

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 22/TT/2021

Coram:

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

Date of Order: 31.05.2023

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for determination of transmission tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Asset 1: 220 kV Kishanganga-Wagoora D/C line Partially on M/C tower along with associated bays at Wagoora Sub-station under "Transmission system associated with Kishenganga HEP" in Northern Region.

And in the matter of:

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

.... Petitioner

Vs.

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg, Jaipur-302005.
2. Ajmer Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
4. Jodhpur Vidyut Vitran Nigam Limited,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.



6. Punjab State Electricity Board,
Thermal Shed Tia,
Near 22 Phatak, Patiala-147001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134109.
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001.
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
13. North Delhi Power Limited,
Power Trading & Load Dispatch Group,
Cennet Building, Adjacent to 66/11 kV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi-110034.
14. Chandigarh Administration,
Sector - 9, Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,



New Delhi-110002.

18. NHPC,
N.H.P.C Office Complex,
Sector-33, Faridabad-121003 (Haryana).

...Respondent(s)

For Petitioner : Shri S. S Raju, PGCIL
Shri B. B. Rath, PGCIL
Shri D.K. Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri Nitish Kumar, PGCIL
Shri Ranjeet Kumar Pandey, PGCIL

For Respondents : Shri Rajiv Shankar Dvivedi, Advocate, NHPC
Shri S. K. Meena, NHPC
Shri Aman Mahajan, NHPC

ORDER

Power Grid Corporation of India Limited, has filed the instant petition for determination of transmission tariff for the period from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of 220 kV Kishanganga-Wagoora D/C line Partially on M/C tower along with associated bays at Wagoora Sub-station (hereinafter referred to as the “transmission asset”) under “Transmission system associated with Kishenganga HEP” in Northern Region (hereinafter referred to as “the transmission project”):

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

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

2) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –8 above.

3) Condone the delay and allow IDC/IEDC as claimed in the petition as delay is on account of force majeure as per CERC Regulations’2019 22(2)(a) “uncontrollable factors”



4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8 above for respective block.

5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

7) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.

8) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.8 above.

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 interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.

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

Background

3. The brief facts of the case are as follows:

(a) The Investment Approval (IA) of the transmission project was accorded by Board of Directors of the Petitioner in its 309th meeting held on 29.1.2015, communicated vide Memorandum No. C/CP/ Kishenganga dated 2.2.2015, at an estimated cost of ₹26880 lakh including IDC of ₹1658 lakh, at October, 2014 price level.



(b) The scope of the transmission project was discussed and agreed in the 33rd Standing Committee Meeting (SCM) of the Northern Region held on 23.12.2013 and then approved in the 30th NRPC meeting dated 28.2.2014.

(c) The Petitioner has submitted Revised Cost Estimate (RCE) for the transmission project which was issued vide Memorandum No. C/CP/Kishenganga HEP dated 31.3.2017 at an estimated cost of ₹34088 lakh including IDC of ₹1886 lakh based on October, 2016 price level.

(d) The scope of work covered under the transmission project is as follows:

A. Transmission Line:

- i. Kishenganga-Amargarh 220 kV D/C
- ii. Kishenganga-Wagoora 220 kV D/C

Note: Due to right of way constraint near Kishenganga HEP, portion from Kishenganga to Amargarh T-point is being proposed to be constructed as multi-circuit line. After Amargarh T-point, the lines will be constructed on D/C towers

B. Sub-station:

- i. Amargarh (PDD, J&K) 220 kV Sub-station
 - 220 kV Line Bay: 2 Numbers
- ii. Wagoora (Powergrid) 400/220 kV Sub-station
 - 220 kV Line Bay: 2 Numbers

(e) The revised scope of work covered the transmission project is as follows:

A. Transmission Line:

- i. Kishenganga-Amargarh 220 kV D/C
- ii. Kishenganga-Wagoora 220 kV D/C

Note: Due to right of way constraint near Kishenganga HEP, portion from Kishenganga to Amargarh T-point is being proposed to be constructed as multi-circuit line. After Amargarh T-point, the lines will be constructed on D/C towers

B. Sub-station:

- i. Wagoora (Powergrid) 400/220 kV Sub-station
 - 220 kV Line Bay: 2 Numbers



Note: Petition for 220 kV Kishenganga-Amargarh D/C line on M/C tower (Charged on 25.2.2018) has already been filed vide Petition No. 124/TT/2018.

