

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 87/TT/2023**

**Coram:**

**Shri Jishnu Barua, Chairperson  
Shri Ramesh Babu V., Member  
Shri Harish Dudani, Member**

**Date of Order: 15.10.2024**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the determination and approval of transmission tariff for transmission assets under "220 kV Srinagar-Leh Transmission System (SLTS)" from 31.10.2019 to 31.3.2024.

**And in the matter of:**

Power Grid Corporation of India Limited,  
"Saudamini", Plot No. 2,  
Sector 29, Gurgaon-122001 (Haryana).

**...Petitioner**

**Vs.**

1. Jammu & Kashmir Power Transmission Corporation Limited,  
Gladni Narwal, Jammu,  
UT of J&K-180006.
2. Power Development and New & Renewable Energy Department,  
Union Territory of Ladakh, Head office at Civil Secretariat,  
Leh, Ladakh-194101.
3. Jammu Kashmir Power Corporation Limited,  
220/66/33 kV Gladni Ss SLDC Building,  
Narwal, Jammu.
4. Ajmer Vidyut Vitran Nigam Limited,  
Corporate Office, Vidyut Bhawan, Panchsheel Nagar,  
Makarwali Road, Ajmer-305004.
5. Jaipur Vidyut Vitran Nigam Limited,  
132 kV, Gss Rvpnl Sub-Station Building, Caligiri Road,  
Malviya Nagar, Jaipur-302017.



6. Jodhpur Vidyut Vitran Nigam Limited,  
New Power House, Industrial Area,  
Jodhpur-342003.
7. Himachal Pradesh State Electricity Board Limited,  
Vidyut Bhawan, Kumar House Complex Building ii,  
Shimla-171004.
8. Punjab State Power Corporation Limited,  
The Mall, PSEB Head Office,  
Patiala-147001.
9. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector-6,  
Panchkula-134109, Haryana.
10. Uttar Pradesh Power Corporation Limited,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226001.
11. BSES Yamuna Power Limited,  
B-Block, Shakti Kiran, Building (Near Karkadooma Court),  
Karkadooma 2<sup>nd</sup> Floor, New Delhi-110092.
12. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi.
13. Tata Power Delhi Distribution Limited,  
33 kV Sub-station, Building, Hudson Lane,  
Kingsway Camp, Delhi-110009.
14. Chandigarh Administration,  
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Limited,  
Urja Bhawan, Kanwali Road, Dehradun.
16. North Central Railway,  
Allahabad, Uttar Pradesh.
17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110002.

...Respondents

**Parties Present** : Shri Amit Kumar Chachan, PGCIL  
Shri V.C.Sekhar, PGCIL  
Shri Amit Kumar, PGCIL



## ORDER

Power Grid Corporation of India Limited (“PGCIL”) has filed the instant Petition under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the determination and approval of the transmission tariff for the transmission assets under “220 kV Srinagar-Leh Transmission System (SLTS)” from 31.10.2019 to 31.03.2024.

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

- “1) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred/projected to be incurred.*
- 2) Approve the Transmission Tariff for the tariff block 2019-24 block for the assets covered under this petition, as per para – 12.3 above.*
- 3) Allow the O&M claimed for 220 kV S/C Underground Cable for Gagangir- Shitkari (6.215 kM) portion of 220 kV Alusteng (Srinagar)-Drass S/c Transmission line under Regulation-76 (Power to Relax) & Regulation-77 (Power to Remove Difficulty) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to a change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.*
- 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on the publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of the petition.*
- 6) Allow the petitioner to bill and recover Licensee fees and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 7) Allow the petitioner to bill and adjust the impact on Interest on Loan due to a change in the Interest rate on account of the floating rate of interest applicable during the 2019-24 period, if any, from the beneficiaries.*
- 8) Allow the petitioner for claiming the overall security expenses related to the instant Assets and consequential IOWC on that security expenses as mentioned at para 12.8 above.*
- 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
- 11) Allow tariff in accordance with Regulation 10(3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the purpose of inclusion in the PoC charges.*



*and pass such other relief as the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”*

### **Background**

3. The Petitioner has mainly submitted as under:
  - a. The Ministry of Power (MOP), Government of India vide sanction letter No F.No.3/18/2011-Trans. Dated 29.1.2014 had conveyed the approval of the Competent Authority for the construction of a 220 kV transmission line from Alusteng (Srinagar) to Leh of 220/66 kV sub-stations and 66 kV interconnection systems at Leh, Khalsti, Kargil & Drass in the State of erstwhile Jammu & Kashmir (J&K) ("SLTS Project") by Power Grid Corporation of India Limited (PGCIL) on a consultancy basis at an estimated cost of ₹ 178841 lakhs (at October 2012 price level) with the completion schedule of 42 months from the date of release of the first installment (post-investment approval) of funds for its implementation including the consultancy fee payable to PGCIL. As per the said sanction letter, the project cost had to be borne by the Government of India and the erstwhile Government of Jammu & Kashmir in a ratio of 95:5.
  - b. In this regard, a Memorandum of Understanding (MoU) was signed between PGCIL and the Jammu & Kashmir Power Development Department (hereinafter called "PDD, J&K") on 22.11.2016. As per the said MoU, PGCIL had to discharge the responsibilities as "Project Management Consultant" (PMC) on behalf of the ultimate owner, i.e., PDD, J&K, and upon commissioning of the SLTS Project, the same was to be transferred to the State of Jammu & Kashmir.
  - c. PGCIL has completed the SLTS Project on behalf of the owner PDD, J&K, as PMC and successfully commissioned the same on 31.1.2019. As per Clause A(iii) of the MoU, immediately after the commissioning of the SLTS Project by



PGCIL, PDD, J&K shall take over the Project, and the Operation & Maintenance (O&M) and other related activities shall be carried out by the PDD, J&K at its own cost. Further, in case of any delay in taking over the transmission assets by PDD, J&K, it shall pay the maintenance charges to PGCIL.

- d. After the commissioning of the SLTS Project on 31.1.2019, the matter regarding taking over the transmission assets was taken up with PDD, J&K many times. However, these transmission assets were not taken over by the PDD, J&K. Considering the importance of the system for maintaining the uninterrupted power supply to the Srinagar and Ladakh regions, PGCIL continued the O&M services for the system since February 2019. The matter regarding taking over the transmission assets of the SLTS Project by PDD, J&K was reviewed during the meeting chaired by the Commissioner/ Secretary (Power), J&K on 29.8.2019, wherein it was agreed that the O&M of the SLTS Project shall be provided by PGCIL up to 31.3.2022 and the O&M Expenses will be reimbursed to PGCIL by PDD, J&K as per the Commission's norms.
- e. The State of Jammu & Kashmir has been reconstituted into two Union Territories, namely, Jammu & Kashmir and Ladakh, with effect from 31.10.2019. Due to the above reconstitution, the SLTS Project has become a natural ISTS transmission project in line with Section 2(36) of the Electricity Act, 2003 (the Act), as the SLTS Project connects two different Union Territories, Jammu & Kashmir, and Ladakh.
- f. Regulation 2(36) of the Act defines the "Inter-State Transmission System" asunder:

*(36) "Inter State transmission system" includes –*

- i. any system for the conveyance of electricity by means of main transmission line from the territory of one State to another State;*



- ii. *the conveyance of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-State transmission of electricity;*
  - iii. *the transmission of electricity within the territory of a State on a system built, owned, operated, maintained or controlled by a Central Transmission Utility.”*
- g. The definition of the “Inter State Transmission System” provided in the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (hereinafter called “2010 Grid Code Regulations”) provides as under:

2. (1) (qq) *“Inter State Transmission System (ISTS)” means*

- i. *Any system for the conveyance of electricity by means of a main transmission line from the territory of one State to another State*
  - ii. *The conveyance of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-state transmission of energy*
  - iii. *The transmission of electricity within the territory of State on a system built, owned, operated, maintained or controlled by CTU;”*
- h. According to the Petitioner, in line with the provisions of the Act and 2010 Grid Code Regulations, the SLTS Project automatically becomes an Inter-state System after the reconstitution of Jammu & Kashmir into two Union Territories (UT), namely, UT of Jammu & Kashmir, and UT of Ladakh.
- i. Accordingly, a Committee headed by the CEA with the representatives from CERC, CTUIL, PGCIL, JKPTCL, and PDD, Ladakh, deliberated on the matter of handing over the 220 kV Srinagar-Leh Transmission System to PDD, J&K and enumerated the steps to be taken for declaring the 220 kV Srinagar - Leh Transmission System as Inter-State Transmission System. The Committee in its 4th meeting held on 28.12.2020, recommended that the UT of J&K and UT of Ladakh communicate their consent regarding handing over of the System as an ISTS. The UT of J&K and UT of Ladakh, vide their letters dated 3.2.2021 and 7.1.2021, respectively, informed that they have no objection regarding the declaration of the 220 kV Srinagar – Leh Transmission System as an Inter-State Transmission System (ISTS).



