date of award of contract. The Contract Agreement for construction of 400



kV Srinagar Sub-station was executed between the Petitioner and ABB Ltd. on 30.5.2009 wherein timeline for commissioning of 400 kV Srinagar sub-station was kept as 900 days from the effective date. Relevant clause 3.1 of the Contract Agreement, defining effective date is reproduced below:

*“The effective date upon which the period until the Time for Completion of the facilities shall be counted from is the date when all the following conditions have been fulfilled.*

- A. This Contract Agreement has been duly executed for and on behalf of the employer and the Contractor.*
- B. The Contractor has submitted to the Employer the performance security and advance payment guarantee.*
- C. The Employer has paid the Contractor the advance payment.”*

26. The Petitioner vide affidavit dated 28.7.2020 has submitted that Clauses A, B and C of the Contract Agreement were satisfied on 30.5.2009, 20.6.2009 and 9.12.2009 respectively by executing the Contract Agreement, Performance Bank Guarantee and by making advance payment to the Contractor. The Petitioner has further submitted that effective date for start of the Project was 9.12.2009 and completion date of the Project was assigned as 26.5.2012 as per time schedule (900 days/ 30 months from effective date).

27. Clause 54 of Regulation 3 of the 2014 Tariff Regulations with regard to scheduled COD provides as follows:

*“54. ‘Scheduled Commercial Operation Date or SCOD’ shall mean the date(s) of commercial operation of a generating station or generating unit or block thereof or transmission system or element thereof as indicated in the Investment Approval or as agreed in power purchase agreement or transmission service agreement as the case may be, whichever is earlier.”*

28. In the present case, except for DPR and Contract Agreement, nowhere the timeline for execution of 400 kV Srinagar Sub-station is mentioned. Thus, in the



absence of any documents except DPR in the present case, it is appropriate to consider period of 30 months from the date of award of the contract for setting up of 400 kV Srinagar Sub-station as Scheduled Date of Commercial Operation of the Project.

29. In the present case, Contract Agreement between the Petitioner and Contractor was executed on 30.5.2009 and, therefore, in terms of clause 3.1 of the Contract Agreement, the effective date in the present case comes to 9.12.2009 and, thus, completion date of the project was 26.5.2012. Accordingly, the Scheduled Date of Commercial Operation of 400 kV Srinagar Sub-station shall be considered as 26.5.2012.

### **Scope of the Project**

30. The Petitioner vide affidavit dated 23.12.2019 has submitted DPR in which elements of the complete Project have been mentioned as follows:

#### **Project-1:**

400 kV D/C Lohari Nagpala-Koteshwar Transmission Line (approx. 90 km)

#### **Project-2:**

400/ 220 kV Srinagar Sub-station (2X315 MVA ICTs, 2X160 MVA ICTs)

31. Details of the elements of the 400 kV Srinagar sub-station taken from the DPR and considered for tariff in the present petition are as follows:

- 2 number 315 MVA, 400/220 kV Transformer
- 2 number 160 MVA, 220/132 kV Transformer
- For 400 kV-Feeder bay 6 number, Transformer bay 4 number, Transfer Bus Coupler 1 number and Bus Coupler 1 number.
- For 220 kV - Feeder bay 4 number, Transformer bay 4 number, Bus Coupler 1 number and Transfer Bus Coupler 1 number.
- Bus configuration for sub-station will be 2 main and one transfer bus scheme with latest sub-station automation and SCADA.
- 50 MVAR Reactor



## **Analysis and Decision**

32. 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 Act. Reply to the petition has been filed by UPCL vide affidavit dated 27.12.2019 and the Petitioner has filed rejoinder to the reply of UPCL vide affidavit dated 22.1.2020.

33. Hearing in this matter was held on various dates through video conference and order was reserved in the matter on 16.6.2020.

34. This order is issued considering the submissions made in the Petition vide affidavits dated 31.3.2016, 13.10.2016, 18.10.2016, 28.9.2018, 23.12.2019 and 23.10.2020, reply of UPCL vide affidavits dated 27.12.2019 and 10.7.2020 and the Petitioner's rejoinder to the reply of UPCL vide affidavits dated 22.1.2020 and 28.7.2020.

35. Having heard the parties and perused the material on record, we proceed to dispose of the Petition.

36. The Commission in order dated 20.4.2018 in Petition No. 80/TT/2016 and Petition No. 81/TT/2016 granted interim tariff subject to actual COD of the assets.

The relevant portion of the order dated 20.4.2018 is as follows:

*"4. The petitioner, on 27.12.2016, has submitted the trial operation certificate dated 14.12.2016 issued by the Northern Regional Load Dispatch Centre (NRLDC) in respect of the assets covered in Petition Nos. 80/TT/2016 and 81/TT/2016. As per the NRLDC Certificate, the trial run in respect of the assets covered in Petition Nos. 80/TT/2016 and 81/TT/2016 was completed on 30.7.2016 and 26.7.2016 respectively. Accordingly, the COD of the assets covered in Petition Nos. 80/TT/2016 and 81/TT/2016 is provisionally as 31.7.2016 and 27.7.2016 respectively and a final view will be taken at the time of final order. The actual COD is considered as per the trial operation*



certificate issued by the NRLDC. There is a time over run in commissioning of both the assets. The details of the commercial operation date are as follows:

| <b>Petition No.</b>     | <b>Name of the Asset</b>                             | <b>Scheduled COD</b> | <b>Anticipated COD</b> | <b>Actual COD</b> |
|-------------------------|--|----------------------|------------------------|-------------------|
| Petition No. 80/TT/2016 | 400 kV Srinagar Substation<br><b>(Asset-A)</b>       | 2.9.2013             | 31.3.2016              | 31.7.2016         |
| Petition No. 81/TT/2016 | 400 kV Srinagar-Srinagar PH line<br><b>(Asset-B)</b> | 2.9.2013             | 31.3.2016              | 27.7.2016         |

Xxxxxxxxxxxxx

8. The Commission will examine the report of the above said Committee separately. The 400 kV Srinagar- Srinagar PH Line and 400 kV Srinagar Substation were conceived as a part of UITP scheme to evacuate the power from various HEP. It is observed that the petitioner has commissioned the transmission elements i.e. 400 kV Srinagar-Srinagar PH Line and 400 kV Srinagar Substation to evacuate the share of home state as of now. The transmission system of the UITP scheme is not connected with the inter-state transmission system till date.

Xxxxxxxxxxxxx

12. The AFC allowed in this order shall be applicable from the date of commercial operation of the transmission system. Since the assets covered in the instant case are used to transfer power of home state from Srinagar PH of GVK Industries Ltd, the use of the assets is attributed to the home state till the transmission elements are connected to the inter-State transmission system. The petitioner shall recover the transmission charges allowed as above from the distribution licensee of the state i.e. Uttarakhand Power Corporation Ltd. through billing as per the Commission order in Petition No.155/MP/2016....”

37. The Commission, in the above-mentioned order, observed that assets are being used for transfer of home state quota of power from Srinagar PH of GVK and has not been connected with ISTS. Therefore, transmission charges would be recovered by the Petitioner from UPCL. The Petitioner has submitted that UPCL has not paid the said charges till now while it is recovering the same from the consumers of the State as per the Commission’s order referred above.



## **Commercial Operation Date (COD)**

### **A. 400/220 kV 315 MVA ICT-1 & ICT-2 at Srinagar Sub-station (along with associated bays)**

38. The Petitioner vide affidavit dated 23.12.2019 has submitted 'Approval of Energization' Certificate from CEA for complete 400/220 kV Srinagar sub-station (i.e. 2X315 MVA ICTs, 2X160 MVA ICTs, Bus Reactor, 11 nos. 400 kV bays and 10 nos. 220 kV bays). The Petitioner has submitted trial operation certificate issued by NRLDC for 400/220 kV 315 MVA ICT-1 and ICT-2 which confirms that the trial operation was completed on 30.7.2016.

39. The Petitioner has submitted its MD certificate declaring that 400/220 kV 315 MVA ICT-1 and ICT-2 were ready and capable of operation to their full capacities w.e.f. 31.7.2016 as per Regulation 6.3(A)(4)(vi) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (for short, "2010 Grid Code").

40. UPCL in its reply filed vide affidavit dated 27.12.2019 has submitted that certificate in the present case is only for test charging of the transformers and not for other elements of the 400 kV Srinagar sub-station.

41. We have considered the submissions of the Petitioner and UPCL and perused the record. Regulation 4(3) of the 2014 Tariff Regulations provides as follows:

*"(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:*

*Provided that:*

*(i) where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall*



*endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations:*

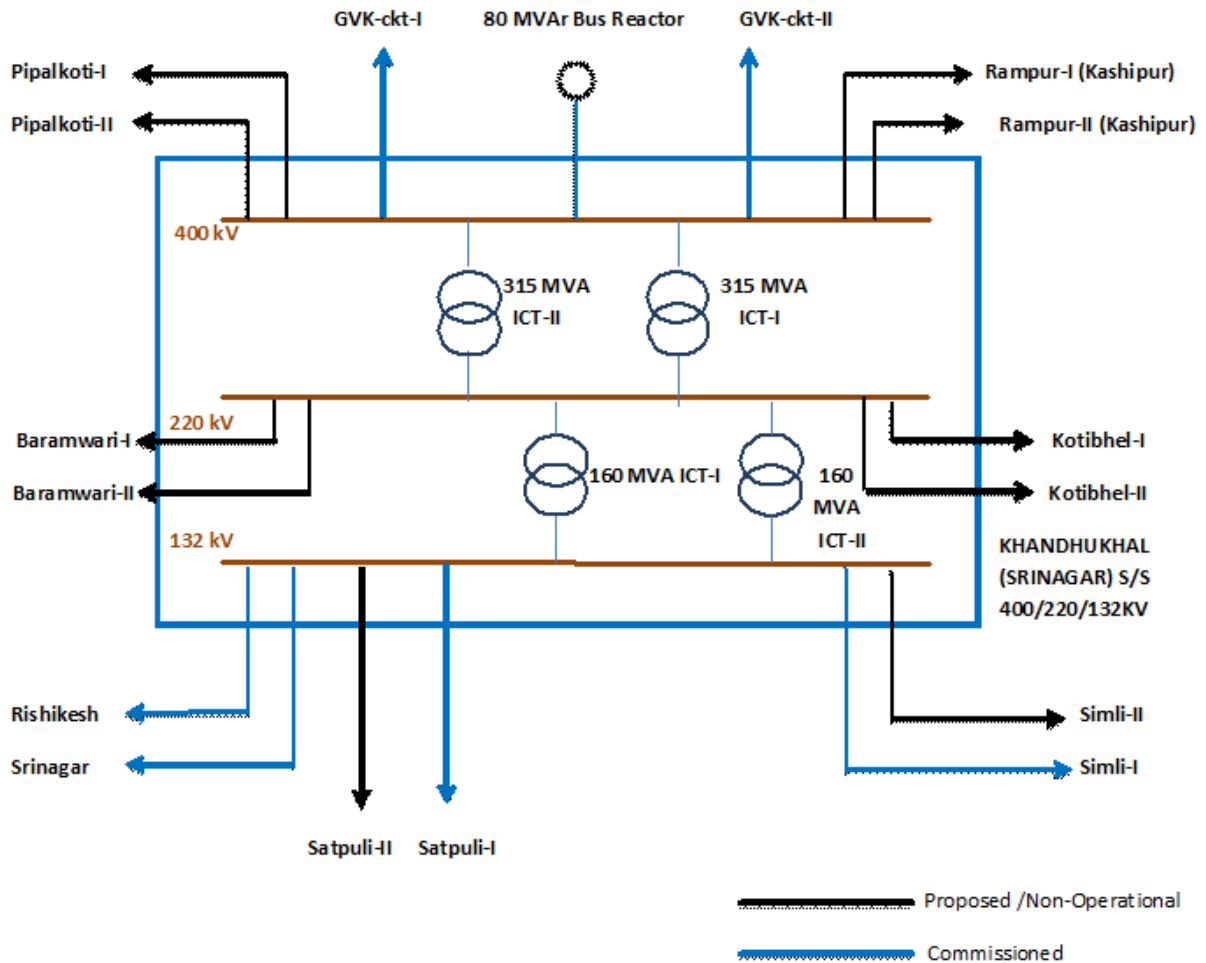
*(ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.”*

42. On perusal of Regulation 4(3) of the 2014 Tariff Regulations, we observe that it requires a transmission licensee to declare COD from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end. The Petitioner vide affidavit dated 23.12.2019 has submitted tariff forms considering COD as 31.7.2016. Records also show that trial operation of 400/220 kV 315 MVA ICT-1 and ICT-2 was completed on 30.7.2016 and MD certificate declared that 400/220 kV 315 MVA ICT-1 and ICT-2 were ready and capable of operation to their full capacities w.e.f. 31.7.2016 as per the 2010 Grid Code.

43. Further, the Petitioner vide affidavit dated 28.7.2020 has submitted power flow statement for 400 kV D/C Khandukhal (Srinagar)-GVK HEP line from July 2016 to June 2020 wherein it is observed that power flow path is from GVK HEP power station to 400 kV Khandukhal Sub-station (Srinagar) through 400/220 kV ICTs and 220/132 kV ICTs to the downstream of 132 kV lines.

44. The schematic diagram of the instant asset i.e. Srinagar sub-station is as follows:





45. Taking into consideration the submissions and the documents submitted by the Petitioner, trial operation certificate issued by NRLDC and power flow statement, we approve COD of 400/220 kV 315 MVA ICT-1 and ICT-2 along with associated bays at the 400 kV Srinagar sub-station as 31.7.2016.

B. 220/132 kV 160 MVA ICT-1 and ICT-2 at Srinagar sub-station (along with associated bays)

46. The Petitioner has submitted that it requested NRLDC to issue trial operation certificate for 220/132 kV 160 MVA ICT-1 and ICT-2 in compliance of directions of the Commission as per RoP of the hearing dated 18.11.2019. The Petitioner vide





affidavit dated 23.10.2020 has submitted charging certificate dated 22.1.2020 issued by SLDC, Uttarakhand certifying that charging of 220/132 kV 160 MVA ICT-1 and ICT-2 were done on 25.7.2016 and 2.8.2016 respectively. The Petitioner has also submitted Log Book entry dated 25.7.2016 wherein it is shown that 220/132 kV 160 MVA ICT-1 was charged on 25.7.2016. The Petitioner has submitted MD certificate declaring that 220/132 kV 160 MVA ICT-1 and ICT-2 were ready and capable of operation to their full capacities w.e.f. 31.7.2016 as per Regulation 6.3(A)(4)(vi) of 2010 Grid Code.