(f) The scope of the of the work as per I.A. is completed and is covered under the following petitions:

| Asset details | Petition details |
|---------------------------------------|---|
| Kishenganga-Amargarh 220 kV D/C line. | The transmission tariff was approved for the period from its COD to 31.3.2019 vide order dated 25.4.2019 in Petition No. 124/TT/2018. |
| Kishenganga-Wagoora 220 kV D/C | Covered under the instant petition. |

(g) The details of scheduled date of commercial operation (SCOD), date of commercial operation (COD) and time over-run in case of the transmission asset is as follows:

| SCOD | COD | Time over-run |
|-------------|-----------------------|----------------------|
| 1.3.2018 | 31.7.2019 (actual) | 517 days |

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public or Respondents in response to the aforesaid notices published in the newspapers by the Petitioner. Uttar Pradesh Power Corporation Limited (UPPCL) i.e. Respondent No. 9 has filed its reply vide affidavit dated 8.6.2021 and has raised the issues of time over-run, cost over-run, price of bids, details of ACE, completion cost of the project. NHPC i.e. Respondent No.18 has filed its reply vide affidavit dated 18.10.2021. In response, the Petitioner has filed its rejoinders vide affidavits dated 28.10.2021 to the reply of UPPCL and



NHPC. The issues raised by UPPCL and NHPC and the clarifications given by the Petitioner have been dealt in the relevant paragraphs of this order.

6. The hearing in this matter was held on 20.12.2022 and order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the petition, the Petitioner's affidavits dated 15.9.2021 and 18.11.2022 and 13.1.2023; UPPCL's reply vide affidavit dated and 8.6.2021, NHPC's reply vide affidavit 18.10.2021 and the Petitioner's rejoinder vide affidavit dated 28.10.2021 thereto.

8. Having heard the representatives of the Petitioner and learned counsel for NHPC and having perused the material on record, we proceed to dispose of the petition.

Determination of Annual Fixed Charges from COD to 31.3.2024 of the 2019- 24 Tariff Period

9. The Annual Fixed Charges (AFC) claimed by the Petitioner in respect of the transmission asset for the period from COD to 31.3.2024_ are as follows:

| Particulars | (₹ in lakh) | | | | |
|-----------------------------|---------------------------------------|----------------|----------------|----------------|----------------|
| | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Depreciation | 735.65 | 1173.33 | 1207.86 | 1210.78 | 1212.66 |
| Interest on Loan | 787.01 | 1169.35 | 1111.13 | 1027.47 | 932.99 |
| Return on Equity | 827.86 | 1316.81 | 1353.66 | 1356.78 | 1358.78 |
| Interest on working capital | 37.93 | 59.18 | 59.52 | 58.48 | 57.13 |
| O&M Expenses | 59.18 | 91.59 | 94.72 | 98.14 | 101.50 |
| Total | 2447.63 | 3810.26 | 3826.89 | 3751.66 | 3663.06 |

10. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset for the period from COD to 31.3.2024 are as follows:



(₹ in lakh)

| Particulars | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|------------------------------------|---------------------------------------|---------------|---------------|---------------|---------------|
| O&M Expenses | 7.37 | 7.63 | 7.89 | 8.18 | 8.46 |
| Maintenance Spares | 13.26 | 13.74 | 14.21 | 14.72 | 15.23 |
| Receivables | 449.56 | 469.76 | 471.81 | 462.53 | 450.38 |
| Total | 470.19 | 491.13 | 493.91 | 485.43 | 474.07 |
| Rate of Interest (in %) | 12.05 | 12.05 | 12.05 | 12.05 | 12.05 |
| Interest on Working Capital | 37.93 | 59.18 | 59.52 | 58.49 | 57.13 |

Date of Commercial Operation (“COD”)