- j. Keeping in view the importance of the Srinagar-Leh Transmission System, recommendation received from the Technical Committee headed by the CEA and the consent of UT of J&K and UT of Ladakh, the Ministry of Power (MoP) vide its letter dated 23.3.2021 had conveyed the approval for transfer of the Srinagar-Leh Transmission System to PGCIL as an ISTS with effect from 31.10.2019 and directed that the O&M Expenses prior to the date of transfer would be shared between the UT of J&K and UT of Ladakh in proportion to their respective line length. MoP, vide its letter dated 23.3.2021, had advised PGCIL to approach the CERC for the determination of tariff and other terms and conditions for the SLTS system from the date of the transfer after hearing all the related parties, including UT of J&K and UT of Ladakh.
- k. The Chairman, Jammu & Kashmir Power Transmission Corporation Limited (JKPTCL) vide letter dated 17.4.2021, informed PGCIL that the erstwhile State of J&K has contributed ₹8942 lakhs as the State's contribution of 5% of the estimated cost of ₹178,841 lakhs and suggested that PGCIL, in consultation with the UT of J&K and UT of Ladakh, can choose any of the following two options before the filing of the tariff Petition before CERC, (i) to pay off the share of the construction cost to UT of J&K and UT of Ladakh in proportion to their line length, as a one-time settlement or, (ii) to reimburse a part of tariff, equivalent to RoE, to both the UTs on a regular basis.
- l. Subsequently, PGCIL agreed to pay off the share of the construction cost to the UT of J&K and UT of Ladakh in proportion to their line length as a one-time settlement. In this regard, Board of Directors of PGCIL vide Memorandum dated 24.5.2021 has accorded Investment Approval ("IA") of "Equity Investment to pay off the State's contribution of 5% of the project cost to the UT of J&K and UT of



Ladakh and the expenditure towards the procurement of Tools and Plants (T&Ps) and the Spares for the 220 kV Srinagar-Leh Transmission System (SLTS)” at an estimated cost of ₹14,442 lakh.

- m. PGCIL signed a Tripartite Memorandum of Understanding (MoU) on 24.8.2022 with JKPTCL and Power Development and New & Renewable Energy Department, UT of Ladakh, covering various aspects of transfer and terms and conditions for taking over the transmission assets by PGCIL. As per the MoU, PGCIL has agreed to pay off the share of the State’s contribution cost to UT of J&K and UT of Ladakh in proportion to the line length falling in their respective jurisdiction as a one-time settlement. The said amount of ₹8942 lakh was paid by PGCIL to the JKPTCL and the Power Development and New & Renewable Energy Department, Union Territory of Ladakh in FY 2022-23.
- n. The 220 kV SLTS was constructed by PGCIL with 95% funding from the Central Government and 5% funding from the State Government, having an initial cost estimate of ₹178,841 lakh. MoP vide sanction order dated 6.6.2019 had conveyed the approval of the Revised Cost Estimate (“RCE”) of the project at ₹ 209,896 lakh as per the actual cost incurred on the project.
- o. Out of the IA of ₹14,442 lakh, an amount of ₹ 8942 lakh is towards Equity Investment to pay off the State’s contribution of 5% project cost to the UT of J&K and UT of Ladakh, and ₹5500 lakh is towards procurement of the T&Ps and the Spares for 220 kV SLTS.
- p. The scope of work covered under “SLTS project” is as follows:
- i. Srinagar (Alusteng) to Leh via Kargil Transmission system:
    - Alusteng (Srinagar)-Drass 220 kV S/c
    - Drass-Kargil 220 kV S/c





- Kargil-Khalsti 220 kV S/c
- Khalsti-Leh 220 kV S/c
- Establishment of 220/66 kV sub-stations at Kargil and Leh with 2x50 MVA (7x16.67 MVA / Ph) ICTs and 1x25 MVAR (4x8.33 MVAR/Ph) bus reactor at each location and 4 Nos. of 66 kV line bays at each location
- Establishment of 220/66 kV sub-station at Drass and Khalsti with 1x50 MVA (4x16.67 MVA/Ph) ICTs at each location and 2 Nos. of 66 kV line bays at each location

ii. 66 kV inter-connection system:

- Drass 220/ 66 kV- Drass 66/11 kV (RGGVY) 66 kV D/c line
- Kargil 220/ 66 kV- Kargil 66/11 kV (RGGVY) 66 kV 2xD/c line
- Khalsti 220/ 66 kV- Khalsti 66/11 kV (RGGVY) 66 kV D/c line
- Leh 220/ 66 kV- Leh 66/11kV (RGGVY) 66 kV 2xD/c line
- Provision of 66 kV bays at Drass 66/11kV (RGGVY), Kargil 66/11kV (RGGVY), Khalsti 66/11kV (RGGVY) and Leh 66/11kV (RGGVY)

q. The scope of the project is completed and covered in the instant Petition.

4. The Respondents, mainly the beneficiaries of the Northern Region, are distribution licensees, generation utilities, and Power Departments that are procuring transmission services from the Petitioner. The Petitioner has served the copy of the Petition on the Respondents and the notice regarding filing of this Petition has also been published in the newspapers in accordance with Section 64 of the Act. No comments or suggestions have been received from the general public in response to the aforesaid notice.



5. The order in the present Petition was reserved on 29.4.2024. However, the order could not be issued prior to Shri Arun Goyal, Member, demitting the office. Accordingly, the matter was listed for the hearing on 28.8.2024. During the course of the hearing, the Petitioner's representative submitted that the pleadings had been completed in the matter, and arguments were heard and requested the Commission to issue an order on the basis of the information available on record. Considering the submissions of the Petitioner's representative, the order was reserved on the matter.

6. Having heard the representatives of the Petitioner and having perused the material on record, we proceed to dispose of the Petition.

7. This order is issued considering the submissions made by the Petitioner in the Petition and Petitioner's affidavit dated 16.2.2024.