47. UPCL in its reply vide affidavit dated 27.12.2019 has submitted that NRLDC has not yet issued trial operation certificate for 220/132 kV 160 MVA ICT-1 and ICT-2 and as such COD of these ICTs should not be approved.

48. We have perused the documents furnished by the Petitioner relating to COD of 220/132 kV 160 MVA ICT-1 and ICT-2 and taken into consideration the contention of UPCL. It is noted that the Petitioner has not furnished NRLDC certificate for trial operation of 220/132 kV ICTs. However, the Petitioner has submitted charging certificate dated 22.1.2020 issued by SLDC, Uttarakhand certifying the charging of ICT-1 on 25.7.2016 and of ICT-2 on 2.8.2016. Further, the Petitioner vide affidavit dated 28.7.2020 has also placed on record power flow statement for 400 kV D/C Khandukhal (Srinagar)-GVK HEP line from July 2016 to June 2020 which confirms that 220/132 kV ICTs is being utilized.

49. The Petitioner has not specifically made any submissions regarding declaration and approval of COD of 220/132 kV 160 MVA ICT-1 and ICT-2. However, in the tariff forms, the Petitioner has indicated COD of 220/132 kV 160



MVA ICT-1 and ICT-2 as 31.7.2016. Keeping in view SLDC certificate and power flow statement placed on record by the Petitioner, we approve COD of 220/132 kV 160 MVA ICT-1 along with associated bays as 31.7.2016 and for 220/132 kV 160 MVA ICT-2 as 3.8.2016 along with associated bays.

50. We direct the Petitioner to submit all the documents as required under Regulation 4(3) of the 2014 Tariff Regulations at the time of truing up.

C. 80 MVAr Bus Reactor at Srinagar sub-station (along with associated bays)

51. The Commission vide RoP for the hearing dated 18.11.2019 directed the Petitioner to file complete DPR along with project scope with specific mentioning of 50/80 MVAr reactor. In response, the Petitioner vide affidavit dated 23.12.2019 has submitted the information called for. It has been noted in earlier part of this order that DPR envisaged Project completion period as 30 months from the date of Letter of Award to the contractor. The original Contract Agreement for supply of Bus Reactor was executed between the Petitioner and ABB Ltd. on 30.5.2009 wherein the Petitioner was required to supply, erect and put to commercial operation 1 x 50 MVAr Bus Reactor by 26.5.2012.

52. The Commission vide RoP for the hearing dated 18.11.2019 also sought confirmation from the Petitioner whether 1X50 MVAr 400 kV reactor was replaced with 1X80 MVAr 400 kV reactor at Srinagar substation. The Commission further directed to furnish CMD/CEO/MD certificate for 1X80 MVAr 400 kV reactor at Srinagar sub-station along with its scheduled date of commercial operation.



53. In response, the Petitioner vide affidavit dated 23.12.2019 has submitted that 1X80 MVAR reactor was installed in place of originally approved 1X50 MVAR reactor at 400 kV Srinagar sub-station as per discussion in 39<sup>th</sup> meeting of Standing Committee of Power System Planning held on 29-30 May, 2017. The Petitioner has submitted that amendment in Contract Agreement of 400 kV Srinager sub-station was issued to ABB Ltd. for installation of 80 MVAR reactor in place of 50 MVAR reactor with same unit price and taxes as applicable for 50 MVAR reactor. The Petitioner has submitted MD certificate for 1X80 MVAR 400 kV reactor at Srinagar sub-station and scheduled date of commercial operation of 80 MVAR reactor as 6.8.2018 as per the amended contract (i.e. 8 months from the letter of amendment issued).

54. The Petitioner vide affidavit dated 23.12.2019 has submitted the energization certificate of CEA dated 14.9.2018 and trial operation certificate dated 15.11.2018 issued by NRLDC which confirms that trial run of 400 kV 1x80 MVAR reactor was completed on 19.10.2018.

55. On scrutiny of record, we are unable to find any submissions of the Petitioner with regard to approval and declaration of commercial operation date of 1X80 MVAR 400 kV reactor at Srinagar Sub-station. Regulation 4(3) of the 2014 Tariff Regulations mandates a transmission licensee to declare COD of an element of transmission asset when it is in regular service after successful trial operation.

56. In the present case, the trial operation of 1X80 MVAR 400 kV reactor at Srinagar sub-station was completed on 19.10.2018. Accordingly, we consider the date of commercial operation of 80 MVAR Bus Reactor along with associated bays as 20.10.2018.



57. We direct the Petitioner to submit all documents as required under Regulation 4(3) of the 2014 Tariff Regulations at the time of truing up.

D. Other 400 kV and 220 kV Bays at Srinagar sub-station

58. As per DPR, 11 number of 400 kV bays and 10 number of 220 kV bays are included in the Project scope of 400 kV Srinagar sub-station. The Petitioner has submitted the details of bays as follows (first 11 bays are 400 kV bays while last 10 bays are 220 kV bays):

| Sl. No. | Name of Bay                 |
|---------|-----------------------------|
| 1.      | Bay 401 GVK CKT 1           |
| 2.      | Bay 402 GVK CKT 2           |
| 3.      | Bay 403 SRI KASHI CKT 1     |
| 4.      | Bay 404 SRI KASHI CKT 2     |
| 5.      | Bay 405 SRI PIPAL CKT 1     |
| 6.      | Bay 406 SRI PIPAL CKT 2     |
| 7.      | Bay 407 Bus Reactor         |
| 8.      | Bay 408 Transfer Bus        |
| 9.      | Bay 409 Bus Coupler         |
| 10.     | Bay 410 ICT 1 <sup>st</sup> |
| 11.     | Bay 411 ICT 2nd             |
| 12.     | Bay 201 Line bay            |
| 13.     | Bay 202 Line bay            |
| 14.     | Bay 203 Bus Transfer        |
| 15.     | Bay 204 SRI Rudra Ckt 1     |
| 16.     | Bay 205 Bus Coupler         |
| 17.     | Bay 206 SRI Rudra CKT 2     |
| 18.     | Bay 207 ICT 1st 400/220     |
| 19.     | Bay 208 ICT 1st 220/132     |
| 20.     | Bay 209 ICT 2nd 400/220     |
| 21.     | Bay 210 ICT 2nd 220/132     |

59. The Petitioner vide affidavit dated 23.12.2019 has submitted commissioning status of 400 kV bays and 220 kV bays as follows:

| Sl. No. | Bay No. | Bay Name  |
|---------|---------|---|
| 1.      | 401     | Line 1: 400 kV Srinagar-Srinagar PH line (GVK) Circuit 1 <sup>st</sup> (Commissioned) |



|     |     |   |
|-----|-----|---|
| 2.  | 402 | Line 2: 400 kV Srinagar-Srinagar PH line (GVK) Circuit 2 <sup>nd</sup> (Commissioned)           |
| 3.  | 403 | Line 3: 400 kV Khandukhal-Rampura line circuit 1 <sup>st</sup> (Proposed)                       |
| 4.  | 404 | Line 4: 400 kV khandukhal-Rampura line circuit 2 <sup>nd</sup> (Proposed)                       |
| 5.  | 405 | Line 5: 400 kV Srinagar-Karanprayag-Pipalkoti line circuit 1 <sup>st</sup> (under construction) |
| 6.  | 406 | Line 6: Srinagar-Karanprayg-Pipalkoti line circuit2nd (under construction)                      |
| 7.  | 407 | Bus Reactor (Commissioned)  |
| 8.  | 408 | Bus Transfer (Commissioned)   |
| 9.  | 409 | Bus Coupler (Commissioned)  |
| 10. | 410 | ICT-1 <sup>st</sup> (Commissioned) 3 x 105 MVA TF HV side)                                      |
| 11. | 411 | ICT 2 <sup>nd</sup> (Commissioned 3 x 105 MVA TF HV side)                                       |

| Sl. No. | Bay No. | Bay Name   |
|---------|---------|--|
| 1       | 201     | Line 1: Proposed for Kotibhel HEP  |
| 2       | 202     | Line 2: Proposed for Kotibhel HEP  |
| 3.      | 203     | Bus Transfer   |
| 4.      | 204     | Line 3: Baramwari-Srinagar Line Circuit 1 <sup>st</sup> (under construction) |
| 5.      | 205     | Bus Coupler  |
| 6.      | 206     | Line 4: Baramwari-Srinagar Line Circuit 2 <sup>nd</sup> (under construction) |
| 7.      | 207     | ICT 1 <sup>st</sup> 400/220 kV (Commissioned 3 x 105 MVA TF LV side)         |
| 8.      | 208     | ICT-1 <sup>st</sup> 220/132 kV (Commissioned 1 x 160 MVATF HV side)          |
| 9.      | 209     | ICT-2 <sup>nd</sup> 400/220 kV (Commissioned 3 x 105 MVA TF-LV side)         |
| 10.     | 210     | ICT-2 <sup>nd</sup> 220/132 kV (Commissioned 1 x 160 MVA TF HV side)         |

60. Out of 400 kV bays and 220 kV bays, COD of the bays associated with 400/220 kV 315 MVA ICT-1 & ICT-2, 220/132 kV 160 MVA ICT-1 & ICT-2 and 80 MVAR bus reactor have already been considered in earlier paragraphs. COD of other bays are dealt in the succeeding paragraphs.

(i) 400 kV Line Bays

61. Clause 53 of Regulation 3 of the 2014 Tariff Regulations provides as follows:

*“(53) ‘Regular Service’ means putting into use a transmission system or element thereof after successful trial operation and a certificate to that effect has been issued by the concerned Regional Load Dispatch Centre;”*

62. From the record placed before us, we find that 2 number of bays associated with 400 kV D/C Srinagar-Kashipur Transmission Line (Rampur) and 2 number of bays associated with 400 kV D/C Srinagar-Karanprayag-Pipalkoti Transmission Line are not in use due to non-commissioning of associated lines under the scope of the



Petitioner itself. Therefore, we do not approve COD of these 4 line bays. Accordingly, their respective capital costs have been excluded from the capital cost for working out the annual fixed charges.

(ii) 400 kV Bus Transfer and Bus Coupler bays

63. The Petitioner has claimed COD of these elements as 31.7.2016. On perusal of record, we observe that the Petitioner has submitted CEA Energization Certificate dated 18.7.2016 for bus transfer bays and bus coupler bays at 400 kV level. However, the Petitioner has not submitted NRLDC trial operation certificate for any of them. In the absence of trial operation certificate in respect of these bays, we are not inclined to approve their commercial operation date. Accordingly, their respective capital costs shall be excluded from the capital cost to be considered to work out the annual fixed charges.

64. However, the Petitioner may submit all relevant documents including the trial operation certificate of the said elements at the time of truing-up and seek approval of the commercial operation date of these elements.

(iii) 220 kV line bays

65. On scrutiny of record, it is noticed that 2 number of bays associated with 220 kV D/C Khandukhal-Kotibhel HEP line and 2 number of bays associated with 220 kV D/C Srinagar-Bharamwari line are not in use due to non-commissioning of associated lines by the Petitioner itself. Therefore, we do not approve COD of these 4 line bays. Accordingly, their respective capital costs shall be excluded from the capital cost to be considered to work out the annual fixed charges.

(iv) 220 kV Bus Transfer bays and Bus Coupler bays

66. The Petitioner has claimed COD of these elements as 31.7.2016. The Petitioner has submitted CEA Energization Certificate dated 18.7.2016 for bus



transfer bays and bus coupler bays at 220 kV level. However, the Petitioner has not submitted NRLDC or SLDC (Uttarakhand) trial operation certificate or charging certificate. In the absence of trial operation certificate in respect of these elements, we are not inclined to approve their commercial operation date. Accordingly, their respective capital costs shall be excluded from the capital cost to be considered to work out the annual fixed charges.

67. However, Petitioner may submit all relevant documents including trial operation certificate of the said elements at the time of true-up and seek approval of the commercial operation date of these elements.

68. Accordingly, the commercial operation dates, allowed and disallowed, for the assets are as follows:

| Sr. No. | 400/220 kV bays   | Number of bays | COD         |
|---------|---|----------------|-------------|
|         | <b><u>400 kV</u></b>  |                |             |
| 1       | 400/220 kV 315 MVA ICT-1& ICT-2 along with their bays (HV side) | 2              | 31.7.2016   |
| 2       | 400 kV D/C Khandukhal (Srinagar) - GVK HEP line                 | 2              | 31.7.2016   |
| 3       | 80 MVAr Bus Reactor   | 1              | 20.10.2018  |
| 4       | 400 kV D/C Khandukhal (Srinagar) - Kashipur line                | 2              | Not Allowed |
| 5       | 400 kV D/C Khandukhal (Srinagar) - Pipalkoti line               | 2              | Not Allowed |
| 6       | Bus Coupler   | 1              | Not Allowed |
| 7       | Bus Transfer  | 1              | Not Allowed |
|         | <b>Total</b>  | <b>11</b>      |             |
|         | <b><u>220 kV</u></b>  |                |             |
| 1       | 400/220 kV 315 MVA ICT-1 & ICT-2 - bays (LV side)               | 2              | 31.7.2016   |
| 2       | 220/132 kV 160 MVA ICT-1 along with its bay (HV side)           | 1              | 31.7.2016   |
| 3       | 220/132 kV 160 MVA ICT-2 along with its bay (HV side)           | 1              | 3.8.2016    |
| 4       | 220 kV D/C Khandukhal (Srinagar) -                              | 2              | Not Allowed |



|   |   |           |             |
|---|---|-----------|-------------|
|   | Kotibhel line                                     |           |             |
| 5 | 220 kV D/C Khandukhal (Srinagar) - Baramwari line | 2         | Not Allowed |
| 6 | Bus Coupler                                       | 1         | Not Allowed |
| 7 | Bus Transfer                                      | 1         | Not Allowed |
|   | <b>Total</b>                                      | <b>10</b> |             |

69. The Petitioner is directed to submit documents in support of COD of the elements whose CODs have not been allowed as per Regulation 4(3) of the 2014 Tariff Regulations and seek approval of the commercial operation date at the time of truing up. The Petitioner is also directed to furnish segregated audited capital cost and Additional Capital Expenditure (ACE) along with revised tariff forms based on the approved COD of the assets at the time of truing up.