11. The Petitioner has claimed actual COD of the transmission asset as 31.7.2019.

Regulation 5(1) and 5(2) of the 2019 Tariff Regulations provides as follows:

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

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

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

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

- (a) *Energisation certificate issued by the Regional Electrical Inspector under Central Electricity Authority;*
- (b) *Trial operation certificate issued by the concerned RLDC for charging element with or without electrical load;*
- (c) *Implementation Agreement, if any, executed by the parties;*
- (d) *Minutes of the coordination meetings or related correspondences regarding the monitoring of the progress of the generating station and transmission systems;*
- (e) *Notice issued by the transmission licensee as per the first proviso under this clause and the response;*
- (f) *Certificate of the CEO or MD of the company regarding the completion of the transmission system including associated communication system in all respects.”*



12. In support of the actual COD of the transmission asset, the Petitioner has submitted provisional energisation certificate issued by the Chief Electrical Inspector, J&K dated 19.3.2019, certificate of completion of trial operation of the transmission element dated 16.8.2019 certifying that trial operation completed on 30.7.2019, CMD certificate as required under Grid Code, self-declaration of COD dated 16.8.2019.

13. Taking into consideration the energisation certificate, certificate of completion of trial operation of transmission element, CMD certificate as required under the Grid Code and self-declaration of COD, COD of the transmission asset is approved as 31.7.2019.

Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the Asset-before the date of commercial operation;*



- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway.*
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”*

(4) The capital cost in case of existing or new hydro generating station shall also include:

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
- (b) cost of the developer’s 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*

(5) The following shall be excluded from the capital cost of the existing and new projects:

- (a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;*
- (b) De-capitalised Asset-after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*



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

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

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

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

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

15. The Petitioner has submitted the Auditor's Certificate dated 17.2.2020 in support of the capital cost incurred as on COD and projected ACE for 2019-24 tariff period and the same is as follows:

(₹ in lakh)

| Apportio ned FR Cost | Apportion ed RCE Cost | Capital cost as on COD | Projected ACE | | Estimated completion cost |
|----------------------------|-----------------------------|---------------------------|---------------|---------|---------------------------------|
| | | | 2019-20 | 2020-21 | |
| 12355.22 | 16254.74 | 14898.68 | 984.13 | 1008.18 | 16890.99 |

16. UPPCL has submitted that the Petitioner has not disclosed details of bids, such as date of bid, price quoted by the successful bidder, date of LoA, completion time contracted and price escalation formula agreed with the bidder executing the transmission project and date of start of work. The Board of Director (BOD) sanctioned the estimated completion cost of the transmission project but have not indicated individual costs of Line-(i) and Line-(ii). UPPCL has submitted that the completion cost of ₹26800 lakh may be apportioned on the basis of length of lines and number of bays as provided by the Commission under Regulation 6(2) of the 2014 Tariff Regulations. Similarly, the cost discovered through bids may also be apportioned on the basis of length of lines and number of bays as provided under the said Regulation. However, the Petitioner has not provided quoted price based



on which the award was made to the successful bidder. After bids were invited in pursuance of IA on 2.2.2015, the BOD of the Petitioner company revised the cost estimate of the transmission project to ₹34088 lakh on 31.3.2017, which is higher than the original cost estimate by ₹7288 lakh. Even the SCOD of the transmission project was increased to 38 months for both the lines. Increase in implementation period would have serious implication on UPPCL in terms of increased cost over-run and IDC. As per Regulation 3(54) of the 2014 Tariff Regulations, the SCOD of the transmission project or element will be as indicated in IA. The SCOD of the transmission project has already been indicated as 29 months and 38 months for Line-(i) and Line-(ii) respectively, in the IA dated 2.2.2015 which cannot be revised by RCE dated 31.3.2017. Further, revised cost estimate does not have any significance in view of the fact that after invitation of bid and discovery of cost; even the original cost estimate has no relevance. Further, the policy of the Petitioner company is to discover the cost of implementation of the transmission project through competitive bids. The cost so discovered can be apportioned between Line-(i) and Line-(ii) with their associated bays in accordance with the provisions of Regulation 6(2) of the 2014 Tariff Regulations, if the separate costs of such parts of the transmission project have not been invited by the Petitioner. The tariff of the transmission project should be determined based on the cost discovered through competitive biddings and completion time agreed with the executing agency. Further, the Petitioner has not explained the reasons as to why the cost estimate was revised in midst of the implementation while it had already discovered the cost by the Petitioner. Therefore, the Petitioner might not be allowed to compare the completion cost of the transmission project with cost approved in IA or REC. After the transmission project is completed, the completion cost must be estimated based