#### **Determination of Annual Fixed Charges for the 2019-24 Tariff Period**

8. The Petitioner has claimed the following transmission charges in respect of the transmission asset for the 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	0.00	0.00	1.74	287.75	650.05
Interest on Loan	0.00	0.00	1.32	33.74	107.03
Return on Equity	0.00	0.00	1.86	897.10	1873.75
Interest on Working Capital	11.17	27.69	28.75	48.05	70.26
O&M Expenses	256.44	634.78	657.45	680.20	704.33
<b>Total AFC</b>	<b>267.61</b>	<b>662.47</b>	<b>691.12</b>	<b>1946.84</b>	<b>3405.42</b>

9. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission asset for the 2019-24 tariff period:



(₹ in lakh)

Particulars	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
O&M Expenses	51.12	52.90	54.79	56.68	58.69
Maintenance Spares	92.02	95.22	98.62	102.03	105.65
Receivables	78.71	81.67	85.21	240.02	418.70
<b>Total Working Capital</b>	<b>221.85</b>	<b>229.79</b>	<b>238.62</b>	<b>398.73</b>	<b>583.04</b>
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>26.73</b>	<b>27.69</b>	<b>28.75</b>	<b>48.05</b>	<b>70.26</b>
<b>Pro rata Interest on Working Capital</b>	<b>11.17</b>	<b>27.69</b>	<b>28.75</b>	<b>48.05</b>	<b>70.26</b>

### Date of Commercial Operation (COD)

10. The Petitioner has submitted that the SLTS Project was commissioned on 31.1.2019, and the Project was transferred to PGCIL after the State of Jammu and Kashmir was reconstituted into two UTs, namely, UT of Jammu and Kashmir and UT of Ladakh with effect from 31.10.2019. Subsequently, the SLTS project became a natural ISTS transmission project in line with Section 2(36) of the Act since the SLTS Project connects two different Union Territories, i.e., Jammu and Kashmir and Ladakh.

11. We have considered the submissions of the Petitioner. MoP vide letter dated 23.3.2021 approved the 220 kV Srinagar-Leh Transmission System as an ISTS. The relevant extracts of the letter dated 23.3.2021 are as under:

*"To  
The CMD,  
Power Grid Corporation of India Ltd (POWERGRID)  
Gurugram, Haryana*

*Sub: Maintenance of 220 kV Srinagar-Leh S/C Transmission System-Regading  
Sir,*

*I am directed to say that 220 kV Srinagar-Leh Transmission System (SLTS) was constructed by POWERGRID with 95% funding from Central Govt and 5% funding from State Government, and commissioned in 2019. As per agreement between POWERGRID and erstwhile Jammu and Kashmir Power Development Department (JKPDD), the said Srinagar Leh Transmission System (SLTS) was to be taken over by JKPDD after commissioning. However, JKPDD is yet to take over the system. Considering the importance of the system, POWERGRID is still maintaining the System, but it is not getting any maintenance charges.*

*2. The Technical Committee headed by CEA in the meeting held on 28.12.2020 (MOM at Annex I) inter-alia recommended that UT of J&K and UT Ladakh to communicate their*



consent regarding handing over the System as ISTS. UT of J&K and UT of Ladakh vide their letters 3.2.2021 (Annex-II) and dated 7.1.2021 (Annex-III) respectively have mentioned that they have no objection regarding declaration of 220 kV Srinagar-Leh Transmission System as Inter State Transmission System (ISTS)

3. In this regard, it may be noted as per Section 2(36) of the Electricity Act,2003, definition of inter-state transmission system includes “any system for the conveyance of electricity by means of main transmission line from the territory of one State to another State” and accordingly, **220 kV Srinagar-Leh Transmission System has automatically become an inter-state System, after bifurcation of erstwhile State of Jammu and Kashmir into UT of J&K and UT of Ladakh**

4. Keeping in view the importance of the Srinagar-Leh Transmission System and recommendation received from Technical Committee headed by CEA, and also the fact that both these UTs have given their consents for declaring the System as ISTS, **it is decided to transfer the 220 kV Sringar-Leh Transmission System to POWERGRID as ISTS.** The O&M charges prior to date of transfer would be shared between two UTs in proportion of respective line length in the UTs. POWERRID is advised to approach CERC for determination of tariff, so that CERC can decide tariff and other terms and conditions for the Srinagar-Leh Transmission System from the date of transfer, after hearing all the related parties including UT of J&K and UT of Ladakh, after considering POWERGRID’s operation and maintenance charges, as well as UT of J&K and UT of Ladakh’s contribution in the construction of the line. Date of formation of the two UTs of J&K and Ladakh’s contribution i.e. 31<sup>st</sup> October,2019 will be construed as date of transfer of above asset as ISTS to POWERRID.

5. This issues with the approval of Hon’ble Minister of State (Independent Charge) for Power and NRE and Minister of State for Skill Development and Entrepreneurship.”

12. Taking into consideration the above, the approval of the 220 kV Srinagar-Leh Transmission System (SLTS) is considered an ISTS transmission project in terms of Section 2(36) of the Act. Accordingly, the COD of the transmission assets is considered as 31.10.2019, i.e., the formation of the two UTs of J&K and UT of Ladakh.

### **Capital Cost**

13. Regulation 19 of the 2019 Tariff Regulations provides as under:

**“19 Capital Cost:** (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.

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

- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the



- actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
  - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
  - (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
  - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
  - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
  - (h) Adjustment of revenue earned by the transmission licensee by using the Asset-before the date of commercial operation;
  - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
  - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway.
  - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
  - (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
  - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
  - (n) Expenditure on account of change in law and force majeure events; and
  - (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
  - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
  - (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
  - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
  - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
  - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
  - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;



(b) *De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

*Provided that in case replacement of transmission Asset-is recommended by Regional Power Committee, such Asset-shall be decapitalised only after its redeployment;*

*Provided further that unless shifting of an Asset-from one project to another is of permanent nature, there shall be no de-capitalization of the concerned asset.*

(c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*

(d) *Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*

(e) *Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”*

14. The Petitioner has claimed the following capital cost to pay off the State’s contribution of 5% project cost to UT of J&K and UT of Ladakh and the expenditure towards the procurement of the T&Ps and the Spares for the 220 kV SLTS and has placed on record the copy of the Auditor’s Certificate in support of the same:

Approved Cost as per IA	Claimed cost as on 31.10.2019	Additional Capitalization			(₹ in lakh)
		2021-22	2022-23	2023-24	Estimated completion cost as on 31.03.2024
14442.00	0.00	65.84	10846.29	2955.19	13867.31

15. The Petitioner has submitted that the SLTS Project was constructed by the Petitioner with 95% funding from the Central Government and 5% funding from the State Government with an initial cost estimate of ₹178,841 lakhs. The MoP vide sanction order dated 6.6.2019 conveyed the approval of the Revised Cost Estimates (“RCE”) of the project at ₹209,896 lakh as per the actual cost incurred on the project.

16. The Petitioner has considered capital cost as per the actuals and the estimated expenditure against the IA dated 24.5.2021 for the estimated cost of ₹14442 lakhs comprising of ₹ 8942 lakhs for equity investment to pay off the State’s contribution of 5% project cost to UT of J&K and UT of Ladakh (which was paid by the Petitioner in FY 2022-23) and the expenditure of ₹ 5500 lakhs towards the procurement of the T&Ps and the Spares for the



SLTS Project which was transferred to PGCIL with effect from 31.10.2019. The original and subsequent RCE of the project, as approved by MoP, the T&Ps, and the Initial Spares were not included. In order to supply power through difficult hilly terrain and to minimize downtime in case of breakdown, dedicated T&Ps and Initial Spares are essential. Therefore, the T&Ps and the Initial Spares are being procured for the SLTS project under the IA dated 24.5.2021 in line with the norms of the T&Ps generally procured by PGCIL for its other transmission systems.

17. The Petitioner has submitted the expenditure of ₹4925 lakh for the T&Ps and the essential spares expected to be incurred up to FY 2023-24. Head-wise details of the actual/projected expenditure are as under:

Cost Head	Actual/Projected Expenditure			Total Expenditure till 31.03.2024
	2021-22	2022-23	2023-24	
Equity Investment to pay off the State contribution of 5% project cost	0.00	8942.00	0.00	8942.00
Expenditure towards procurement of the T&Ps and the Spares	65.84	1904.29	2955.19	4925.31
<b>Total Project Cost</b>				<b>13867.31</b>

18. The Petitioner has submitted that as against the FR approved cost of ₹14442.00 lakh, the estimated completion cost is ₹13867.31 lakh.