#### **Time over-run**

##### Srinagar Sub-station 400/220/132 kV

70. As has already been observed above in this order that as per the Contract Agreement, SCOD of Srinagar sub-station was 900 days from the start date i.e. 9.12.2009. Accordingly, the scheduled date of commercial operation of 400 kV Srinagar sub-station came to be 26.5.2012. There is approximately 50 months' time over-run in case of the Srinagar sub-station. The Petitioner has submitted that the Srinagar sub-station was delayed mainly because it was constructed on one of the toughest terrains in India and its construction involved over 22 terraces with a height difference of 32 metres. The Petitioner has further submitted that despite its best endeavours, the construction of the project was delayed due to the factors beyond its control. The Petitioner has set out the following reasons for time over-run supported by documents and justifications:

- a) Work stopped due to damage of roads between Kirtinagar and





Khandukhal due to landslide and heavy rain during July 2010 to September 2010. The work was further delayed in monsoon season of 2011, 2012 and 2013.

b) There was delay in construction of double lane transport-worthy road between Kirtinagar to Khandukhal and construction of double lane Class-A loading bridge at 1 km of this road due to which supply of heavy materials and equipment of 400 kV sub-station was affected.

c) There was delay in supply/ transportation of 8 power transformers and 1 no. 50 MVAR reactor because of delayed permission by BRO (Border Roads Organisation) consequent to heavy damages on NH due to heavy rains and landslide in 2010-2013 and the road being not transport-worthy for movement of heavy consignment.

71. The Petitioner has also submitted time over-run details activity-wise along with brief reasons for delay and the same are as follows:

| Activity                               | Period of activity |           |          |           | Time over-run (in months) | Reason(s) for Time Over-run   |
|--|--------------------|-----------|----------|-----------|---------------------------|---|
|  | Planned/Scheduled  |           | Actual   |           |                           |   |
|  | From               | To        | From     | To        |                           |   |
| Land Acquisition                       |                    |           |          |           |                           |   |
| LOA                                    |                    |           |          |           |                           |   |
| Supplies (Structures, equipment, etc.) | 8.11.2010          | 25.1.2012 | 8.2.2011 | 5.2.2016  | 48 months                 | 1. Due to landslide and heavy rain, single lane approach road to site was regularly damaged and blocked in 2010 to 2013 in rainy season due to which movement of heavy vehicles was affected.<br><b>-12 months delay.</b><br><br>2. The double lane approach road was constructed by PWD, GoU in January, 2014. Construction of double lane Class-A loading bridge by PWD, GoU near |
| Civil works & Erection                 | 9.12.2009          | 26.5.2012 | 1.5.2010 | 30.6.2016 | 49 months                 |   |



|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  | <p>existing single lane bridge in March, 2014 and bridge has been further strengthened in June, 2015 for transportation of transformers and Reactor.<br/> <b>-36 months delay.</b></p> <p>3. Permission for transportation of transformers and reactor was delayed by BRO due to heavy damages that occurred in NH route due to heavy rain and landslides in 2010-2013 and was not transport worthy for movement of heavy consignment. MoRTH has given permission in December, 2014 only for movement of 105 MVA Transformers on Rishikesh-Srinagar route and 105 MVA transformers were transported in February, 2015 to the site. MoRTH did not give permission for movement of 160 MVA transformers and reactor on this route as Devprayag bridge was not able to carry load of such heavy consignment. Further, for the movement of 160 MVA transformers and reactor, MoRTH gave permission in May, 2015 on Rishikesh-Chamba-Tehri-Srinagar route and 160 MVA transformers were supplied to site in December, 2015 after taking permission from</p> |
|--|--|--|--|--|--|



|  |  |   |           |            |           |   |
|--|--|---|-----------|------------|-----------|---|
|  |  |   |           |            |           | THDC to pass over Tehri Dam.<br><b>- 42 months delay.</b>   |
| Testing & Commissioning  | 28.1.2012  | 26.5.2012                                       | 15.4.2015 | 21.7.2016  | 49 months | Sub-station was ready for charging on 18.3.2016 but due to non-availability of 400 kV Srinagar-Srinagar PH line for 4 months sub-station achieved COD on 25.7.2016.<br><b>- 04 months delay.</b>  |
| Any other Activity for time over-run, if any Supply, erection and testing commissioning of 80 MVar Reactor | 7.12.2017 (it was scheduled for 80 MVar reactor) | 6.8.2018 (it was scheduled for 80 MVar reactor) | 7.12.2017 | 18.10.2018 | 02 months | Amendment for supply, erection, testing & commissioning of 80 MVar reactor at 400 kV Sub-station was issued on 7.12.2017 with completion period as 08 months i.e. 6.8.2018. Erection work of 80 MVar reactor was completed on 15.7.2018. Due to bad weather and heavy rainfall in the month of July, the necessary work like start oil filling, filtration and final testing of reactor was completed in first week of August, 2018. After completion of requisite testing online application for inspection was submitted on 8.8.2019 to CEA. Electrical Inspection was carried out on 27/28.8.2018. Order for compliance was issued by CEA on 4.9.2018. Compliance report was submitted by the Petitioner on 12.9.2018. Subsequently, the Petitioner submitted requisite pre-charging documents to NRLDC on |



|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  | 20.9.2018, 27.9.2018 & 12.10.2018. After due compliance of pre-charging documents, code for energization of 80 MVA reactor was issued by NRLDC on 18.10.2018 and subsequently 80 MVA reactor was commissioned on same date i.e. on 18.10.2018. |
|--|--|--|--|--|--|--|

72. UPCL vide affidavit dated 27.1.2020 has refuted the submissions of the Petitioner and has made the following submissions with regard to time over-run:

a) The reasons given by the Petitioner do not amount to uncontrollable factors as envisaged under Regulation 12 of the 2014 Tariff Regulations. Timeframe for construction of 400 kV sub-station in snow bound/ very difficult terrain as mentioned in Appendix 1 of the 2014 Tariff Regulations is 36 months. All the facts should have been considered by the Petitioner at the time of preparation of DPR and as the Petitioner is operating the existing transmission network of the area, it was well aware of the issues and problems of the area.

b) It is beyond understanding as to how legal proceedings contributed for delay in execution of the Project especially when contract was entered well in time and funds for the Project were readily available and disbursed timely in a phased manner. The Petitioner was bound to commission its assets in terms of the Commission's order dated 31.1.2013.

73. We have perused the submissions of the Petitioner and documents placed on record. We have also taken note of the submissions of UPCL. There is a time over-run of approximately 50 months. It is observed that the major reasons for time over-run stated by the Petitioner are heavy rains, slippages, damaged roads, road blockages, landslides, natural disaster, delay in construction of double lane transport road, delay in construction of double lane Class-A loading bridge for transporting



heavy consignments, damages on NH roads, issue of temporary staging and washing away of staging.

74. The reasons for time over-run along with their period of occurrence as claimed by the Petitioner are as follows:

| Sl. No. | Activity  | From          | To             |
|---------|---|---------------|----------------|
| 1       | Delay in construction of double lane road from Kirtinagar to Khandukhal (Srinagar) and a double lane bridge Class-A loading.      | 9.12.2009     | 15.3.2014      |
| 2       | Delay in getting approval from BRO for movement on roads and bridge on Rishikesh to Khandukhal (Srinagar) route.                  | 3.10.2012     | 12.12.2014     |
| 3       | Delay due to Natural disaster (Flash floods).   | June, 2013    | Not submitted  |
| 4       | Delay in transportation of heavy consignments i.e. 160 MVA ICTs and 50 MVA Bus Reactor through Rishikesh -Chamba-Tehri Dam route. | January, 2015 | June, 2015     |
| 5       | Delay due to staging washed away.   | July, 2015    | December, 2015 |
| 6       | Delay due to non-availability of GVK-Khandukhal line.   | 19.3.2016     | 31.7.2016      |
| 7       | Delay due to road blocks, damaged roads, heavy rainfall, sharp turns of the roads, landslides, slippages etc.                     | 2010          | 2013           |

75. We analyse the reasons submitted by the Petitioner for time over-run hereunder:

- *Delay in construction of bridge of adequate strength*

76. The Petitioner had requested PWD, GoU for double lane road and strengthening of bridge for transportation of heavy equipment to Srinagar sub-station vide letters dated 8.9.2006, 4.5.2007, 2.6.2008, 18.8.2009, 22.9.2010, 31.12.2010, 12.10.2011, 21.9.2012, 20.9.2013 and 19.2.2014 etc. The Petitioner has submitted that both the above works (double lane road and strengthening of bridge for transportation of heavy equipment to Srinagar sub-station) were completed only by 15.3.2014.



77. It is observed that the Petitioner vide letter dated 8.9.2006 wrote to PWD, GoU stating that existing iron bridge on the route of Srinagar-Khandukhal was not of adequate strength and was required to be strengthened for carrying around 173 MT of weight. As per the bar chart attached with DPR, four months were envisaged for approvals. Nothing specific relating to double lane road or bridge is mentioned in DPR. Although the Petitioner was pursuing with PWD for construction of the said bridge since 2006, it did not keep any time for construction of bridge in its scheduled time in DPR. This issue did not arise after the project was approved and rather the Petitioner knew it beforehand and should have planned accordingly. In our view, any delay on account of this is attributable to the Petitioner.

- *Flash floods and delay due to landslides, slippages, damaged roads and road blockages*

78. The Petitioner has submitted that its works were affected due to landslides, roadblocks, road blockages and damaged roads during 2010-13 period and in this context, the Petitioner has submitted copies of the various letters written to PWD. We observe that in these letters, the Petitioner had requested for early clearances of landslides, slippages and blocks on the route between Kirtinagar to Khandukhal (Srinagar) due to heavy rainfall. The Petitioner has submitted letters dated 6.8.2010, 23.8.2010, 1.9.2010, 11.10.2010, 28.10.2010, 12.11.2010 and 10.12.2010 which clarify that road blockages and landslides were on the aforementioned route since 31.7.2010. The Petitioner has also submitted letter dated 3.1.2011 wherein it has been mentioned that PWD, GOU had informed vide their letter dated 21.12.2010 that the damaged road between Kirtinagar to Khandukhal (Srinagar) was repaired.



79. The Petitioner has further submitted letters dated 17.8.2011 and 30.8.2012 which mention about the slippages, landslides and road blockages. The Petitioner has also submitted various letters written to PWD dated 19.6.2013, 2.7.2013, 16.7.2013, 30.8.2013, 20.9.2013, 7.11.2013, 21.11.2013 and 13.12.2013 which clarify that the Petitioner was facing transportation problem due to slippages, landslides and road blockages since 16.6.2013 on the route between Kirtinagar to Khandukhal (Srinagar). The Petitioner has also submitted letter dated 26.2.2014 wherein it is mentioned by the Petitioner that the said route has been opened up for the movement of transportation.

80. Therefore, we allow time over-run from 31.7.2010 to 21.12.2010 and time over run from 16.6.2013 to 15.12.2013, considering the said events as *force majeure* which were not within the control of Petitioner. The Petitioner has not given any date in December 2013 indicating when the issues of land slides, slippages, road blockages etc. were resolved. Accordingly, we have considered and allowed time over-run till 15.12.2013 (middle of the month of December 2013). Time over-run claimed during the years 2011 and 2012 in the context of landslides, slippages, damaged roads etc. is disallowed as the same is not substantiated by documentary proofs. We also note that the time period of 16.6.2013 to 15.12.2013 is subsumed in another event that has been condoned in the following paragraph i.e. due to delay in getting permission from BRO/ MoRTH.



- *Delay in getting permission from Border Roads Organization (BRO)/ Ministry of Road Transport & Highways (MoRTH)*

81. The Petitioner approached BRO for obtaining permission for movement of heavy consignments from NH-58 vide letters dated 3.10.2012, 17.8.2013, 25.2.2014, etc. However, BRO opined that said part of NH-58 was not suitable for carrying heavy equipment. Therefore, the Petitioner approached MoRTH, after which part permission was granted to the Petitioner on 12.12.2014 for movement of only 6X105 MVA ICTs which were under 100 MT weight.

82. We observe that there was delay in getting clearance from BRO/ MoRTH for movement of heavy consignments on roads between Rishikesh-Khandukhal (Srinagar) route since 3.10.2012 and permission was finally received on 12.12.2014. Considering time requirement of 4 months for 'approvals' of route as per DPR, the total time taken from 3.10.2012 to 12.12.2014 after excluding the said 4 months, we condone the delay from 3.2.2013 to 12.12.2014 i.e. 22 months and 9 days delay on this count.

- *Delay in transportation of heavy consignments i.e. 160 MVA ICTs and 50 MVAr Bus Reactor through Rishikesh-Chamba-Tehri Dam route*

83. On 27.3.2015, PWD informed the Petitioner that a temporary staging was required for transporting heavy consignment of more than 100 MT on the bridge constructed by PWD. Meanwhile, vide letter dated 15.5.2015, MoRTH allowed the Petitioner to move 160 MVA ICTs and 50 MVAr Bus Reactor through Rishikesh-Chamba-Tehri Dam route. Further, PWD constructed temporary staging under double lane bridge for strengthening the bridge for carrying 160 MVA ICTs and 50





MVAr Bus Reactor in June, 2015. On 12.7.2015, 1 no. 160 MVA ICT reached at site through the afore-mentioned route.

84. We are of the view that the Petitioner should have taken due care while planning the route i.e. whether Rishikesh-Khandukhal (Srinagar) route would require lots of clearances and strengthening of road to bear the heavy load. However, it is observed that PWD informed the Petitioner that there was requirement of providing temporary staging at Kirtinagar bridge to carry load of more than 100 MT vide letter dated 27.3.2015 and PWD constructed the same by June 2015. The Petitioner might not have envisaged this event at the time of planning. Accordingly, we condone the time over-run from 27.3.2015 to 15.6.2015 (in the absence of exact date, we considered 15.6.2015) i.e. 2 months and 20 days.

- *Delay due to washing away of staging*

85. The Petitioner has submitted that 1<sup>st</sup> unit of 160 MVA ICT reached at Khandukhal (Srinagar) site on 12.7.2015 and in the 2<sup>nd</sup> week of July, 2015, temporary staging provided by PWD was washed away during the heavy rains. Subsequently, ABB provided staging for the bridge and 2<sup>nd</sup> unit of 160 MVA ICT reached the site by December 2015.

86. We observe that staging provided by PWD in June 2015 was washed away due to heavy rainfall in the second week of July 2015 and, accordingly, the last consignment reached at site by December 2015. The delay in respect of washing away of the staging in June 2015 was an uncontrollable event in terms of the 2014 Tariff Regulations. Therefore, we condone the time over-run from 14.7.2015 (in the absence of exact date for 2<sup>nd</sup> week of July, 14.7.2015 is being considered) to



15.12.2015 (in the absence of exact date 15.12.2015 is being considered) i.e. 5 months and 2 days.