on expenditure actually incurred on the transmission project and compared with the cost discovered by the Petitioner through bids. The difference in cost, so arrived, must be considered for cost over-run if it exceeds the discovered cost.

17. In response, the Petitioner has submitted that some inadvertent error occurred in Form-5A provided with the details of bid submitted along with the main petition, hence, the Petitioner has submitted the revised Form-5A along with this rejoinder. Further, the Petitioner has apportioned the cost as per the DPR of the instant transmission project. The transmission project covers two assets. Accordingly, the Petitioner has apportioned the estimated cost into two parts. There was delay in execution of the transmission asset due to uncontrollable factor and increase in cost as compared to the estimates due to reason as explained in the petition which led to approval of the RCE. Further, the tariff has been computed based on expenditure incurred on the transmission asset based on the payment made to the contractor as per LoA provisions and the details of bids are given in Form-5A. Tariff is computed based on expenditure incurred on the transmission asset based on the payment made to the contractor as per LoA provisions and the comparison of the same is to be done with estimates as per format of Form-5.

18. NHPC has submitted as follows:

(i) Power evacuation of Kishanganga Power Station of NHPC is being done through 220 kV Kishanganga-Amargarh D/C line and 220 kV Kishanganga-Wagoora D/C line on multi circuit towers upto a common 'T point' near Delina Sub-station and on double circuit tower, thereafter.

(ii) The Petitioner has filed a Petition No.124/TT/2018 for determination of transmission tariff of 220 kV Kishanganga-Amargarh D/C line on M/C tower from claimed COD of the lines i.e. from 27.2.2018 to 31.3.2019 and Petition No.



22/TT/2021 for determination of transmission tariff of 220 kV Kishanganga-Wagoora D/C line on M/C tower from COD to 31.3.2024. The Commission vide order dated 25.4.2019 in Petition No. 124/TT/2018 determined the tariff of 220 kV Kishanganga-Amargarh D/C line on M/C tower and in the said order, the Commission held that NHPC would bear the transmission charges of the said line from 27.2.2018 to 17.5.2018.

(iii) The Petitioner filed the truing up Petition No. 471/TT/2020 for the period 27.2.2018 to 31.3.2019, however, the Petitioner did not implead NHPC as a respondent though, being a Respondent in the main Petition No. 124/TT/2018 and being made liable for payment of transmission charges for the period from 27.2.2018 to 17.5.2018. Therefore, NHPC filed an Interlocutory Application No. 81/IA/2021 in Petition No. 471/TT/2020 on 31.8.2021 seeking directions to recall the order dated 9.6.2021 in Petition No. 471/TT/2020 and to include NHPC as a Respondent in the said petition by amending the memo of parties.

(iv) As per Form-1 A' of Petition No. 471/TT/2020 and Petition No. 22/TT/2021, the cost of the transmission line as on COD/ 1.4.2019 in respect of Kishanganga-Amargarh line (length 43 km) is ₹13438 lakh and cost of the transmission line as on COD/ 1.4.2019 in respect of Kishanganga-Wagoora line (length 115 km) is ₹12922 lakh. Thus, the Petitioner has loaded the entire cost of multi circuit towers (which is a common asset for both the lines) in the cost of Kishanganga-Amargarh transmission line instead of apportionment of cost of these multi circuit towers in both the transmission lines as per Regulation 6(2) of the 2014 Tariff Regulations.

(v) There is discrepancy in the apportionment of cost of multi circuit towers which are the common facilities/ assets for both the transmission lines.