### **Initial Spares**

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

*“(d) Transmission System*

*(i) Transmission line: 1.00%*

*(ii) Transmission sub-station*

*- (Green Field): 4.00%*

*- (Brown Field): 6.00%*

*(iii) Series Compensation devices and HVDC Station: 4.00%*

*(iv) GIS Insulated Sub-station*



- (Green Field): 5.00%
- (Brown Field): 7.00%
- (v) Communication System: 3.50%
- (vi) Static Synchronous Compensator: 6.00%

20. The Petitioner has claimed the following Initial Spares:

(₹ in lakh)

Asset	Head	Plant and Machinery cost*	Ceiling as per Regulations (in %)	Allowable Initial Spares	Initial Spares claimed	Excess Initial Spares
Combined Asset	Sub-station (Green-field)	46207.73	5	1861.61	1529.11	Nil
	TL	108862.18	1	1098.38	122.73	Nil

\*inclusive of 95% of original project cost received as Central grant portion for computation of allowable spares only.

21. The Petitioner has submitted that the Initial Spares claimed are within the allowable limits as per the 2019 Tariff Regulations. It is noticed that the Petitioner has claimed the Initial Spares based on the total Project cost, including 95% of the original Project cost of the Central Grant portion. The Petitioner vide RoP dated 31.1.2024 was directed to furnish the details of the Initial Spares claimed for the sub-stations (₹1529.11 lakh) and the transmission line (₹ 122.73 lakh). In response, the Petitioner has submitted the details of estimates for the T&P for the SLTS. However, the Petitioner did not submit the details for the Initial Spares claimed based on the Plant & Machinery cost up to the cut-off date and how much amount is funded by the Central Government. Accordingly, the Petitioner is directed to submit the same at the time of truing up. We have considered and allowed the claimed Initial Spares subject to truing-up.

#### **Additional Capital Expenditure (“ACE”)**

22. The Petitioner has submitted that the admissibility of the ACE incurred after the COD is to be dealt with in accordance with the provisions of Regulation 24 of the 2019 Tariff Regulations, which provides as under:

**“24. Additional Capitalisation within the original scope and up to the cut-off date**

- (1) The additional capital expenditure in respect of a new project or an existing project





*incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

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

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

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

23. The Petitioner has submitted that the element-wise details of ACE claimed have already been submitted vide Form-7. The Petitioner has further submitted that the additional capitalization incurred in the contextual assets is on account of the undischarged liability towards the final payment/withheld payment due to the contractual exigencies for works executed within the cut-off date under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has submitted the details of ACE as under:

<b>Description</b>	<b>₹ in lakh</b>	<b>Remarks</b>
5% cost of UTs & J&K share	8942.00	State contribution of 5% project costs to UT of J&K and Ladakh
T&P	3273.47	Proposed Additional Capitalisation
TL Spares	122.73	
SS Spares	1529.11	
<b>Total</b>	<b>13867.31</b>	

24. The Petitioner has submitted that the claim of the additional capitalization, details of the works carried out during the 2019-24 tariff period, including the works against which balance/retention payments were projected to be made, are as follows:



<b>Expenditure details incurred in FY 2021-22</b>			
<b>S. No.</b>	<b>Particulars</b>	<b>Amount (₹ in lakh)</b>	<b>Remarks</b>
1	Payment against T&P to M/S Amin Sons Agritech	338000.00	Sub-stations
2	Payment against T&P to M/S Beacon Enovation Technology	1176224.00	
3	Payment against T&P to M/S Mahabali Industries	304000.10	
4	Payment against T&P to M/S Motwane Manufacturion C. Pvt Ltd	2006000.00	
5	Payment against T&P to M/S Sonel Instruments India Pvt Ltd	2643468.00	
6	Payment against T&P to M/S Top Syringe Mfg Co. Pvt Ltd	115920.00	
7	<b>Total (Rs)</b>	<b>6583612.10</b>	
8	<b>Total (Rs Lakh)</b>	<b>65.84</b>	

<b>Expenditure details incurred in FY 2022-23</b>			
<b>S. No.</b>	<b>Particulars</b>	<b>Amount (₹ In Lakh)</b>	<b>Remarks</b>
1	Work already executed estimates kept for release of payment of equity investment to pay off the state contribution of 5% project cost to UTs of J&K and Ladakh (as per approval)	569.96	Building & Civil works
2	Estimates kept for procurement of T&P and spares under TL head for 2022-23	5531.89	Transmission Line
3	Work already executed estimates kept for release of payment of equity investment to pay off the state contribution of 5% project cost to UTs of J&K and Ladakh (as per approval)	354.37	
4	Estimates kept for procurement of T&P and spares under S/S head for 2022-23	2348.07	Sub-station
5	Work already executed estimates kept for release of payment of equity investment to pay off the state contribution of 5% project cost to UTs of J&K and Ladakh (as per approval)	1549.91	
6	Estimates kept for procurement of T&P and spares under TL head for 2023-24	471.85	PLCC/ Communication System
7	Estimates kept for procurement of T&P and spares under S/S head for 2023-24	20.24	IT Equipment
8	<b>Total (Rs Lakh)</b>	<b>10846.29</b>	

<b>Expenditure details incurred in FY 2023-24</b>			
<b>S. No.</b>	<b>Particulars</b>	<b>Amount (₹ in lakh )</b>	<b>Remarks</b>
1	Estimates kept for procurement of T&P and spares under TL head for 2023-24	531.56	Transmission Line
2	Estimates kept for procurement of T&P and spares under S/S head for 2023-24	2423.63	Sub-station
8	<b>Total (Rs Lakh)</b>	<b>2955.19</b>	

25. The Petitioner has also submitted the details of the estimated T&Ps for the SLTS Project as under:



S. No.	Item Description	Quantity	Estimated rate (including GST) (₹)	Total estimated Amount (including GST) (₹)
1	Automatic third Harmonic Resisitive Current (THRC) Measurement Kit suitable for monitoring gapless LA	2	1500000	3000000
2	Digital insulation tester, low-voltage (250V, 500V, 1000V) Battery operated	4	108250	433000
3	Digital Automation contact Resistance meter	4	256797	1027188
4	Transformer oil BDV test set	4	495000	1980000
5	DGA glass syringes	80	1818	145440
6	Oil sampling bottles	80	4499	359920
7	Digital earth resistance/resistivity meter-battery operated	4	234000	936000
8	DC Earth fault locator	4	625000	2500000
9	Digital Insulation tester, battery opearted-10 kV (500V, 1000V, 2.5kV, 5.0kV, 10kV), suitable for PI measurement	4	429767	1719068
10	6 KLPH offline transformer oil filtration plant	4	3579000	14316000
11	Mobile dry air plant (heatless type)	4	2324895	9299580
12	Automatic battery discharge kit	2	2845392	5690784
13	Battery opearted platform trolley, Min capacity of 2000kg	4	1156500	4626000
14	Automatic relay test kit	4	3776000	15104000
15	TFR Kit	2	557550	1115100
16	Procurement of cameras for TL Patrolling	6	131300	787800
17	Multimeters, clamp of meters, etc	Lot	478660	478660
18	C& Tan Delta Kit	4	3032910	12131640
19	Transformer Winding resistance meters	1	742500	742500
20	Automatic transformer turns ratio meter	1	2006000	2006000
21	Snow blowers for Drass & Kargil	2	222222	444444
22	RTD/Thermocouple Calibrator	1	810000	810000
23	Digital clamp on meters	Lot	1088143	1088143
24	Procurement of PPEs for sub-station and transmission line in SLTS under NR II region	Lot	3409600	3409600
25	Hand held laser range finder for Kargil	1	205000	205000