- *Delay due to non-availability of GVK HEP-Khandukhal (Srinagar) Sub-station Transmission Line*

87. The Petitioner has submitted that Srinagar sub-station was ready for charging by 18.3.2016. However, the Petitioner has submitted that it could not charge Srinagar sub-station due to delay in commissioning of GVK HEP-Khandukhal (Srinagar) Sub-station Transmission Line till 25.7.2016. We observe that the said transmission line belongs to the Petitioner itself and, therefore, we are of the view that time over-run on this count cannot be condoned.

- *Delay in COD of 400/220 kV Srinagar Sub-station*

88. As per the Petitioner's submission, last consignment of 2<sup>nd</sup> unit of 160 MVA ICT 220/132 kV reached at site by the end of December 2015 and Srinagar Sub-station was made ready by the Petitioner on 18.3.2016. The Petitioner has claimed delay beyond 18.3.2016 as delay in commissioning of Srinagar P/H to Srinagar line. The said transmission line is in the scope of Petitioner itself and delay due to its own fault cannot be allowed. Moreover, the said line is covered in Petition No. 81/TT/2016 wherein time beyond 18.3.2016 has not been condoned vide order dated 13.6.2021. Hence, time over-run beyond 18.3.2016 is disallowed.

89. The Petitioner has also submitted CEA letter dated 18.7.2016 wherein approval for energisation of the Srinagar sub-station was allowed.



90. We notice that following events have occurred after December 2015 as a result of which the Petitioner could transport last consignment of 160 MVA ICT-II at Srinagar Sub-station:

|   | <b>Event/ Activity</b>                          | <b>Date of occurrence</b> |
|---|---|---------------------------|
| 1 | Last consignment reached (160 MVA ICT-II)       | December, 2015            |
| 2 | Petitioner submitted that Sub-station was ready | 18.3.2016                 |
| 3 | Petitioner wrote to CEA for inspection          | 16.5.2016                 |
| 4 | Electrical inspection done                      | 29.6.2016                 |
| 5 | Civil and erection works were completed         | 30.6.2016                 |
| 6 | Inspection report/ Non-compliance               | 5.7.2016                  |
| 7 | Compliance Report received by CEA               | 13.7.2016                 |
| 8 | CEA energisation certificate issued             | 18.7.2016                 |
| 9 | Testing and commissioning completed by          | 21.7.2016                 |

91. The Petitioner vide affidavit dated 23.12.2019 has submitted details of time over-run (activity-wise) wherein it is found that the Petitioner had scheduled time of four months for 'testing and commissioning' of the sub-station.

92. From the above table, it is clear that the Petitioner was able to deliver last consignment of 160 MVA ICT-II in December 2015 and was able to make Srinagar sub-station ready for charging on 18.3.2016 i.e. within 4 months of the delivery of last 160 MVA ICT-II. It is noticed from the above table that the Petitioner sent an application to CEA for approval of charging of the sub-station only on 16.5.2016 i.e. two months after the said sub-station was ready.

93. We observe that obtaining all the clearances from electrical inspector and submission of compliance report cannot be considered as unforeseen/ uncontrollable events. Accordingly, time over-run from 19.3.2016 to 30.7.2016 (4 months and 12 days) is not condoned.

94. The details of the time over-run condoned is as follows:



| Sr. No. | Activity   | From      | To         | Time taken          |
|---------|--|-----------|------------|---------------------|
| 1       | Delay due to road blockages, damaged roads, landslides, slippages etc  | 31.7.2010 | 21.12.2010 | 4 months & 22 days  |
| 2       | Delay in getting approval from BRO for movement on roads and bridge on Rishikesh to Khandukhal (Srinagar) route and delay due to natural disaster (Flash floods during June, 2013) | 3.2.2013  | 12.12.2014 | 22 months & 9 days  |
| 3       | Delay in transportation of heavy consignments i.e. 160 MVA ICTs and 50 MVAr Bus Reactor through Rishikesh-Chamba-Tehri Dam route   | 27.3.2015 | 15.6.2015  | 2 months & 20 days  |
| 4       | Delay due to washing away of staging   | 14.7.2015 | 15.12.2015 | 5 months & 2 days   |
|         | <b>Total time over-run condoned</b>  |           |            | 34 months & 23 days |

95. Hence, out of the total time over-run of 50 months, time over-run of 34 months and 23 days in case of 400/220/132 kV Srinagar Sub-station is condoned.

#### 80 MVAr 400 kV Bus Reactor

96. We have, in earlier part of this order, come to the finding that the scheduled date of commercial operation of the Project (including the bus reactor) was 26.5.2012. There is delay of 77 months in commissioning of bus reactor. The Petitioner has submitted that it was required to erect, test and commission 50 MVAr reactor at Srinagar sub-station vide original Contract Agreement dated 30.5.2009 along with other elements like 315 MVA ICTs, 160 MVA ICTs, 400 kV and 220 kV bays. The Petitioner vide affidavit dated 23.12.2019 has submitted an inter-office letter dated 3.8.2015, in which it was informed that on 27.7.2015, the said reactor toppled while in transit to site at Srinagar Sub-station. Thereafter, the reactor was sent back to the factory for its checking.

97. The Petitioner has submitted that it completed the erection work of 80 MVAr reactor on 15.7.2018 but due to bad weather and heavy rainfall in the month of July 2018, the final testing of the equipment could be completed in the first week of



August 2018 only. Later, the Petitioner approached CEA on 8.8.2018 for the 'Approval of Energization' of 80 MVAR reactor which the Petitioner received on 14.9.2018. The successful trial operation of 80 MVAR reactor was completed on 19.10.2018. Trial operation certificate was issued by NRLDC on 15.11.2018.

98. The Petitioner has considered the reference date for time taken to commission the reactor as the date of new contract i.e. 7.12.2017 with a schedule of 8 months. However, in our view, any delay in achieving COD has to be considered with respect to the original scheduled COD of the reactor (50 MVAR) which was 26.5.2012. The COD of the 80 MVAR bus reactor having been approved as 20.10.2018, there is delay of 77 months.

99. The Petitioner has referred to 38<sup>th</sup> and 39<sup>th</sup> NRPC meeting regarding installation of 80 MVAR reactor in place of 50 MVAR reactor as envisaged. We have perused the minutes of meeting of 38<sup>th</sup> and 39<sup>th</sup> NRPC meetings. Relevant extract from 38<sup>th</sup> NRPC minutes of meeting dated 10.1.2017 is as follows:

*“B.13 Reactive compensation at 220 kV level TCC Deliberation*

*B.13.1 Member Secretary NRPC stated that the proposal for installation of bus reactors at 12 nos. 400 kV and 17 nos. 220 kV sub-stations was discussed in the 29th meeting of NRPC held on 13th September 2013. After deliberations, NRPC had approved installation of reactors at 400 kV sub-stations of POWERGRID and RVPNL. As regards 220 kV bus reactors, it was decided that the requirement would be firmed up in consultation with the States in separate meetings. Thereafter, the issue of validation of the data and submission of report of the study for determination of requirement of reactive compensation at 220 kV level had been under discussion at NRPC forum.*

....  
400 kV Level

|    |          |            |          |
|----|----------|------------|----------|
| 24 | Srinagar | Uttrakhand | 125 MVAR |
|----|----------|------------|----------|

....  
*B.13.6 TCC accepted the report with the observation that study for Delhi system would be reviewed and recommended for approval of NRPC. NRPC Deliberation NRPC approved the recommendation of the TCC.”*



100. Relevant extract from 39<sup>th</sup> NRPC meeting dated 2.5.2017 and minutes of meeting dated 14.7.2017 are as follows:

*“B.5 Reactive compensation at 220 kV level.*

*.....  
B.5.2 He added that POWERGRID, in September, 2016 had submitted its report on Reactive compensation in Northern Region. The report was deliberated in 34thTCC/38th NRPC meeting held on 24th /25th October, 2016. Delhi had requested to review the system study for its system. NRPC approved the reactors as per the details given below in Table-2 and Table-3 , subject to review of requirement for Delhi.*

**Table-2: At 220 kV level:**

**Table-3: At 400 kV level:**

| <b>Sl. No.</b> | <b>Bus Name</b> | <b>State</b> | <b>Reactors Proposed (MVAR)</b> |
|----------------|-----------------|--------------|---------------------------------|
| 1              | .....           | .....        | .....                           |
| 23             | Kashipur        | Uttrakhand   | 125                             |
| 24             | Srinagar        | Uttrakhand   | 125                             |

101. In the 39<sup>th</sup> Standing Committee on Power System Planning of Northern Region held on 28-29.5.2017 and minutes of meeting dated 28.7.2017, following was discussed:

***“Reactive Power Compensation Requirement Studies in Northern Region and High voltage at Kurukshetra***

*27.1 CEA stated that after the Grid Disturbance in July 12, the need for proper reactive power management was emphasised for reliable and secure operation of the grid. The issue of reactive compensation was discussed in 29th meeting of NRPC held on 13/09/2013, wherein, it was deliberated that adequate reactive compensation need to be provided at 400 kV as well as at 220 kV level to contain the high voltages in the grid so as the opening of lines during light load conditions can be avoided. Accordingly, in the meeting, it was agreed that the studies may be carried out by CTU for installation of bus reactors at 400 kV and 220 kV level.*

*27.2 CTU stated that they had carried out system studies to identify the requirement of reactive compensation at 400 kV and 220 kV voltage level.*

*.....  
27.3 CTU further stated that while carrying out the studies, requirement of additional shunt reactors at 400 kV was also observed. Accordingly, studies were also carried out for evolving the requirement of shunt reactors at 400 kV level for 2018-19 conditions along with above mentioned additional reactors at 220 kV level. Based on the studies, Reactors at following locations at 400 kV level are proposed:*



.....

| S.No. | Bus Name | State      | Reactors Proposed (MVAR) |
|-------|----------|------------|--------------------------|
| 1     | .....    | .....      | .....                    |
| 23    | Kashipur | Uttrakhand | 125                      |
| 24    | Srinagar | Uttrakhand | 125                      |

27.8 PTCUL stated that they have already put up the proposal for 80 MVAR bus reactor at Srinagar and Kashipur 400 kV S/Ss instead of 125 MVAR due to transportation problems and they have proposed PSDF funding for installation of these reactors.

27.14 After further deliberation following was agreed:

| S.No. | Bus Name | State      | Reactors Proposed (MVAR) |
|-------|----------|------------|--------------------------|
| 1     | .....    | .....      | .....                    |
| 17    | Kashipur | Uttrakhand | 125                      |
| 18    | Srinagar | Uttrakhand | 80                       |

102. We observe that there was requirement of 125 MVAR reactors at Srinagar and Kashipur as per studies conducted by CTU to find reactive compensation in Northern Region. The said requirements were of CTU in the year 2013 and again in the year 2016. The requirement of reactive compensation nowhere refers to replace 50 MVAR reactor under the scope of PTCUL, rather it is about an additional reactive requirement for 125 MVAR in place of which PTCUL proposed 80 MVAR. For these reasons, we do not find it appropriate to condone the delay occurred due to installation of 80 MVAR reactor in place of 50 MVAR reactor in view of discussions in RPC and Standing Committee meetings.

103. The Petitioner has submitted identical reasons for time over-run till 27.7.2015, as submitted for Srinagar sub-station. These reasons have been analyzed in earlier paragraphs of this order and accordingly the treatment for time over-run on this count up to 27.7.2015 is as follows:



| Sr. No. | Activity  | From      | To         | Time taken         |
|---------|---|-----------|------------|--------------------|
| 1       | Delay due to road blockages, damaged roads, landslides, slippages etc.  | 31.7.2010 | 21.12.2010 | 4 months & 22 days |
| 2       | Delay in getting approval from BRO for movement on roads and bridge on Rishikesh to Khandukhal (Srinagar) route and delay due to natural disaster (Flash floods during June, 2013). | 3.2.2013  | 12.12.2014 | 22 months & 9 days |
| 3       | Delay in transportation of heavy consignments i.e. 160 MVA ICTs and 50 MVAr Bus Reactor through Rishikesh-Chamba-Tehri Dam route  | 27.3.2015 | 15.6.2015  | 2 months & 20 days |
| 4       | Delay due to washing away of staging.   | 14.7.2015 | 26.7.2015* | 13 days            |
|         | <b>Total time over-run condoned</b>   |           |            | 30 months & 4 days |

*\*We are not inclined to allow time over-run beyond 27.7.2015 (when 50 MVAr reactor got toppled)*

104. We are of the view that toppling of the reactor, amendment of the existing contract and revising SCOD of the reactor cannot be considered as a 'force majeure' event in terms of the 2014 Tariff Regulations.

105. Therefore, time over-run beyond 27.7.2015 till 19.10.2018 (COD of the reactor 20.10.2018) is not condoned. Accordingly, out of total time over-run of 77 months, the time over-run of 30 months and 4 days is condoned as shown above.

106. In view of the above, tariff of the transmission assets has been calculated based on the following facts:

- (i) The Petitioner has submitted capital cost as on 31.7.2016 for the bay element corresponding to "160 MVA 220/132 kV ICT-2" along with the costs of other bay elements of the sub-station. Although the approved COD for the bay element of "160 MVA 220/132 kV ICT-2" is 3.8.2016, for ease of calculations, tariff of the said bay element and other elements has been computed with effect from 31.7.2016. We direct the Petitioner to furnish capital cost data as on





approved COD i.e. 3.8.2016 for the bay elements of “160 MVA 220/132 kV ICT-2” at the time of truing up.

(ii) Tariff is approved on the basis of commercial operation dates of the assets:

| Assets   | Elements  | Number of Bays | COD        |
|----------|---|----------------|------------|
| Asset-I  | 400/220 kV 315 MVA ICT-1&2 along with their bays (HV side +LV side) | 2 +2           | 31.7.2016  |
|          | 400 kV D/C Khandukhal (Srinagar) - GVK HEP Transmission Line        | 2              |            |
|          | 220/132 kV 160 MVA ICT-1 along with its bay (HV side)               | 1              |            |
|          | *220/132 kV 160 MVA ICT-2 along with its bay (HV side)              | 1              |            |
| Asset-II | 80 MVAR Bus Reactor   | 1              | 20.10.2018 |

*\*COD of this element has been decided as 3.8.2016. However, tariff is worked out from 31.7.2016 along with other elements based on the capital cost of the combined elements submitted as on 31.7.2016. Combined capital cost has been submitted by the Petitioner on 31.7.2016 which is inclusive of this element.*

(iii) Asset-I and Asset-II are hereinafter referred to as “the transmission assets”.