(vi) NHPC came to know about the cost of transmission line of Kishanganga-Wagoora line after Petition No. 22/TT/2021 was filed by the Petitioner, however, NHPC could not bring the facts to the notice of the Commission in Petition No. 471/TT/2020 as the Petitioner did not impleaded NHPC as a Respondent in the said petition.



(vii) NHPC vide letter dated 23.6.2021 requested the Commission to direct the Petitioner to make NHPC a party in Petition No. 471/TT/2020 and to serve a copy of the said petition to them. NHPC filed an Interlocutory Application No. 81/IA/2021 in Petition No. 471/TT/2020 on 31.8.2021.

(viii) Both the tariff petitions (i.e. Petition No. 471/TT/2020 and Petition No. 22/TT/2021) are inter related since two lines shares the common assets and, therefore, the break-up of the capital cost for both the lines, needs to be examined for interest of all the stakeholders.

(ix) Further, the Petitioner has provided the Auditor's Certificate for break-up of actual expenditure as on 31.3.2019 and as on COD and estimated expenditure as on 31.3.2021 and as on 31.3.2022. As per the Auditor's Certificate, the total expenditure as on COD is ₹14898.68 lakh. The Petitioner has provided the break-up of capital cost as on COD in Form-1A which is ₹14575.63 lakh including undischarged liability of ₹1921.56 lakh. Thus, there is in the expenditure provided in the Auditor's Certificate and Form-1A.

19. In response, the Petitioner has submitted as follows:

- (a) M/C tower is being used since the execution of 220 kV Kishanganga-Amargarh D/C line and entire cost of M/C portion including land except 1 number D/C tower cost constructed for D/C Kishanganga-Wagoora line at Kishanganga end, half conductor, half insulator, half hardware fitting and Earthwire/ OPGW cost have been booked with 220 kV Kishanganga-Amargarh D/C line on M/C tower.
- (b) The instant asset i.e. 220 kV Kishanganga-Wagoora D/C line partially on M/C tower along with associated bays at Wagoora Sub-station, for M/C portion, only 1 number D/C tower constructed for D/C Kishanganga-Wagoora line at Kishanganga end, half conductor, half insulator, half hardware fitting and earth wire/ OPGW cost have been booked. The booking of cost is in line with spirit of the regulation.

20. The Commission vide RoP for hearing dated 27.10.2022 directed the Petitioner



to submit “The detailed break up of cost of Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line along with apportionment of cost of common assets including land.” In response, the Petitioner vide affidavit dated 18.11.2022 has submitted as follows:

(i) The estimated completion cost of both the transmission assets after apportionment of cost of common assets including land is as follows:

a) Kishanganga-Amargarh transmission line (COD: 27.2.2018)

| Particulars | (₹ in lakh) | | | | |
|---|-----------------|-------------------|-------------|---------------|----------------|
| | Land (Freehold) | Transmission line | Sub-station | PLCC | Total |
| Expenditure upto COD | 1044.61 | 6180.97 | 0.00 | 51.70 | 7277.28 |
| Expenditure from 27.2.2018 to 31.3.2018 | 13.99 | 77.55 | 0.00 | 0.00 | 91.53 |
| Expenditure from 1.4.2018 to 31.3.2019 | 0.51 | 662.16 | 0.00 | 33.55 | 696.22 |
| Expenditure from 1.4.2019 to 31.3.2020 | 0.00 | 411.55 | 0.00 | 61.06 | 472.61 |
| Expenditure from 1.4.2020 to 31.3.2021 | -0.04 | 349.29 | 0.00 | 0.00 | 349.25 |
| Expenditure from 1.4.2021 to 31.3.2022 | 0.00 | 18.76 | 0.00 | 0.00 | 18.76 |
| Total | 1059.07 | 7700.28 | 0.00 | 146.31 | 8905.65 |

b) Kishanganga-Wagoora transmission line (COD: 31.7.2019)