S. No.	Item Description	Quantity	Estimated rate (including GST) (₹)	Total estimated Amount (including GST) (₹)
26	Hand held laser range finder Leh	1	205000	205000
27	Procurement of hand trolley (01 Ton) for all 04 Nos GIS under SLTS	4	124000	496000
28	Procurement of 02 no chain saw cutter for maintenance of Srinagar Leh Transmission line	2	55560	111120
29	Procurement of Bench vice and various measuring tapes for all 04 Nos GIS under SLTS	1	48376	48376
30	Thermo vision Camera High-end	1	2360000	2360000
31	Supply of Tools & Plants for TL	1	4822823	4822823
32	Special T&P for TL	Lot	3206188	3206188
33	Hydraulic T&P for TL	LS	2826100	2826100
34	PP ropes for all sub-station of SLTS	LS	271992	271992
35	Heavy duty drill machine for all Sub-station of SLTS	4	207000	828000
36	ERS	1	55000000	55000000
37	Portable moisture test kit/measuring sensors	2	985300	1970600
38	Procurement of cameras for TL Patrolling	6	333588	2001528
39	Portable welding set for all sub-stations of SLTS	4	140000	560000
40	Power Minch Machine for TL at Leh & Kargil	2	2621724	5243448
41	Portable DGA Kit	1	3797800	3797800
42	Light Meter (Lux Meter) for measurement of light for GIS Kargil	1	20000	20000
43	Sound/Noise Level Meter for GIS Kargil	1	13215	13215
44	CT Analyser	1	2832000	2832000
45	Automatic third Harmonic Resistive Current (THRC) Measurement Kit suitable for monitoring gapless LA (for Drass & Khlasti)	2	1433000	2866000
46	Digital Temperature Meter (Having remote sensor) for Kargil Sub-station	1	14160	14160
47	Procurement of 1 No digital temperature meter (having remote sensor) for 220/66 kV GIS Phyang Sub-station under SLTS	1	14160	14160



S. No.	Item Description	Quantity	Estimated rate (including GST) (₹)	Total estimated Amount (including GST) (₹)
48	Electric Oven for GIS Kargil	1	21850	21850
49	Procurement of 1 No Electric Oven for GIS Phyang under SLTS	1	21850	21850
50	Procurement of 1 No Soldering station for GIS Kargil under SLTS	1	18487.99	18487.99
51	Procurement of 1 No Soldering station for GIS Phyang under SLTS	1	22500	22500
52	Procurement of 2 No phase sequence indicators for checking for correct sequence in 3 phase system at Kargil	2	16000	32000
53	Procurement of 1 No sound/noise level meter for 220/66kV GIS Phyang under SLTS	1	13214.87	13214.87
54	Thermovision Camera Low-end	4	4219680	16878720
55	Primary current injection Kit	1	675000	675000
56	Articulating Boom Lifts	4	19964873	79859492
57	Cable fault locator	LS	54159931	54159931
58	Procurement of various types of Ladders for all 04 Nos GIS under SLTS	Lot	1779184	1779184
			<b>Net Total</b>	<b>327346606.86</b>

26. The Petitioner vide ROP dated 31.1.2024, was directed to submit the following information:

(a) Whether the RPC /standing committee approved the proposed Add-Cap for the subject transmission asset.

(b) About the claim of additional capitalization, details of works carried out during the 2019-24 period, including the works against which balance/retention payments are projected to be made along with detailed justification in line with relevant provisions of the 2019 Tariff Regulations, 2019.

(c) Detailed policy for procurement of T&P and Spares.

27. The Petitioner, vide affidavit dated 16.2.2024, has submitted that the works related to the major upgradation/ modification of the existing assets are generally taken up for discussion in RPCs. With regard to the proposed Additional Capitalization of ₹8942 lakh is towards the equity investment to pay off the State's contribution of 5% of project cost (now



UT of J&K and UT of Ladakh). The remaining ₹ 5500 lakh is towards the procurement of the Spares and the T&Ps. PGCIL generally procures the spares and the T&Ps in its project as a part of the initial project cost, wherever required. However, the aforesaid SLTS was executed by PGCIL as PMC on behalf of the ultimate owner, i.e., PDD, J&K. In the original Detailed Project Report (DPR) and subsequent RCE of the project as approved by MoP, the T&Ps and the requisite Initial Spares were not included. In order to supply power through difficult hilly terrain and to minimize downtime in case of a breakdown, dedicated T&Ps, and Initial Spares are essential. Therefore, the T&Ps and the Initial Spares are being procured for the SLTS Project under the IA dated 24.5.2021 in line with the norms of the T&Ps generally procured by PGCIL for its other transmission systems. Therefore, a separate approval from the RPC Standing Committee has not been considered. The Petitioner has further submitted that the T&P and the spares are critical for the smooth functioning of the instant projects, and the cable fault locator has been procured in the instant project due to the following reasons:

- Under SLTS, a 220-kV cable has been installed in a portion of the 220-kV Alusteng–Drass Line. The SLTS scheme operates on a radial system at 220 kV level, and any outage of this line results in a blackout in the Ladakh Region. It has been observed from the previous history of cable faults at these sites that the lead time for hiring an agency for fault identification, its deployment, and successful fault identification is around 10-15 days. Further, the laying of the additional 15 km (approx.) cable in the 220 kV Alusteng–Drass Line in the Zozi-La section as an alternate path is under progress to ensure uninterrupted power supply to the Ladakh Region during the winter season. Considering the difficulty in the deployment of cable fault locator systems in the J&K and Ladakh Region due to remoteness and extreme climatic conditions, procurement of cable fault locator is being undertaken. The availability of the cable fault locator system can significantly reduce the dependency on external fault locating



agencies and effectively curtail the high lead time, ensuring timely identification and subsequent restoration in case of a cable fault. A similar cable fault locating system has also been purchased in the HVDC Trichur Project. The Petitioner has also shared the list of essential spares for sub-station equipment and transmission systems.

28. We have gone through the details of the estimates of the T&Ps for the SLTS project as submitted by the Petitioner as ACE. There is no separate provision to allow the ACE under Regulations 24 (1) and (2), Regulation 25 (1) and (2), and Regulation 26(1) and (2) with respect to the T&P spares in the 2019 Tariff Regulations. It is noticed that the Petitioner has proposed 58 items under T&P with an estimated cost of ₹3273 lakh. It is also observed that the line passes through difficult mountainous terrain in Minamarg to Zozi-La top portion of the Alusteng- Drass 220 kV section, which is also an avalanche-prone zone, and the transmission line traverses through heavy snowfall zones. In view of Regulations 24 (1) and (2), 25 (1) and (2) and 26 (1) and (2) of the 2019 Tariff Regulations, various items claimed by the Petitioner under the T&P cannot be allowed.

29. Regulations 76 and 77 of the 2019 Tariff Regulations provide as under:

*“76. Power to Relax. The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person.*

*77. Power to Remove Difficulty: If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations.”*

30. It is an established principle of law that the power to relax and the power to remove difficulty have to be strictly construed and are to be exercised judiciously and with caution. Further, the power to relax and the power to remove difficulty are to be exercised only when undue hardship is caused by the application of the rules or regulations. Accordingly, we deem it appropriate to relax the provisions of Regulations 24 (1) and (2), 25 (1) and (2), and



26 (1) and (2) of the 2019 Tariff Regulations to allow T&P spares in the 2019 Tariff Regulations keeping in mind the peculiar circumstances of the case such as presence of the defense establishments in the area, its strategic importance as well as the need to maintain the transmission line for reliability of power in Ladakh Region. Therefore, the Commission, in the exercise of powers conferred under Regulations 76 and 77 of the 2019 Tariff Regulations, hereby relaxes the provisions of Regulations 24 (1) and (2), 25 (1) and (2), and 26 (1) and (2) of the 2019 Tariff Regulations. Accordingly, the Spares required for the smooth operation of the transmission asset, out of the total claim of ₹3273 lakhs, an amount of ₹ 3175 lakhs towards the T&P and the Spares is allowed, and an amount of ₹ 98 lakhs towards the T&P and the Spares claimed is disallowed. It is clarified that the present case should not be treated as a precedent for the relaxation of tariff regulations. The details of T&P and spares allowed and disallowed are as follows:

(₹ in lakh)

<b>T&amp;Ps for SLTS</b>				
S. No.	Item Description	Quantity	Estimated rate (including GST) (₹)	Total estimated Amount (including GST) (₹)
<b>T&amp; P allowed under Power to relax</b>				
1	Automatic third Harmonic Resisitive Current (THRC) Measurement Kit suitable for monitoring gapless LA	2	1500000	3000000
2	Digital insulation tester, low-voltage (250V, 500V, 1000V) Battery operated	4	108250	433000
3	Digital Automation contact Resistance meter	4	256797	1027188
4	Transformer oil BDV test set	4	495000	1980000
5	Digital earth resistance/resistivity meter-battery operated	4	234000	936000
6	DC Earth fault locator	4	625000	2500000
7	Digital Insulation tester, battery opearted-10 kV (500V, 1000V, 2.5kV, 5.0kV, 10kV), suitable for PI measurement	4	429767	1719068





8	6 KLPH offline transformer oil filtration plant	4	3579000	14316000
9	Battery operated platform trolley, Min capacity of 2000kg	4	1156500	4626000
10	Automatic relay test kit	4	3776000	15104000
11	TFR Kit	2	557550	1115100
12	C& Tan Delta Kit	4	3032910	12131640
13	Transformer Winding resistance meters	1	742500	742500
14	Automatic transformer turns ratio meter	1	2006000	2006000
15	Snow blowers for Drass & Kargil	2	222222	444444
16	RTD/Thermocouple Calibrator	1	810000	810000
17	Procurement of PPEs for sub-station and transmission line in SLTS under NR II region	Lot	3409600	3409600
18	Hand held laser range finder for Kargil	1	205000	205000
19	Hand held laser range finder Leh	1	205000	205000
20	Procurement of hand trolley (01 Ton) for all 04 Nos GIS under SLTS	4	124000	496000
21	Procurement of 02 no chain saw cutter for maintenance of Srinagar Leh Transmission line	2	55560	111120
22	Thermovision Camera High-end	1	2360000	2360000
23	PP ropes for all sub-station of SLTS	LS	271992	271992
24	Heavy duty drill machine for all Sub-station of SLTS	4	207000	828000
25	ERS	1	55000000	55000000
26	Portable welding set for all sub-station of SLTS	4	140000	560000
27	Power Minch Machine for TL at Leh & Kargil	2	2621724	5243448
28	Light Meter (Lux Meter) for measurement of light for GIS Kargil	1	20000	20000
29	Sound/Noise Level Meter for GIS Kargil	1	13215	13215
30	CT Analyser	1	2832000	2832000
31	Digital Temperature Meter (Having remote sensor) for Kargil Sub-station	1	14160	14160
32	Procurement of 1 No. digital temperature meter (having remote sensor) for 220/66kV GIS Phyang Sub-station under SLTS	1	14160	14160



33	Procurement of 1 No Soldering station for GIS Kargil under SLTS	1	18487.99	18487.99
34	Procurement of 1 No Soldering station for GIS Phyang under SLTS	1	22500	22500
35	Procurement of 2 No phase sequence indicators for checking for correct sequence in 3 phase system at kargil	2	16000	32000
36	Primary current injection Kit	1	675000	675000
37	Articulating Boom Lifts	4	19964873	79859492
38	Cable fault locator	LS	54159931	54159931
39	Procurement of various types of Ladders for all 04 Nos GIS under SLTS	Lot	1779184	1779184
40	Mobile dry air plant (heatless type)	4	2324895	9299580
41	Automatic battery discharge kit	2	2845392	5690784
42	Supply of Tools & Plants for TL	1	4822823	4822823
43	Special T&P for TL	Lot	3206188	3206188
44	Hydraulic T&P for TL	LS	2826100	2826100
45	Portable DGA Kit	1	3797800	3797800
46	Thermovision Camera Low-end	4	4219680	16878720
<b>Total T&amp;P allowed</b>			<b>31754333224.99</b>	

<b>T&amp;P not allowed</b>				
S. No.	Item Description	Quantity	Estimated rate (including GST) (₹)	Total estimated Amount (including GST) (₹)
1	DGA glass syringes	80	1818	145440
2	Oil sampling bottles	80	4499	359920
3	Procurement of cameras for TL Patrolling	6	131300	787800
4	Multimeters, clamp of meters, etc	Lot	478660	478660
5	Digital clamp on meters	Lot	1088143	1088143
6	Procurement of Bench vice and various measuring tapes for all 04 Nos GIS under SLTS	1	48376	48376
7	Portable moisture test kit/measuring sensors	2	985300	1970600
8	Procurement of cameras for TL Patrolling	6	333588	2001528



9	Automatic third Harmonic Resisitive Current(THRC) Measurement Kit suitable for monitoring gapless LA (for Drass & Khlasti)	2	1433000	2866000
10	Electric Oven for GIS Kargil	1	21850	21850
11	Procurement of 1 No Electric Oven for GIS Phyang under SLTS	1	21850	21850
12	Procurement of 1 No sound/noise level meter for 220/66kV GIS Phyang under SLTS	1	13214.9	13214.87
	<b>Total not allowed</b>			<b>9803381.87</b>

31. Accordingly, we allowed the ACE in terms of Regulations 24(1)(a), 24(1)(b), 23(d), and 76 of the 2019 Tariff Regulations towards undischarged liabilities recognized to be payable at a future date and the balance work deferred for execution, as under:

(₹ in lakh)

Particulars	Regulations	ACE allowed		
		2021-22	2022-23	2023-24
Balance and retention payments for liabilities other than IDC	24(1)(a) and 24(1)(b) of 2019 TR	65.84	8942.00	0.00
Estimates for T&P Spares	76 of 2019 TR	0.00	279.86	2895.56
T/L Spares	23(d) of 2019 TR	0.00	122.73	0.00
Sub-station Spares	23(d) of 2019 TR	0.00	1463.27	0.00
IDC Discharged after COD		0.00	0.00	0.00
<b>Total ACE</b>		<b>65.84</b>	<b>10807.87</b>	<b>2895.56</b>

32. The capital cost allowed in respect of the transmission assets for 2019-24 tariff period is as follows:

(₹ in lakh)

Admitted capital cost as on COD (31.10.2019)	(ACE)			Capital Cost as on 31.3.2024
	2021-22	2022-23	2023-24	
0.00	65.84	10807.87	2895.56	13769.28

33. The Petitioner is directed to furnish the details of funds received/released by the Government of India up to COD and post COD; funds deployed by the Petitioner along with



the terms and conditions of the Central Government regarding utilization of the funds and the balance thereof at the time of truing-up.