(iv) The Petitioner is directed to submit segregated audited capital cost, with ACE, if any, along with separate tariff forms based on the approved CODs of the assets at the time of truing up.

(v) Computation of time over-run condoned and not condoned in respect of the transmission assets is as follows:

| Particulars                                   | Asset-I   | Asset-II   |
|---|-----------|------------|
| SCOD considered                               | 26.5.2012 | 26.5.2012  |
| Time up to SCOD (months)                      | 30        | 30         |
| COD Approved                                  | 31.7.2016 | 20.10.2018 |
| Time over-run (months approximately)          | 50        | 77         |
| Total time consumed (months approximately)    | 80        | 107        |
| Time over-run condoned (months approximately) | 34.77     | 30.13      |



|  |       |       |
|--|-------|-------|
| Time over-run not condoned<br>(months approximately) | 15.23 | 46.87 |
|--|-------|-------|

## Capital cost

107. Clauses (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides as follows:

*“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of 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;*

*(bi) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period shall form part of the capital cost.*

*(c) Increase in cost in contract packages as approved by the Commission;*

*(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;*

*(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;*

*(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;*

*(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and*

*(h) Adjustment of any revenue earned by the transmission licensee by using the assets before COD.”*

108. The Petitioner has submitted information of expenditure through two certificates which are supplemental in nature and verified by different Auditors. Based on these cost data and associated assumptions, we have analysed the capital cost:

**(i) Auditor’s certificate submitted with affidavits dated 29.9.2018 and 23.12.2019**

109. The Petitioner vide affidavits dated 29.9.2018 and 23.12.2019 has submitted Form-5B and revised Form-5B respectively along with Auditor’s certificate dated



11.9.2018 for combined cost of ₹20562.30 lakh as on COD i.e. on 31.7.2016 for “400/220 kV Srinagar Sub-station” and ₹1776.92 lakh for actual/ projected cost for the period 2016-19. The Auditor has certified that the figures have been checked and verified from the books of accounts of the Petitioner in respect of expenses incurred for sub-station. The details of the capital cost claimed is as follows:

(₹ in lakh)

| Apportioned approved cost | RCE apportioned approved cost | Capital cost up to COD | Expenditure during 2016-17 | Expenditure during 2017-18 | Projected expenditure during 2018-19 | Estimated completion cost |
|---------------------------|-------------------------------|------------------------|----------------------------|----------------------------|--------------------------------------|---------------------------|
| 17208.00*                 | 23089.44                      | 20562.30               | 589.49                     | 288.88                     | 898.55                               | 22339.22                  |

*\*Director (CEA) vide letter dated 27.11.2008 mentions estimated completion cost of the instant project as ₹17208.00 lakh with comments. The same estimated cost is also mentioned in DPR of the project.*

**Note:** Initial Spares of ₹416.92 lakh have been included in the capital cost claimed.

**(ii) Auditor’s certificate submitted with affidavit dated 29.7.2020**

110. The Commission vide RoP dated 18.11.2019 directed the Petitioner to clarify the number of bays claimed at 400 kV and 220 kV levels and the Petitioner clarified the same vide its affidavit dated 23.12.2019. Subsequently, the Petitioner vide affidavit dated 29.7.2020 as part of additional information, submitted Auditor’s Certificate dated 10.7.2020 certifying bay-wise costs of 21 numbers 400 kV and 200 kV bays and 80 MVAR reactor of the Srinagar sub-station. The cost of the bays combined together is ₹18358.44 lakh and that of the reactor is ₹670.52 lakh which are included in the completion cost indicated at paragraph 109 above.

111. The capital cost data submitted are as follows:



(₹ in lakh)

| Sr. No. | Name of Bay                 | Supply & Erection Cost | Apportioned IDC | Apportioned IEDC | Total Cost      |
|---------|-----------------------------|------------------------|-----------------|------------------|-----------------|
| 1       | Bay 401 GVK CKT 1           | 487.09                 | 65.66           | 39.09            | 591.84          |
| 2       | Bay 402 GVK CKT 2           | 487.09                 | 65.66           | 39.09            | 591.84          |
| 3       | Bay 403 SRI KASHI CKT 1     | 487.09                 | 65.66           | 39.09            | 591.84          |
| 4       | Bay 404 SRI KASHI CKT 2     | 487.09                 | 65.66           | 39.09            | 591.84          |
| 5       | Bay 405 SRI PIPAL CKT 1     | 487.09                 | 65.66           | 39.09            | 591.84          |
| 6       | Bay 406 SRI PIPAL CKT 2     | 487.09                 | 65.66           | 39.09            | 591.84          |
| 7       | Bay 407 Bus Reactor*        | 1024.49                | 138.10          | 82.21            | 1244.80         |
| 8       | Bay 408 Transfer Bus        | 366.54                 | 49.41           | 29.41            | 445.36          |
| 9       | Bay 409 Bus Coupler         | 421.84                 | 56.86           | 33.85            | 512.55          |
| 10      | Bay 410 ICT 1 <sup>st</sup> | 2178.11                | 293.61          | 174.78           | 2646.50         |
| 11      | Bay 411 ICT 2nd             | 2429.62                | 327.51          | 194.97           | 2952.10         |
| 12      | Bay 201 Line bay            | 360.56                 | 48.60           | 28.93            | 438.09          |
| 13      | Bay 202 Line bay            | 360.56                 | 48.60           | 28.93            | 438.09          |
| 14      | Bay 203 Bus Transfer        | 266.61                 | 35.94           | 21.39            | 323.94          |
| 15      | Bay 204 SRI Rudra Ckt 1     | 352.25                 | 47.48           | 28.27            | 428.00          |
| 16      | Bay 205 Bus Coupler         | 308.03                 | 41.52           | 24.72            | 374.27          |
| 17      | Bay 206 SRI Rudra CKT 2     | 352.25                 | 47.48           | 28.27            | 428.00          |
| 18      | Bay 207 ICT 1st 400/220     | 292.49                 | 39.43           | 23.47            | 355.39          |
| 19      | Bay 208 ICT 1st 220/132     | 1617.01                | 217.97          | 129.76           | 1964.74         |
| 20      | Bay 209 ICT 2nd 400/220     | 292.89                 | 39.48           | 23.50            | 355.87          |
| 21      | Bay 210 ICT 2nd 220/132     | 1563.49                | 210.76          | 125.46           | 1899.71         |
|         | <b>Total</b>                | <b>15109.28</b>        | <b>2036.71</b>  | <b>1212.46</b>   | <b>18358.45</b> |

Note: a) All bays capitalized during 2016-17 (25.7.2016) except bay 407.

b) \*As per the Auditor's certificate cost of 80 MVAR Reactor (₹670.52 lakh) is included in bay no. 407, and this bay element was capitalized during FY 2018-19 (7.8.2018).

112. As discussed in paragraph 56 above, COD of 80 MVAR bus reactor has been considered as 20.10.2018. The Petitioner vide affidavit dated 18.10.2016 and in Form-7 has stated that it had contemplated supply and erection of 50 MVAR reactor under ACE (for the Srinagar sub-station) after COD, although the 50 MVAR reactor capacity was replaced by 80 MVAR. Auditor's certificate dated 11.9.2018 provides for ACE for 2016-17, 2017-18 and 2018-19 periods. A combined reading of the Auditor's certificate, Form-7 furnished vide affidavit dated 18.10.2016 and Form-5 B submitted



with affidavit dated 23.12.2019 suggest that the cost incurred as ACE after 31.7.2016 and up to 31.3.2019 can be attributed towards the reactor and reactor bay. Accordingly, it is clear that capital cost of 400 kV 80 MVAr bus reactor is not included in capital cost as on 31.7.2016.

113. On comparison of RCE apportioned cost and the estimated completion cost given in the table in paragraph 109 above, it is noted that there is no cost over-run. It has also been inferred earlier in this order that the total cost as on 31.3.2019 has been expended towards 400 kV sub-station along with reactor and other elements which has been detailed in the scope of Project at paragraph 30 and paragraph 31. We have separated the total cost for the two assets, namely, (i) sub-station and bays, and (ii) reactor and bays. As per the Auditor's certificate dated 10.7.2020, cost of 80 MVAr Reactor i.e. ₹670.52 lakh is included in the cost of bay no. 407 and this bay element was capitalized during 2018-19. All other bay elements were capitalized during 2016-17. However, for ease of arriving at the capital cost for tariff purpose, the cost of bay elements as mentioned in paragraph 111 are assumed to be included in the sub-station cost i.e. ₹20562.30 lakh.

114. In the light of above discussion, capital costs of the transmission assets on COD are as follows subject to further analysis:

| <b>Asset</b>   | <b>COD</b> | <b>Capital cost as on COD<br/>(₹ lakh)</b> |
|--|------------|--|
| <b>Asset (I):</b> 400/220/132 kV sub-station at Srinagar & associated bays | 31.7.2016  | 20562.30                                   |
| <b>Asset (II):</b> 80 MVAr reactor and associated bays                     | 20.10.2018 | 1776.92                                    |
| <b>Total</b>   |            | <b>22339.22</b>                            |



115. The Petitioner is directed to submit the cost break-up of all the elements of Asset-I and Asset-II certified by Auditor, segregating them into the heads of Land (Freehold and/or Leasehold), Building & Civil Works, Transmission Lines, if any, sub-station, PLCC along with IDC and IEDC incurred at the time of truing up. The certificates should clearly indicate the expenditure as on CODs of respective assets and corresponding ACE after the COD. As directed above in paragraph 67 and paragraph 106 of this order, similar details are also required to be given for all other assets, either collectively on single COD or on their individual CODs as the case may be.

116. As discussed in paragraph 68, certain bay elements have been disallowed. Accordingly, the following costs of 400 kV bays/220 kV bays and 400 kV and 220 kV bus coupler/ bus transfer bays are not being allowed in the total cost of bay elements (i.e. ₹18358.45 lakh) claimed as on COD in respect of Asset-I:

**(₹ in lakh)**

| <b>Sl. No.</b> | <b>Name of Bay</b>                         | <b>Total cost</b> |
|----------------|--|-------------------|
|                | <b>400 kV Bays</b>                         |                   |
| 1              | Bay 403 Sri Kashi Ckt 1                    | 591.84            |
| 2              | Bay 404 Sri Kashi Ckt 2                    | 591.84            |
| 3              | Bay 405 Sri Pipal Ckt 1                    | 591.84            |
| 4              | Bay 406 Sri Pipal Ckt 2                    | 591.84            |
| 5              | Bay 408 Transfer Bus                       | 445.36            |
| 6              | Bay 409 Bus Coupler                        | 512.55            |
|                | <b>200 kV Bays</b>                         |                   |
| 1              | Bay 201 Line bay                           | 438.09            |
| 2              | Bay 202 Line bay                           | 438.09            |
| 3              | Bay 203 Bus Transfer                       | 323.94            |
| 4              | Bay 204 SRI Rudra Ckt 1                    | 428.00            |
| 5              | Bay 205 Bus Coupler                        | 374.27            |
| 6              | Bay 206 SRI Rudra CKT 2                    | 428.00            |
|                | <b>Disallowed cost</b>                     | <b>5755.65</b>    |
|                | Bay Elements' Total Cost                   | 18358.45          |
|                | Disallowed cost percentage of Bay Elements | 31.35 %           |
|                | Allowed cost percentage                    | 68.65%            |



117. As discussed in paragraph 110 of this order, the costs of bay elements are assumed to have been included in the sub-station cost (i.e. ₹20562.30 lakh). The Petitioner has submitted Form 5B which contain “Element-wise cost details of the Project. On perusal of Form 5B, we observe that establishing one-to-one relation between the “Element-wise Cost details” data and the “bays” data indicated at paragraphs 111 and 116 is difficult. To overcome this difficulty, we have worked out transformer cost based on proportional cost of the sub-station and thereafter reduced the transformer cost so obtained from the sub-station cost to derive at the bays’ cost. This working has supposition that costs other than the transformers’ cost pertain to bays’ cost. In view of the allowable cost percentage of bay elements as per preceding paragraph, the same proportion i.e. 68.65% has been applied to the derived bays’ cost. The allowable cost as on COD for Asset-I is, thus, ₹17067.55 lakh as detailed below (there is no reduction in the cost of Asset-II):

| Particulars  | (₹ in lakh)<br>Cost |
|--|---------------------|
| Sub-station equipment soft cost (A)  | 13228.00            |
| Sub-station cost [inclusive of land, civil works, pre-commissioning & other overheads] (B) | 20562.30            |
| Transformer soft cost (C) included in (A)  | 6056.65             |
| Transformer cost corresponding to (B) above: (D) = (B)*(C)/(A)                             | 9414.78             |
| Bays’ cost derived: (E) = (B) - (D)  | 11147.53            |
| Allowable Bays’ cost (F)= 68.65% of (E)  | 7652.78             |
| Disallowed Bays’ cost: (G)=(E) – (F)   | 3494.75             |
| Transformer Cost + Allowable Bays’ cost (H) = (D) + (F)                                    | 17067.55            |

118. We are, therefore, considering the capital cost of ₹17067.55 lakh and ₹1776.92 lakh for Asset-I and Asset-II respectively, as on COD.

### **Interest During Construction (“IDC”)**

119. The Petitioner, vide Auditor’s certificate dated 11.9.2018, has claimed Interest during Construction (IDC) of ₹2432.10 lakh up to claimed COD of 31.7.2016 for all the elements combined together as “400/220 kV Srinagar Sub-station”.



120. The Petitioner vide affidavit dated 28.9.2018 has submitted that un-discharged liability portion of IDC is not included in the projected ACE. The Petitioner has also not submitted any details of un-discharged liability in respect of IDC. Therefore, we presume that IDC claimed is on cash basis and adjustment of capital cost in this regard is not required.