### **Debt-Equity Ratio**

34. Regulations 18 of the 2019 Tariff Regulations provides as follows:

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

*Provided that:*

*i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*

*ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*

*iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*

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

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

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

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

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

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

*(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and*



renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

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

35. The Petitioner has claimed 100% equity investment for the 5% share of J&K amounting to ₹ 8942 lakh, which was paid during FY 2022-23 as per the option given vide letter No. Chmn/JKPTCL/KMR/01-06/01 dated 17.4.2021. Further, the Petitioner has claimed the Debt Equity Ratio of 70:30 for procurement of the T&Ps and the Spares incurred by the Petitioner. The same has been considered by the Commission. However, the Petitioner is directed to provide the justification for consideration of ₹ 8942 lakhs (i.e.,5% share of J&K) as equity and the approval of the MoP for treating the same equity at the time of truing-up. However, the claimed debt equity ratio has been considered as under:

Funding	2021-22 (₹ in lakh)	(in %)	2022-23 (₹ in lakh)	(in %)	2023-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	46.09	70.00	1306.11	12.08	2026.89	70.00	3379.09	24.54
Equity	19.75	30.00	9501.76	87.92	868.67	30.00	10390.18	75.46
<b>Total</b>	<b>65.84</b>	<b>100.00</b>	<b>10807.87</b>	<b>100.00</b>	<b>2895.56</b>	<b>100.00</b>	<b>13769.28</b>	<b>100</b>

### Depreciation

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

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

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

(2) The value base for the purpose of depreciation shall be the capital cost of the Asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of



*the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the Asset-for part of the year, depreciation shall be charged on pro rata basis.*

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

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

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

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

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

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

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

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

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

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

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

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



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

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

37. We have considered the submissions of the Petitioner. The depreciation has been worked out considering the admitted capital expenditure as on the COD and expenditure incurred/projected to be incurred during the 2019-24 tariff period. The Weighted Average Rate of Depreciation (WAROD) at Annexure has been worked out as per the rates of depreciation specified in the 2019 Tariff Regulations. Depreciation allowed in respect of the transmission assets for the 2019-24 tariff period is as follows:

(₹ in lakh)

	Particulars	2021-22	2022-23	2023-24
A	Opening Gross Block	0.00	65.84	10873.71
B	Addition during the year 2019-24 due to projected ACE	65.84	10807.87	2895.56
C	Closing Gross Block (A+B)	65.84	10873.71	13769.28
D	Average Gross Block (A+C)/2	32.92	5469.78	12321.49
E	Average Gross Block (90% depreciable assets)	32.92	5459.66	12301.25
F	Average Gross Block (100% depreciable assets)	0.00	10.12	20.24
G	Depreciable value (excluding IT equipment and software) (E*90%)	29.63	4913.69	11071.13
H	Depreciable value of IT equipment and software (F*100%)	0.00	10.12	20.24
I	Total Depreciable Value (G+H)	29.63	4923.81	11091.37
J	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.24	5.25
K	Lapsed useful life at the beginning of the year (Year)	1	2	3
L	Balance useful life at the beginning of the year (Year)	24	23	22
<b>M</b>	<b>Depreciation during the year (D*J)</b>	<b>1.74</b>	<b>286.74</b>	<b>646.44</b>
N	Cumulative Depreciation at the end of the year	1.74	288.47	934.91



	Particulars	2021-22	2022-23	2023-24
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	27.89	4635.34	10156.46

### **Interest on Loan (IoL)**

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

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

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

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

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

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

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

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

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

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

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

39. The Weighted Average Rate of Interest on Loan (WAROI) has been considered on the basis of the rates prevailing as on the COD for the respective loans. The Petitioner has prayed that the change in interest rate due to the floating rate of interest is applicable, if any, during





the 2019-24 tariff period may be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of truing-up.

40. IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations and allowed in respect of the transmission assets as under:

(₹ in lakh)				
	Particulars	2021-22	2022-23	2023-24
A	Gross Normative Loan	0.00	46.09	1352.20
B	Cumulative Repayments up to Previous Year	0.00	1.74	288.47
C	Net Loan-Opening (A-B)	0.00	44.35	1063.72
D	Addition due to ACE	46.09	1306.11	2026.89
E	Repayment during the year	1.74	286.74	646.44
F	Net Loan-Closing (C+D-E)	44.35	1063.72	2444.18
G	Average Loan (C+F)/2	22.17	554.04	1753.95
H	Weighted Average Rate of Interest on Loan (in %)	5.95	5.95	5.95
I	<b>Interest on Loan (G*H)</b>	<b>1.32</b>	<b>32.97</b>	<b>104.36</b>

### **Return on Equity (RoE)**

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

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

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

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

*Provided further that:*

*i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*

*ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the*



concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

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

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

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

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

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

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;

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



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

42. The Petitioner has submitted that the MAT rate is applicable to the Petitioner's Company. The applicable MAT rate has been considered for the purpose of RoE, which will be trued-up in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission assets is as follows:

(₹ in lakh)				
	Particulars	2021-22	2022-23	2023-24
A	Opening Equity	0.00	19.75	9521.51
B	Addition due to ACE	19.75	9501.76	868.67
C	Closing Equity (A+B)	19.75	9521.51	10390.18
D	Average Equity (A+C)/2	9.88	4770.63	9955.85
E	Return on Equity (Base Rate) (in %)	15.50	15.50	15.50
F	Tax Rate applicable (in %)	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax) (in %)	18.782	18.782	18.782
H	<b>Return on Equity (D*G)</b>	<b>1.85</b>	<b>896.00</b>	<b>1869.86</b>

### Operation & Maintenance Expenses (O&M Expenses)

43. O&M Expenses claimed by the Petitioner for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
Transmission lines	38.16	94.24	97.84	101.11	104.75
Substation	204.80	507.23	525.14	543.39	562.65
Communication system	0.00	0.00	0.00	0.00	0.00
Total O&M Expenses	256.44	634.78	657.45	680.20	704.33

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



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

<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.26	0.27	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis



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

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

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

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

45. We have considered the submissions of the Petitioner. The Petitioner has submitted that the O&M rates for the 220 kV Single Circuit Underground Cable are not provided in the 2019 Tariff Regulations. O&M charges for the Gagangir-Shitkari (6.215 km) portion of the 220 kV Alusteng (Srinagar)-Drass S/c transmission line is calculated considering the approved O&M rates of Multi Circuit (Twin Conductor) AC line under Regulation 76 (Power to Relax) & Regulation 77 (Power to Remove Difficulty) of 2019 Tariff Regulations.

46. The O&M expenses allowed for the transmission assets covered under the instant tariff Petition are as follows:

(₹ in lakh)

Transmission lines	Line length in KM	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
220 KV ALSTUNG-DRASS S/C transmission line	115.80	12.20	30.108	31.266	32.308	33.47



220 KV DRASS - KARGIL S/C transmission line	61.00	6.43	15.86	16.47	17.02	17.63
220 KV KARGIL KHALSTI (UPTO HANISKOOT) S/C transmission line	96.71	10.19	25.14	26.11	26.98	27.95
220 KV KHALSTI-PHYANG (LEH) S/C transmission line	61.50	6.48	15.99	16.61	17.16	17.77
		<b>35.29</b>	<b>87.10</b>	<b>90.45</b>	<b>93.47</b>	<b>96.82</b>
66 KV CHUTAK KARGIL & SHARGOLE KARGIL D/C transmission line	0.202	0.03	0.08	0.08	0.08	0.09
66 KV LILO OF LEH KHARU D/C transmission line	16.11	2.54	6.30	6.51	6.75	6.98
66 KV LILO OF LEH NIMOO D/C transmission line	2.21	0.35	0.86	0.89	0.93	0.96
220 kV S/C UG cable- 220 kV Alstang-Drass (Between GAGANGIR-SHITKARAI) *	6.20	4.00	9.91	10.25	10.62	10.99
		<b>6.92</b>	<b>17.15</b>	<b>17.74</b>	<b>18.38</b>	<b>19.01</b>

\*O&M for 220 kV S/C Underground Cable has been approved under Regulation 76 & 77 of the 2019 Tariff Regulations.