121. The Petitioner has submitted "Details of Interest due against ADB Loan Receipts from Government of Uttarakhand" for each financial year up to 31.7.2016. Based on these details and taking into consideration the loan deployed as per Form-9C, IDC for the Combined Asset has been worked out up to 31.7.2016 and we observe computational difference of ₹3.99 lakh. For Asset- I and Asset- II, we have apportioned the IDC claim based on their capital costs as on COD and subsequently IDC has been further reduced by pro-rata computational difference amount and pro-rata amount on account of time over-run not condoned, as follows:

(₹ in lakh)

|   | Asset-I<br>(Transformers<br>and Bays) | Asset-II<br>(Reactor) | Total<br>[as per Auditor's<br>Certificate dated<br>11.9.2018] |
|---|---------------------------------------|-----------------------|---|
| Cost: (A)<br>[paragraph 114]  | 20562.30                              | 1776.92               | 22339.32  |
| Disallowed cost of bays: (B)  | 3494.75                               | 0.00 <sup>#</sup>     | 3494.75   |
| Cost considered as on COD: (C)  | 17067.55                              | 1776.92               | 18844.47  |
| IDC claim included & pro-rated<br>based on (A) above: (D)                 | 2238.64                               | 193.46                | 2432.10   |
| IDC worked out as on COD:<br>(E) = (C) * (D) / (A)                        | 1858.17                               | 193.46                | 2051.61   |
| IDC disallowed as computational<br>difference: (F)                        | 3.67                                  | 0.32                  | 3.99  |
| IDC considered as on COD:<br>(G) = (E) - (F)                              | 1854.49                               | 193.14                | 2047.63   |
| Time taken for COD: (H)<br>(in months)                                    | 80                                    | 107                   |   |
| Time over-run not condoned: (I)<br>(in months)                            | 15.23                                 | 20 <sup>**</sup>      |   |
| IDC disallowed due to time<br>over-run not allowed: (J) = (G) * (I) / (H) | 353.13                                | 48.28 <sup>**</sup>   | 401.41  |





# No bays considered in Asset-II.

\*\* Loan data is available till 31.7.2016 (COD of Asset-I). Accordingly, the time over-run not condoned in respect of Asset-II could be reckoned for 20 months only (i.e. 30.11.2014 to 31.7.2016), although the time over-run period not condoned is approximately 47 months; hence the IDC.

### Incidental Expenditure During Construction (“IEDC”)

122. The Petitioner vide affidavit dated 23.12.2019 has submitted that ₹1092.00 lakh was earlier wrongly included in IEDC instead of transformer cost and the same has been adjusted. Accordingly, the Petitioner has furnished revised Form-5B and Form 12A for the revised claim of IEDC of ₹684.39 lakh (₹1294.96 lakh-₹610.57 lakh) up to claimed COD i.e. 31.7.2016 for all the elements of the asset combined together as “400/220 kV Srinagar Sub-station”. We have apportioned IEDC for two assets based on their capital costs as on COD and reduced further by the pro-rata amount corresponding to time over-run not condoned. In case of Asset-II, time over-run beyond 30.11.2014 has not been condoned. Therefore, pro-rata IEDC from 30.11.2014 to 31.7.2016 i.e. for 20 months approximately has been reduced, as follows:

|   | (₹ in lakh)                           |                       |   |
|---|---------------------------------------|-----------------------|---|
|   | Asset-I<br>(Transformers<br>and Bays) | Asset-II<br>(Reactor) | Total<br>[As per Auditor’s<br>Certificate dated<br>11.9.2018] |
| Cost: (A)<br>[paragraphs 114]                       | 20562.30                              | 1776.92               | 22339.32  |
| Disallowed cost of Bays: (B)                        | 3494.75                               | 0.00 #                | 3494.75   |
| Cost considered as on COD: (C)                      | 17067.55                              | 1776.92               | 18844.47  |
| IEDC claim pro-rated based on (A)<br>above: (D)     | 629.95                                | 54.44                 | 684.39  |
| IEDC worked out as on COD:<br>(E)=(C)*(D)/(A)       | 522.89                                | 54.44                 | 577.32  |
| IEDC disallowed as computational<br>difference: (F) | 0.00                                  | 0.00                  | 0.00  |
| IEDC considered as on COD:<br>(G) = (E) - (F)       | 522.89                                | 54.44                 | 577.32  |
| Time taken for COD: (H)<br>(in months)              | 80                                    | 107                   |   |
| Time over-run not condoned: (I)                     | 15.23                                 | 20**                  |   |



|  |       |         |        |
|--|-------|---------|--------|
| (in months)  |       |         |        |
| IEDC disallowed due to time over-run not allowed: (J)= (G)*(I)/(H) | 99.57 | 13.61** | 113.18 |

# No bays considered in Asset-II

\*\* Loan data is available till 31.7.2016 (COD of Asset-I). Accordingly, the time over-run not condoned for Asset-II could be reckoned for 20 months only (i.e. 30.11.2014 to 31.7.2016), although time over-run period not-condoned is approximately 47 months, hence the IDC.

123. IEDC of ₹152.87 lakh during the years 2016-17 and 2017-18 taken together is included in expenditure amounting to ₹1776.92 lakh claimed during 2016-19 period (CA certificate/ Auditor's certificate dated 11.9.2018) which is being considered as capital cost for Asset-II.

124. The Petitioner has not furnished any liability discharge statement in respect of IEDC claimed as on 31.7.2016. The Petitioner vide affidavit dated 28.9.2018, has submitted that un-discharged liability portion of IEDC is not included in the projected ACE. Therefore, we have assumed that IEDC claimed is on cash basis and adjustment of capital cost in this regard is not required at this juncture.

125. IEDC allowed for the transmission assets will be re-considered in the light of directions given by Appellate Tribunal for Electricity (APTEL) in its judgment dated 2.12.2019 in Appeal Nos. 95 of 2018 and 140 of 2018 as implemented vide Commission's order dated 4.2.2020 in Petition No. 1/TT/2019, at the time of truing up, after all the assets under the scope of the Project are put into commercial use and actual quantum of IEDC is known. The Petitioner is directed to furnish IEDC details of all the assets of the instant transmission Project at the time of truing up of capital cost.



## Treatment of Initial Spares

126. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of Initial Spares in respect of transmission system as follows:

*“13. Initial Spares Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:*

*(d) Transmission system*

- (i) Transmission line - 1.00%*
- (ii) Transmission Sub-station (Green Field)-4.00%*
- (iii) Transmission Sub-station (Brown Field)-6.00%*
- (iv) Series Compensation devices and HVDC Station-4.00%*
- (v) Gas Insulated Sub-station (GIS)-5.00%*
- (vi) Communication system-3.5%*

*Provided that:*

*(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:*

*(ii) where the generating station has any transmission equipment forming part of the generation project, the ceiling norms for initial spares for such equipments shall be as per the ceiling norms specified for transmission system under these regulations;*

*(iii) once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:*

*(iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application.”*

127. The Petitioner has submitted Auditor's certificate dated 11.9.2018 wherein Initial Spares of ₹416.92 lakh has been claimed in the capital cost for all the elements of the asset combined together as “400/220 kV Srinagar Sub-station”.

128. Initial Spares claimed by the Petitioner corresponding to sub-station are within the norms of the 2014 Tariff Regulations. Hence, no adjustment of Initial Spares is required as on COD.



## Capital Cost Allowed

129. Accordingly, the following capital cost is considered for the purpose of tariff after adjustment of IDC and IEDC and Initial Spares, as on COD of the assets as per Regulation 9(2) of the 2014 Tariff Regulations:

| Particulars  | (₹ in lakh)      |                 |                  |
|--|------------------|-----------------|------------------|
|  | Asset-I          | Asset-II        | Total            |
| <b>Capital costs considered up to CODs</b>   |                  |                 |                  |
| Cost as per Auditor's certificate dated 11.9.2018 as segregated into two assets (A)            | 20562.30         | 1776.92         | 22339.22         |
| Disallowed cost of bays from the cost submitted as per Auditor's certificate in (A) above: (B) | 3494.75          | 0.00            | 3494.75          |
| Total Cost Considered as on COD (Asset-I: 31.7.2016 & Asset-II: 20.10.2018): (C) = (A) - (B)   | 17067.55         | 1776.92         | 18844.47         |
| <b>Interest During Construction (IDC)</b>  |                  |                 |                  |
| IDC claimed included in (A) above: (D)   | 2238.64          | 193.46          | 2432.10          |
| IDC allowed as on COD included in (A): (E)   | 1854.49          | 193.14          | 2047.63          |
| IDC disallowed on account of time over-run not allowed: (F)                                    | 353.13           | 48.28           | 401.41           |
| <b>Incidental Expenditure During Construction (IEDC)</b>                                       |                  |                 |                  |
| IEDC claimed as on 31.7.2016: (G)  | 629.95           | 54.44           | 684.39           |
| IEDC allowed as on 31.7.2016: (H)  | 522.89           | 54.44           | 577.32           |
| IEDC disallowed on account of time over-run not allowed: (I)                                   | 99.57            | 13.61           | 113.18           |
| IEDC included in the cost post 31.7.2016 disallowed (J)  | 0.00             | 152.87          | 152.87           |
| <b>Total cost allowed as on COD: (K) = [C-D+E-F-G+H-I-J]</b>                                   | <b>16123.64*</b> | <b>1561.84*</b> | <b>17685.48*</b> |
| Total cost disallowed as on COD: (L) = (A)-(K)   | 4438.66          | 215.08          | 4653.74          |

\*The capital cost allowed is subject to true up and shall be reviewed on receipt of all the requisite information.

## Projected ACE

130. As discussed above, the Petitioner has claimed the following ACE incurred/ projected to be incurred during the period from claimed COD to 31.3.2019 for the combined asset:



| (₹ in lakh)                          |                            |   |           |
|--------------------------------------|----------------------------|---|-----------|
| Expenditure after COD during 2016-17 | Expenditure during 2017-18 | Expenditure/ Projected expenditure during 2018-19 | Total ACE |
| 589.49                               | 288.88                     | 898.55  | 1776.92   |

131. ACE of ₹1776.92 lakh claimed during 2016-19 period has been considered as capital cost of 80 MVAR reactor (Asset-II) as on COD and has been dealt in previous paragraphs.

### Debt- Equity Ratio

132. Clauses 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:

*“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*

*Provided that:*

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

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

*“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 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.”*

133. As per Regulation 19 of the 2014 Tariff Regulations, details of debt-equity as on COD and as on 31.3.2019 of the transmission assets are as follows:



| Asset-I  | As on COD (31.7.2016)  |        | As on 31.3.2019       |        |
|----------|------------------------|--------|-----------------------|--------|
|          | Amount<br>(₹ in lakh)  | (In %) | Amount<br>(₹ in lakh) | (In %) |
| Debt     | 11286.55               | 70.00  | 11286.55              | 70.00  |
| Equity   | 4837.09                | 30.00  | 4837.09               | 30.00  |
| Total    | <b>16123.64</b>        | 100.00 | <b>16123.64</b>       | 100.00 |
| Asset-II | As on COD (20.10.2018) |        | As on 31.3.2019       |        |
|          | Amount<br>(₹ in lakh)  | (In %) | Amount<br>(₹ in lakh) | (In %) |
| Debt     | 1093.29                | 70.00  | 1093.29               | 70.00  |
| Equity   | 468.55                 | 30.00  | 468.55                | 30.00  |
| Total    | <b>1561.84</b>         | 100.00 | <b>1561.84</b>        | 100.00 |

## Depreciation

134. Regulation 27 of the 2014 Tariff Regulations provides as follows:

*"27. Depreciation:(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. 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 or elements thereof.*

*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 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 in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:*

*Provided further 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 generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended*



life.

*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.*

*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-II to these regulations for the assets of the generating station and transmission system:*

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

*(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.*

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

*(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 decapitalized asset during its useful services.”*

135. Depreciation has been worked out as per Regulation 27 of 2014 Tariff Regulations. Asset-I and Asset-II were put into commercial operation on 31.7.2016 and 20.10.2018 respectively and they will complete 12 years beyond 2018-19. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-II.

136. Accordingly, depreciation has been worked out on the basis of capital expenditure as on COD and ACE incurred thereafter, if any, wherein depreciation for the first year has been calculated on pro-rata basis for the year/ part of year.





| Particular                          | Asset-I                             |               |               | Asset-II                            |
|-------------------------------------|-------------------------------------|---------------|---------------|-------------------------------------|
|                                     | 2016-17<br>(Pro-rata)<br>(244 days) | 2017-18       | 2018-19       | 2018-19<br>(pro-rata)<br>(163 days) |
| Opening Gross Block                 | 16123.64                            | 16123.64      | 16123.64      | 1561.84                             |
| Additional Capitalisation           | 0.00                                | 0.00          | 0.00          | 0.00                                |
| Closing Gross Block                 | 16123.64                            | 16123.64      | 16123.64      | 1561.84                             |
| Average Gross Block                 | 16123.64                            | 16123.64      | 16123.64      | 1561.84                             |
| Rate of Depreciation (in %)         | 5.0576                              | 5.0576        | 5.0576        | <b>4.7546</b>                       |
| Depreciable Value                   | 14222.68                            | 14222.68      | 14222.68      | 1405.65                             |
| Remaining Depreciable Value         | 14222.68                            | 13677.55      | 12862.08      | 1405.65                             |
| <b>Depreciation during the year</b> | <b>545.14</b>                       | <b>815.47</b> | <b>815.47</b> | <b>33.16</b>                        |
| <b>Cumulative depreciation</b>      | 545.14                              | 1360.61       | 2176.08       | 33.16                               |

### Interest on Loan (“IoL”)

137. Regulation 26 of the 2014 Tariff Regulations are provides as follows:

*“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan*

*(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*

*(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation 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.*

*(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 generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the*





*beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.*

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

*(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:*

*Provided that the beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”*

138. IoL has been worked out as per Regulation 26 of the 2014 Tariff Regulations.

The Petitioner vide affidavit dated 28.9.2018 has furnished letter for treatment of the Financial Aid being provided by GoU. The Petitioner has submitted that till date no clear assurance from GoU has been given to the Petitioner regarding treatment of ADB Funding in the ratio of 90:10 (90% grant and 10% loan). Hence, treatment of loan has been considered as 100% loan. In case, GoU clarifies that loan funding is in the ratio of 90:10 (90% grant and 10% loan), then the loan portion will be treated as grant and will be submitted to the Commission.

139. The Petitioner was asked to explain asset-wise latest status of ADB loan and amount of grant received, if any, to which the Petitioner, vide affidavit dated 23.12.2019 has reiterated its submissions as submitted vide affidavit dated 28.9.2018, the details of which are given in the preceding paragraph.

140. In view of above, treatment of ADB loan has been considered as 100% loan in the instant petition. This would be subject to submission of the necessary information at the time of truing up.

141. Accordingly, in our calculations, IoL has been worked out as follows:



- (i) Gross amount of loan, repayment of instalments and rate of interest on actual loan have been considered as per petition.
- (ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year.
- (iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

142. The Petitioner is directed to submit documentary proof in respect of repayment schedule of the loan and rate of interest applied thereon at the time of truing up.

143. Based on the above, details of IoL calculated are as follows:

| Particulars                                      | Asset-I                             |               |               | Asset-II                            |
|--|-------------------------------------|---------------|---------------|-------------------------------------|
|  | 2016-17<br>(Pro-rata)<br>(244 days) | 2017-18       | 2018-19       | 2018-19<br>(pro-rata)<br>(163 days) |
| Gross Normative Loan                             | 11286.55                            | 11286.55      | 11286.55      | 1093.29                             |
| Cumulative Repayments up to Previous Year        | 0.00                                | 545.14        | 1360.61       | 0.00                                |
| Net Loan-Opening                                 | 11286.55                            | 10741.41      | 9925.94       | 1093.29                             |
| Addition due to Additional Capitalisation        | 0.00                                | 0.00          | 0.00          | 0.00                                |
| Repayment during the year                        | 545.14                              | 815.47        | 815.47        | 33.16                               |
| Net Loan-Closing                                 | 10741.41                            | 9925.94       | 9110.47       | 1060.12                             |
| Average Loan                                     | 11013.98                            | 10333.68      | 9518.21       | 1076.71                             |
| Weighted Average Rate of Interest on Loan (in %) | 9.00                                | 9.00          | 9.00          | 9.00                                |
| <b>Interest on Loan</b>                          | <b>662.65</b>                       | <b>930.03</b> | <b>856.64</b> | <b>43.27</b>                        |

### Return on Equity (“RoE”)

144. Clauses (1) and (2) of Regulation 24 and Clauses (1) and (2) of Regulation 25 of the 2014 Tariff Regulations specify as follows:

*“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.*

*(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the 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: (i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:*

*(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:*

*(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:*

*(iv) the rate of return of a new project shall be reduced by 1% 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)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:*

*(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:*

*(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.”*

#### *25 Tax on Return on Equity*

*(1) The base rate of return on equity as allowed by the Commission under Regulation 24 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 the 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 income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered 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:*

*Rate of pre-tax return on equity = 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 the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 20.96% including surcharge and cess:*

*Rate of return on equity =  $15.50/(1-0.2096) = 19.610\%$*

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

*(a) Estimated Gross Income from generation or transmission business for FY 2014-15 is Rs 1000 crore.*

*(b) Estimated Advance Tax for the year on above is Rs 240 crore*

*(c) Effective Tax Rate for the year 2014-15 = Rs 240 Crore/Rs 1000 Crore = 24%*

*(d) Rate of return on equity =  $15.50/ (1-0.24) = 20.395\%$*

145. RoE has been computed as per Regulation 24 of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed-up rate of RoE at the end of the financial year shall be trued up 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 IT authorities pertaining to the 2014-19 tariff period on actual gross income of any financial year.

146. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of RoE with effective tax rate for the purpose of RoE. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of RoE. The Petitioner has claimed RoE for the period 2015-16 to 2018-19 on the basis of MAT rate @21.34%. However, MAT rate notified by GOI is 21.3416%, 21.3416% and 21.5488% for 2016-17, 2017-18 and 2018-19 respectively. Accordingly, pre-tax RoE of 19.705%, 19.705% and 19.758% for 2016-



17, 2017-18 and 2018-19 respectively have been considered.

147. This is being allowed subject to the submission of calculation of effective tax rate and documentary evidence of MAT rate by the Petitioner and prudence check at the time of truing up. Accordingly, RoE allowed is as follows:

| Particulars                            | Asset-I                             |               |               | Asset-II                            |
|--|-------------------------------------|---------------|---------------|-------------------------------------|
|  | 2016-17<br>(Pro-rata)<br>(244 days) | 2017-18       | 2018-19       | 2018-19<br>(pro-rata)<br>(163 days) |
| Opening Equity                         | 4837.09                             | 4837.09       | 4837.09       | 468.55                              |
| Addition due to ACE                    | 0.00                                | 0.00          | 0.00          | 0.00                                |
| Closing Equity                         | 4837.09                             | 4837.09       | 4837.09       | 468.55                              |
| Average Equity                         | 4837.09                             | 4837.09       | 4837.09       | 468.55                              |
| Return on Equity (Base Rate) (%)       | 15.50                               | 15.50         | 15.50         | 15.50                               |
| Effective Tax Rate / MAT rate (%)      | 21.342                              | 21.342        | 21.549        | 21.549                              |
| Rate of Return on Equity (Pre Tax) (%) | 19.705                              | 19.705        | 19.758        | 19.758                              |
| Return on Equity (Pre Tax)             | <b>637.17</b>                       | <b>953.15</b> | <b>955.71</b> | <b>41.34</b>                        |

#### Operation & Maintenances Expenses (“O&M Expenses”)

148. Regulation 29(4)(a) of the 2014 Tariff Regulations provides the following norms for O&M Expenses for the transmission assets covered in the instant petition:

|            | (₹ in lakh/ Bay) |         |         |         |         |
|------------|------------------|---------|---------|---------|---------|
|            | 2014-15          | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| 400 kV Bay | 60.30            | 62.30   | 64.37   | 66.51   | 68.71   |
| 220 kV Bay | 42.21            | 43.61   | 45.06   | 46.55   | 48.10   |

149. O&M Expenses approved for the transmission assets are as follows:

|                                   | (₹ in lakh)    |               |                    |
|-----------------------------------|----------------|---------------|--------------------|
|                                   | 2016-17        | 2017-18       | 2018-19            |
| 400 kV (4 Numbers)                | 172.12*        | 266.04        | 274.84             |
| 220 kV (4 Numbers)                | 120.12*        | 186.20        | 192.40             |
| 400 kV Bus Reactor Bay (1 Number) | 0.00           | 0.00          | 30.68 <sup>#</sup> |
| <b>Total</b>                      | <b>292.24*</b> | <b>452.24</b> | <b>497.92</b>      |

\*Pro- rata O&M Expenses for 160 MVA 220/132 kV ICT-2 bays has been considered from 3.8.2016 and other elements from 31.7.2016.

<sup>#</sup>COD of reactor has been considered as 20.10.2018.



## Interest on Working Capital (“IWC”)

150. Clause 1(c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff

Regulations specify as follows:

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

(a) Xxxxx

(b) Xxxxx

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance 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 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 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.

(5) **“Bank Rate”** means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

151. As per the 2014 Tariff Regulations, the components of the working capital and interest thereon are as follows:

(i) **Maintenance spares:**

Maintenance spares have been worked out based on 15% of O&M Expenses specified in Regulation 28.

(ii) **O & M Expenses:**

O&M Expenses have been considered for one month of the O&M Expenses allowed.

(iii) **Receivables:**

The receivables have been worked out on the basis 02 months of annual transmission charges as worked out above.

(iv) **Rate of interest on working capital:**

As per Regulation 28(3) of the 2014 Tariff Regulations, SBI Base Rate Plus 350 bps as on 1.4.2016 (i.e. 12.80%) has been considered as the rate of



interest on working capital for Asset-I and SBI Base Rate Plus 350 bps as on 1.4.2018 (i.e. 12.20%) has been considered as the rate of interest on working capital for Asset-II.

152. IWC allowed for the transmission assets is as follows:

| Particulars  | Asset-I                             |               |               | Asset-II                            |
|--|-------------------------------------|---------------|---------------|-------------------------------------|
|  | 2016-17<br>(Pro-rata)<br>(244 days) | 2017-18       | 2018-19       | 2018-19<br>(pro-rata)<br>(163 days) |
| Working Capital for O&M Expenses<br>(O&M Expenses for one month)   | 36.43                               | 37.69         | 38.94         | 5.73                                |
| Working Capital for Maintenance<br>Spares<br>(15% of O&M Expenses)   | 65.57                               | 67.84         | 70.09         | 10.31                               |
| Working Capital for Receivables<br>(Equivalent to 2 months of annual<br>fixed cost/annual transmission<br>charges) | 477.24                              | 470.99        | 463.35        | 56.90                               |
| <b>Total Working Capital</b>   | <b>579.24</b>                       | <b>576.52</b> | <b>572.37</b> | <b>72.93</b>                        |
| Rate of Interest (in %)  | 12.80%                              | 12.80%        | 12.80%        | 12.20%                              |
| <b>Interest on working capital</b>   | <b>49.56</b>                        | <b>73.79</b>  | <b>73.26</b>  | <b>3.97</b>                         |

### Annual Transmission Charges

153. In view of the above, the annual transmission charges approved for the transmission assets are as follows:

| Particulars                 | Asset-I                             |                |                | Asset-II                            |
|-----------------------------|-------------------------------------|----------------|----------------|-------------------------------------|
|                             | 2016-17<br>(Pro-rata)<br>(244 days) | 2017-18        | 2018-19        | 2018-19<br>(pro-rata)<br>(163 days) |
| Depreciation                | 545.14                              | 815.47         | 815.47         | 33.16                               |
| Interest on Loan            | 662.65                              | 930.03         | 856.64         | 43.27                               |
| Return on Equity            | 637.17                              | 953.15         | 955.71         | 41.34                               |
| O & M Expenses              | 292.24                              | 452.24         | 467.24         | 30.68                               |
| Interest on Working Capital | 55.51                               | 82.49          | 81.73          | 3.97                                |
| <b>Total</b>                | <b>2192.70</b>                      | <b>3233.38</b> | <b>3176.79</b> | <b>152.43</b>                       |

### Sharing of Transmission Charges

154. As regards sharing of the transmission charges, the Commission vide its order





dated 20.4.2018 in Petition No. 80/TT/2016 and Petition No. 81/TT/2016 observed as follows:

*"12. The AFC allowed in this order shall be applicable from the date of commercial operation of the transmission system. Since the assets covered in the instant case are used to transfer power of home state from Srinagar PH of GVK Industries Ltd, the use of the assets is attributed to the home state till the transmission elements are connected to the inter-State transmission system. The petitioner shall recover the transmission charges allowed as above from the distribution licensee of the state i.e. Uttrakhand Power Corporation Ltd. through billing as per the Commission order in Petition No.155/MP/2016. The relevant portion of the order dated 4.1.2017 in Petition No.155/MP/2016 is as under:*

*"17. The petitioner is directed to provide YTC details of its assets to NLDC and CTU. NLDC shall provide the same to RPC for inclusion in RTAs. The assets shall be billed along with bill 1 under the provisions of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission charges and losses), Regulations, 2010 as amended from time to time. ISTS licensees shall forward the details of YTC to be recovered as per formats provided under the Sharing Regulations to NLDC. ISTS licensees shall forward the details of entity along with YTC details from whom it needs to be recovered as per applicable order's of the Commission to NLDC (only in cases of bilateral billing due to non-availability of upstream/downstream system). Based on the input received from respective licensees and the Commission's order, NLDC shall provide details of billing pertaining to non-availability of upstream/downstream system to respective RPCs for incorporation in RTAs for all cases of bilateral billing. On this basis, CTU shall issue the bills. The process given in this para shall be applicable to all future cases of similar nature and all concerned shall duly comply with the same."*

*Accordingly, the billing, collection and disbursement of the transmission charges shall be made along with bill 1 under the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time in terms of the procedure specified in order dated 4.1.2017 in Petition No.155/MP/2016. Further, the transmission charges allowed in this order shall be subject to adjustment as per Regulation 7(7) of the 2014 Tariff Regulations."*

155. The Petitioner, vide affidavit 23.12.2019, has submitted that UITP was not under any regulatory framework initially so as to ensure that necessary agreements between Petitioner and generators are signed timely and transmission system/elements are implemented in certainty matching with generators. The Petitioner was under contractual obligations to implement these transmission elements for proper and timely utilization of funds as per conditions of ADB funding (multi-tranche funding facility 2006-2016). Revised commissioning schedules of generating projects are as





follows:

| Sr. No. | Name of Generators   | COD as per LTOA applied to PTCUL (UITP as intra-state) | COD as per connectivity application to PTCUL (UITP as intra-state) | COD as per grant of Connectivity by CTU (UITP as deemed ISTS) | COD as per IA signed (UITP as deemed ISTS) | Revised COD as on date |
|---------|--|--|--|---|--|------------------------|
| 1       | Lanco Mandakini Hydro Energy Pvt. Ltd. (Phata Byung HEP) 76 MW | September, 2010  | November, 2012   | September, 2018   | September, 2018                            | NCLT (December, 2022)  |
| 2       | L&T Uttarakhand Hydropower Ltd. (Singoli Bhatwari HEP) 99 MW   | January, 2012  | June, 2013   | October, 2018   | October, 2018                              | March, 2020            |
| 3       | NTPC Ltd. (Tapovan Vishnugad HEP) 520 MW                       | September, 2011  | March, 2014  | March, 2019   | March, 2019                                | December, 2020         |
| 4       | THDC Ltd. (Vishnugad Pipalkoti HEP) 444 MW                     | Not Applied  | -  | December, 2019  | -  | June, 2022             |
| 5       | SJVN Ltd.(Devsari HEP) 252 MW                                  | September, 2012  | July, 2016   | July, 2022  | -  | May, 2026              |

156. The Petitioner has further submitted that 400 kV Sub-station at Srinagar and 400 kV Srinagar-Srinagar PH line are implemented by the Petitioner as part of UITP as ISTS elements. Generators who were liable to bear the transmission charges of these assets have yet not commissioned their generating projects. So far, UPCL being the sole user of this Project, is drawing power using these assets. As per the Commission's order dated 20.4.2018, UPCL has to bear the transmission charges of these assets. However, UPCL has not yet released any payment to the Petitioner.

157. BRPL in its comments on the report of the Committee headed by Chief (Engineering) of the Commission submitted that if any of the generator under the revised scheme is not commissioned, then there should not be any liability on beneficiaries due to its stranded capacity.

158. The Petitioner has stated that keeping in view above facts and peculiar



circumstances, which are beyond the control of Petitioner, recovery of tariff of the transmission assets may be ensured under provisions of the 2010 Sharing Regulations.

159. In response, UPCL vide affidavit dated 27.12.2019 has made the following submissions:

(a) Recovery of transmission charges of 400 kV Srinagar sub-station and 400 kV Srinagar-Srinagar PH line by the Petitioner from UPCL in terms of the Commission's order dated 20.4.2018 is unjust and is an unnecessary burden on the consumers of Uttarakhand.

(b) UPCL has no Power Purchase Agreement (PPA) with GVK HEP for bilateral power purchase. However, in present case, UPPCL is the sole beneficiary of power from GVK HEP. For evacuation of power from GVK HEP, there is a LILO arrangement of 400 kV Vishnuprayag-Muzaffarnagar line. Prior to commissioning of the transmission assets, namely, the Srinagar sub-station and 400 kV Srinagar-Srinagar PH line, contracted power to Uttar Pradesh and royalty power to Uttarakhand were being evacuated through 400 kV Vishnuprayag-Muzaffarnagar line through Northern Grid. Accordingly, no separate evacuation network is required for evacuation of royalty power from GVK HEP to Uttarakhand. The contention that Uttarakhand State is using the transmission assets to evacuate its royalty power is, therefore, wrong. Majority of hydro plants envisaged under UITP stand delayed and, therefore, direction to UPCL to bear all the costs of these transmission assets for evacuation of only royalty power is neither justifiable nor a financially prudent proposition.