(₹ in lakh)

Substation	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
3 No. of 220 kV GIS bays at Drass Substation	19.76	48.93	50.65	52.42	54.26
3 No. of 220 kV GIS bays at Khalsti Substation	19.76	48.93	50.65	52.42	54.26
4 No. of 220 kV GIS bays a LEH Substation	26.35	65.24	67.54	69.89	72.35
5 No. of 220 kV GIS bays at Kargil Substation	32.93	81.55	84.42	87.36	90.44
	<b>98.80</b>	<b>244.65</b>	<b>253.26</b>	<b>262.08</b>	<b>271.32</b>
2 No. of 132 kV GIS bays at Drass Substation	9.41	23.30	24.12	24.96	25.84



6 No. of 132 kV GIS bays at Kargil Sub-station	28.23	69.89	72.37	74.89	77.53
2 No. of 132 kV GIS bays at Khalsti Sub-station	9.41	23.30	24.12	24.96	25.84
6 No. of 132 kV GIS bays at Leh Sub-station	28.23	69.89	72.37	74.89	77.53
1 no. of 132 kV GIS bay at Khalsti	4.71	11.65	12.06	12.48	12.92
1 no. of 132 kV GIS bay at Drass	4.71	11.65	12.06	12.48	12.92
	<b>84.70</b>	<b>209.66</b>	<b>217.10</b>	<b>224.66</b>	<b>232.60</b>
50 MVA ICT -1 at Drass Substation	5.12	12.70	13.15	13.60	14.10
50 MVA ICT-1 at Kargil Substation	5.12	12.70	13.15	13.60	14.10
50 MVA ICT-2 at Kargil Substation	5.12	12.70	13.15	13.60	14.10
50 MVA ICT-1 at Khalsti Substation	5.12	12.70	13.15	13.60	14.10
50 MVA ICT-1 at Leh Substation	5.12	12.70	13.15	13.60	14.10
50 MVA ICT-2 at Leh Substation	5.12	12.70	13.15	13.60	14.10
Total O&M towards ICTs	<b>30.73</b>	<b>76.20</b>	<b>78.90</b>	<b>81.60</b>	<b>84.60</b>
<b>Total Substation</b>	<b>214.23</b>	<b>530.51</b>	<b>549.26</b>	<b>568.34</b>	<b>588.52</b>

47. The break-up of the O&M Expense approved for the 220 kV Srinagar-Leh Transmission System (SLTS) is as follows:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
220 kV S/C (Single Conductor)	35.29	87.10	90.45	93.47	96.82
132 kV D/C Single Conductor	2.92	7.24	7.48	7.76	8.02
220 kV S/C Underground Cable*	4.00	9.91	10.25	10.62	10.99
220 KV GIS Bays	98.80	244.65	253.26	262.08	271.32
132 kV GIS Bays	84.70	209.66	217.10	224.66	232.60
220 KV 6*50 MVA Transformer	30.73	76.20	78.90	81.60	84.60
<b>Total</b>	<b>256.44</b>	<b>634.77</b>	<b>657.45</b>	<b>680.19</b>	<b>704.35</b>

48. Considering the Petitioner's submissions, we approve the following O&M Expenses:



(₹ in lakh)

Particulars	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
220 kV Srinagar-Leh Transmission System (SLTS)	256.44	634.77	657.45	680.19	704.35

49. The Petitioner will submit the actual O&M Expenses towards the 220 kV S/C Underground Cable at the time of truing-up.

### **Interest on Working Capital (IWC)**

50. Regulations 34(1)(c), 34(3), 34(4), and 3(7) of the 2019 Tariff Regulations provide as follows:

*“34. Interest on Working Capital: (1) The working capital shall cover: .....  
(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:*

*(i) Receivables equivalent to 45 days of annual fixed cost;*

*(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*

*(iii) Operation and maintenance expenses, including security expenses for one month.”*

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

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

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

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

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

51. IWC has been worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) on working capital is considered as 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 @ 8.55% plus 350 basis points) for FY 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 @ 7.75% plus 350 basis points) for FY 2020-21, 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 @ 7.00% plus 350 basis points) for FY 2021-22, 10.50% (SBI 1 year MCLR applicable as on 1.4.2022 @ 7.00% plus





350 basis points) for FY 2022-23 and 12.00% (SBI 1 year MCLR applicable as on 1.4.2023 @ 8.50% plus 350 basis points) for FY 2023-24.

52. The components of the working capital and interest allowed thereon are as follows:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M expenses for one month)	51.12	52.90	54.79	56.68	58.70
Working Capital for Maintenance Spares (15% of O&M expenses)	92.02	95.21	98.62	102.03	105.65
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges)	78.71	81.44	84.74	238.89	417.40
<b>Total Working Capital</b>	<b>221.85</b>	<b>229.55</b>	<b>238.15</b>	<b>397.60</b>	<b>581.74</b>
Rate of Interest for working capital (in %)	12.05	11.25	10.50	10.50	12.00
<b>Interest on working capital</b>	<b>11.18</b>	<b>25.82</b>	<b>25.01</b>	<b>41.75</b>	<b>69.81</b>

### Annual Fixed Charges for the 2019-24 Tariff Period

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

Particulars	(₹ in lakh)				
	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
Depreciation	0.00	0.00	1.74	286.74	646.44
Interest on Loan	0.00	0.00	1.32	32.97	104.36
Return on Equity	0.00	0.00	1.85	896.00	1869.86
O&M Expenses	256.44	634.77	657.45	680.19	704.35
Interest on Working Capital	11.18	25.82	25.01	41.75	69.81
<b>Total</b>	<b>267.62</b>	<b>660.59</b>	<b>687.37</b>	<b>1937.63</b>	<b>3394.81</b>

### Filing Fee and Publication Expenses

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



Regulations.

### **Licence Fee and RLDC Fees and Charges**

55. The Petitioner has sought reimbursement of the licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations. The Petitioner shall be entitled to reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall be entitled to recovery of the RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

### **Goods and Services Tax**

56. The Petitioner has submitted that if GST is levied at any rate and at any point of time in the future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further, the additional taxes, if any, are to be paid by the Petitioner on account of the demand from the Government/Statutory Authorities, the same may be allowed to be recovered from the beneficiaries. We have considered the submissions of the Petitioner. Since GST is not levied on transmission service at present, the Petitioner's prayer is premature.

### **Security Expenses**

57. The Petitioner has submitted that security expenses in respect of the transmission assets are not claimed in the instant Petition, and it would file a separate Petition for claiming the overall security expenses and the consequential IWC as per Regulation 35(3)(c) of the 2019 Tariff Regulations.



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

### **Capital Spares**

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

### **Sharing of Transmission Charges**

60. With effect from 1.11.2020, the sharing of the transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the billing, collection, and disbursement of transmission charges shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

61. To summarize, the AFC allowed in respect of the transmission assets for the 2019-24 tariff period in this order is as follows:

Particulars	(₹ in lakh)				
	2019-20 (pro-rata for 153 days)	2020-21	2021-22	2022-23	2023-24
AFC	267.62	660.59	687.37	1937.63	3394.81

62. The Annexure to this order forms part of the order.



63. This order disposes of Petition No. 87/TT/2023 in terms of the above findings and discussions.

**sd/-  
(Harish Dudani)  
Member**

**sd/-  
(Ramesh Babu V.)  
Member**

**sd/-  
(Jishnu Barua)  
Chairperson**



**Annexure**

(₹ in lakh)

Capex	Admitted Capital Cost as on COD	Projected ACE			Admitted Capital Cost as on 31-03-2024	Dep Rate	Annual Depreciation		
		2021-22	2022-23	2023-24			2021-22	2022-23	2023-24
Building	0.00	0.00	569.96	0.00	569.96	3.34%	0.00	9.52	19.04
Substation	0.00	65.84	3882.68	2374.74	6323.25	5.28%	1.74	105.98	271.17
Transmission Line	0.00	0.00	5863.15	520.83	6383.97	5.28%	0.00	154.79	323.32
PLCC	0.00	0.00	471.85	0.00	471.85	6.33%	0.00	14.93	29.87
IT Equipment	0.00	0.00	20.24	0.00	20.24	15.00%	0.00	1.52	3.04
<b>Total</b>	<b>0.00</b>	<b>65.84</b>	<b>10807.87</b>	<b>2895.56</b>	<b>13769.28</b>		<b>1.74</b>	<b>286.74</b>	<b>646.44</b>
						<b>Avg. Gross Block</b>	<b>32.92</b>	<b>5469.78</b>	<b>12321.49</b>
						<b>WAROD</b>	<b>5.28%</b>	<b>5.24%</b>	<b>5.25%</b>