(c) UITP was planned on the condition that the cost recovery mechanism will remain between the Petitioner and upcoming generators and in the proposed arrangement, other constituents would not be required to have direct commitment for payment of transmission charges.

160. In response, the Petitioner vide affidavit dated 24.1.2020 has made the



following submissions:

(a) Generators who were liable to bear the transmission charges of the transmission assets are delayed. So far, UPCL being the sole user of this ISTS network is drawing more power than allocated 12% free power from these assets.

(b) UITP was planned after discussions held in different forums and in the presence of the constituents of NR wherein UPCL is one of the constituents. Reply of UPCL that it has not executed agreement of any kind with the Petitioner for erection of transmission infrastructure and it does not have any PPA with the generators involved is incorrect. UPCL is one of the beneficiaries of CGS (Central Generating Stations) like 520 MW Tapovan-Vishnugad of NTPC, 444 MW Vishnugad- Pipalkoti HEP of THDC, 171 MW Lata-Tapovan HEP (on hold) and State-owned Generating Projects of UJVNL. MoP has already allocated power from CGS to Uttarakhand and UPCL has executed PPA with these Generators. Thus, the power to be evacuated is not only free power allocated by the MoP but also additional quantum agreed between NTPC and UPCL under PPA dated 16.11.2010.

(c) As per PPA, UPCL has agreed to bear the transmission charges from the bus-bar of these CGS Projects i.e. UPCL would be liable to pay transmission charges of transmission system implemented by the Petitioner for evacuation of power from these HEPs. The transmission assets are part of transmission system implemented/ to be implemented by the Petitioner for evacuation of power from these HEPs.

(d) Beside 12% royalty power (39.60 MW) from GVK's 330 MW Srinagar HEP, UPCL is also consuming power between 100 MW-120 MW through Srinagar-Srinagar HEP Line.

(e) UPCL is the signatory of Transmission Service Agreement (TSA) executed with PGCIL and the said elements form part of the same. Therefore, it is clear that pursuant to the signing of TSA, UPCL became entitled to use ISTS



network and liable to pay transmission charges as determined by the Commission.

161. UPCL has made the following submission on the issue of sharing of transmission charges of the transmission assets:

(a) UPCL has no agreement of any kind with the Petitioner for evacuation of royalty power from GVK HEP through the concerned asset and in fact even GVK has no agreement with the Petitioner for evacuation of its power. GVK HEP is and was evacuating its whole power through a LILO arrangement on 400 kV Vishnuprayag-Muzaffarnagar Transmission Line and UPCL also received its royalty share through this network and this arrangement was in existence much prior to the erection of the transmission assets. Similarly, UPCL is receiving its royalty share from Vishnuprayag HEP through Vishnuprayag-Muzaffarnagar Transmission Line.

(b) The Petitioner has inter-connected its 132 kV Srinagar Sub-station (Old) with the newly erected 132 kV Srinagar (Khandukhal) through LILO arrangement of old 132 kV Rishikesh-Srinagar Transmission Line and further upstream have connected 220 kV and 400 kV Srinagar (Khandukhal) Sub-stations. Therefore, the question as to why UPCL was connected to these assets does not arise because UPCL was already connected to a downstream sub-station/ network and the Petitioner has revised the upstream connections with the coming of the concerned assets without any agreement/ requirement of UPCL. The under-construction power plants of NTPC, L&T, LANCO etc. were considered to be benefitted through the transmission assets and, accordingly, the Commission had granted UITP infrastructure the status of ISTS.

(c) Royalty power was being received even prior to the erection of the said assets, which itself is sufficient to show that to consider UPCL was connected to the said asset for receiving its royalty power would only be an assumption and against facts. Load is flowing through the connected transmission assets based on the electrical laws and the same is also evident from the load flow data which suggests that power flow through Srinagar-Srinagar PH transmission line



and Srinagar Sub-station generally remains between 60-80 MW (at times reach up to 120 MW) which is much higher than the royalty share of the State in GVK HEP.

162. In response, the Petitioner has made the following submissions vide affidavit dated 28.7.2020:

(a) The Petitioner has so far not recovered any tariff approved by the Commission, whereas UPCL has already claimed tariff on the basis of the Commission's order dated 20.4.2018 and included the same in its Annual Revenue Requirements (ARR) and submitted it before UERC for approval. UERC vide order dated 27.2.2019 approved the claim of UPCL as ₹99.82 crore (₹36.92 crore + ₹62.90 crore against past arrears) and UPCL has already recovered the transmission charges against these two assets from consumers of the State till 31.3.2020. Further, UERC has approved ARR of UPCL for 2020-21 amounting to ₹36.92 crore and tariff allowed by the Commission is being recovered by UPCL w.e.f. 1.4.2020, but not passed on to the Petitioner. The Petitioner has been burdened with the repayments of the loans for the funding obtained in commissioning the transmission assets and expenditure incurred on O&M Expenses of these assets, but no payments have been realized by the Petitioner since the COD of the transmission assets.

(b) GVK HEP has been using the transmission system as an alternate evacuation system when the existing arrangement i.e. LILO of 400 kV D/C Vishnuprayag-Muzaffarnagar Transmission Line at GVK HEP is under shut-down for maintenance or due to technical constraints. Therefore, it is clear that transmission assets have been put to use for evacuating ISTS power from GVK HEP to UPPTCL in cases of contingencies and beneficiaries of the NR.

(c) Against 12% royalty power (39.60 MW) from GVK's 330 MW Srinagar HEP, UPCL is also drawing power between 100 MW-120 MW through the transmission assets.

163. We have considered the submissions of the Petitioner and UPCL. The



Commission in its interim order dated 20.4.2018 observed that the Petitioner shall recover the approved transmission charges from UPCL as the transmission assets are used for transfer of power of home State from Srinagar PH of GVK HEP and the use of the assets is attributed to the home State till the transmission elements are connected to the inter-State transmission system.

164. UPCL has contended that it has been drawing royalty power from GVK HEP even before the transmission assets were commissioned and the subject assets were not intended for GVK HEP. UPCL does not have PPA with GVK. The transmission assets have been envisaged as intra-State system for generators who had to carry their power through ISTS beyond Kashipur. The assets have been agreed at NRPC and by CEA stating that agreement with constituents is not required and that payment arrangement shall be between the Petitioner and generators. UPCL has contended that Petitioner has failed to construct Srinagar-Kashipur Transmission Line due to which the assets have not been connected to ISTS and burden of inefficiency of the Petitioner is falling on UPCL. UPCL has also contended that the Commission vide its order dated 31.1.2013 in Petition No. 133/MP/2012 has granted the scheme the status of ISTS but has also directed to categorize the intra-State network separately, if any, on which UERC would act as per the Act. In case, the transmission assets are treated as intra-State transmission system, UERC should have the jurisdiction.

165. On the contrary, the Petitioner has submitted that since UPCL is drawing power from transmission assets, it should make payment for such assets. It has further submitted that UPCL has included the tariff directed by the Commission for transmission assets in its ARR but is not making payment to the Petitioner.



166. UPCL has stated that it has full right to protect its consumers even when it has included tariff in its ARR.

167. We note that UITP was granted deemed ISTS status in the order dated 31.1.2013 in Petition No. 133/MP/2012 to the extent it is used for transmission of inter-State power. Further, it was also directed in the above order to segregate dedicated portion, i.e. intra-State and inter-State portion. The Petitioner vide its letter dated 20.5.2017 addressed to the Commission in the context of Committee meeting held on 5.5.2017 stated regarding “Segregation of Intra-State, Inter-State Transmission System and dedicated system” as follows:

(a) During present scenario, 5 Connectivity applications have been received by PGCIL for hydro generation projects for Alaknanda basin namely (i) Phata Byung, (ii) Singoli Bhatwari, (iii) Tapovan Vishnugad (iv) Vishnugad Pipalkoti and (v) Devsari HEP. Connectivity has been granted by PGCIL to Tapovan Vishnugad HEP (520 MW) of NTPC, Pipalkoti HEP (444 MW) of THDC and Singoli Bhatwari HEP (99 MW) of L&T.

(b) In compliance to the directions of the Commission, the Petitioner pursued the matter with PGCIL for vetting of ISTS being implemented under UITP by the Petitioner and PGCIL vide letter dated 11.11.2016 vetted the network. As of now, there is no intra-State generation project that would be utilizing transmission system under UITP till 2019-20 as intra-State generators i.e. Tamak Lata (250 MW), Bowala-Nandprayag (300 MW) and Nandprayag-Langrasu (100 MW) of UJVN Ltd. are in initial stages. During previous LTA/Connectivity meeting of NR, it was discussed that after change in injection point, revised LTA intimations have to be issued and LTA agreements need to be signed/ modified. PGCIL informed that the connectivity/ LTA will be granted by PGCIL after 39<sup>th</sup> Standing Committee Meeting of NR Constituents and 10<sup>th</sup> LTA meeting of NR constituents regarding Connectivity/ LTA applications



scheduled to be held on dated 29<sup>th</sup> and 30<sup>th</sup> May, 2017. Decision on segregation of intra-State, inter-State and dedicated system has to be taken by PGCIL in line with the Commission's order dated 31.1.2013 in Petition No. 133/MP/2012.

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.

170. The Petitioner has contended that UPCL has collected the transmission charges approved by the Commission vide order dated 20.4.2018 for use of the





subject transmission assets from the consumers of Uttarakhand State but the same has not been paid to the Petitioner. UPCL has not refuted the Petitioner's contention. As the transmission charges of the transmission assets have been included in the ISTS charges pool as per the instant order, the Petitioner and UPCL are directed to approach UERC for settlement of the transmission charges already collected by UPCL from the consumers of Uttarakhand.

**Annual Transmission charges**

171. To summarise, the Annual Fixed Charges allowed for the transmission assets for the period from COD to 31.3.2019 are as follows:

| Particulars  | Asset-I                             |         |         | Asset-II                            |
|--------------|-------------------------------------|---------|---------|-------------------------------------|
|              | 2016-17<br>(pro-rata)<br>(244 days) | 2017-18 | 2018-19 | 2018-19<br>(pro-rata)<br>(163 days) |
| <b>Total</b> | 2192.70                             | 3233.38 | 3176.79 | 152.43                              |

172. Annexure-I and Annexure-II attached hereinafter shall form part of this order.

173. This order disposes of Petition No. 80/TT/2016 in terms of above discussions and findings.

sd/-  
**(Arun Goyal)**  
Member

sd/-  
**(I.S. Jha)**  
Member

sd/-  
**(P.K. Pujari)**  
Chairperson



**Weighted Average Rate of Depreciation**

**Asset-I**

|                   | Capital Expenditure as on COD (₹ in lakh) | ACE                 |                     |                     | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation (%) | Annual Depreciation as per Regulations |                     |                     |
|-------------------|---|---------------------|---------------------|---------------------|---|--------------------------|--|---------------------|---------------------|
|                   |   | 2016-17 (₹ in lakh) | 2017-18 (₹ in lakh) | 2018-19 (₹ in lakh) |   |                          | 2016-17 (₹ in lakh)                    | 2017-18 (₹ in lakh) | 2018-19 (₹ in lakh) |
| Freehold Land     | 0.00                                      | 0.00                | 0.00                | 0.00                | 0.00  | 0.00                     | 0.00                                   | 0.00                | 0.00                |
| Leasehold Land    | 273.28                                    | 0.00                | 0.00                | 0.00                | 273.28  | 3.34                     | 9.13                                   | 9.13                | 9.13                |
| Building          | 1302.00                                   | 0.00                | 0.00                | 0.00                | 1302.00   | 3.34                     | 43.49                                  | 43.49               | 43.49               |
| Transmission Line | 0.00                                      | 0.00                | 0.00                | 0.00                | 0.00  | 5.28                     | 0.00                                   | 0.00                | 0.00                |
| Sub-station       | 12166.14                                  | 0.00                | 0.00                | 0.00                | 12166.14  | 5.28                     | 642.37                                 | 642.37              | 642.37              |
| PLCC              | 0.00                                      | 0.00                | 0.00                | 0.00                | 0.00  | 6.33                     | 0.00                                   | 0.00                | 0.00                |
| <b>Total</b>      | <b>13741.42</b>                           | <b>0.00</b>         | <b>0.00</b>         | <b>0.00</b>         | <b>13741.42</b>                                   |                          | <b>694.99</b>                          | <b>694.99</b>       | <b>694.99</b>       |
|                   |   |                     |                     |                     | Average Gross Block (₹ in lakh)                   |                          | <b>13741.42</b>                        | <b>13741.42</b>     | <b>13741.42</b>     |
|                   |   |                     |                     |                     | <b>Weighted Average Rate of Depreciation (%)</b>  |                          | 5.06                                   | 5.06                | 5.06                |



**Weighted Average Rate of Depreciation****Asset-II**

|                   | Capital Expenditure as on COD (₹ in lakh) | ACE                 | Admitted Capital Cost as on 31.3.2019 (₹ in lakh) | Rate of Depreciation (%) | Annual Depreciation as per Regulations |
|-------------------|---|---------------------|---|--------------------------|--|
|                   |   | 2018-19 (₹ in lakh) |   |                          | 2018-19 (₹ in lakh)                    |
| Freehold Land     | 0.00                                      | 0.00                | 0.00  | 0.00                     | 0.00                                   |
| Leasehold Land    | 0.00                                      | 0.00                | 0.00  | 3.34                     | 0.00                                   |
| Building          | 423.09                                    | 0.00                | 423.09  | 3.34                     | 14.13                                  |
| Transmission Line | 0.00                                      | 0.00                | 0.00  | 5.28                     | 0.00                                   |
| Sub-station       | 1139.07                                   | 0.00                | 1139.07   | 5.28                     | 60.14                                  |
| PLCC              | 0.00                                      | 0.00                | 0.00  | 6.33                     | 0.00                                   |
| <b>Total</b>      | <b>1562.16</b>                            | <b>0.00</b>         | <b>1562.16</b>                                    |                          | <b>74.27</b>                           |
|                   |   |                     | Average Gross Block (₹ in lakh)                   |                          | 1562.16                                |
|                   |   |                     | Weighted Average Rate of Depreciation (%)         |                          | 4.75                                   |