| Particulars | (₹ in lakh) | | | | |
|---|-----------------|-------------------|---------------|---------------|-----------------|
| | Land (Freehold) | Transmission line | Sub-station | PLCC | Total |
| Expenditure upto COD | 3183.60 | 17677.38 | 713.67 | 105.22 | 21679.88 |
| Expenditure from 31.7.2019 to 31.3.2020 | 0.00 | 991.98 | 80.89 | 0.00 | 1072.87 |
| Expenditure from 1.4.2020 to 31.3.2021 | -1.92 | 1135.42 | 117.85 | 0.00 | 1251.35 |
| Expenditure from 1.4.2021 to 31.3.2022 | 0.00 | 39.97 | 0.00 | 0.00 | 39.97 |
| Estimated Expenditure in 2022-23 | 0.00 | 70.90 | 0.00 | 0.00 | 70.90 |
| Total | 3181.68 | 19915.65 | 912.41 | 105.22 | 24114.95 |

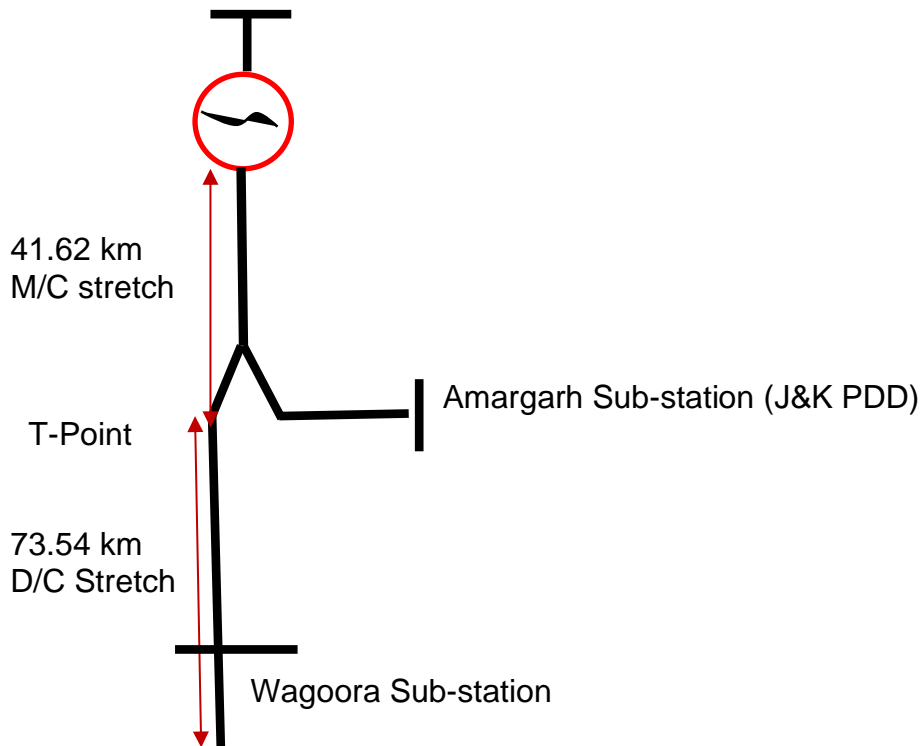
21. The Petitioner vide affidavit dated 13.1.2023 has revised the claim of capital cost and submitted the revised Auditor’s Certificate dated 4.1.2023 and has claimed the following capital cost incurred as on COD and Additional Capital Expenditure (ACE) projected to be incurred, in respect of the transmission asset:



| Apportioned Cost as per RCE | Capital cost as on COD | Projected ACE | | | | (₹ in lakh) |
|-----------------------------|------------------------|---------------|---------|---------|---------|---------------------------|
| | | 2019-20 | 2020-21 | 2021-22 | 2022-23 | Estimated Completion Cost |
| 24602.04 | 21679.87 | 1072.87 | 1251.35 | 39.97 | 70.90 | 24114.96 |

22. We have considered the submissions of the Petitioner, UPPCL and NHPC. UPPCL has raised the issue of apportionment of cost of the transmission lines and NHPC has raised the issue of apportionment of the cost of the common elements among the transmission lines, which we deal in the following paragraphs. As regards the UPPCL's contention about the revised time schedule in the RCE, we would like to state that we have considered the timeline of 38 months given in the initial Investment Approval.

23. The Petitioner had to construct Kishangang-Amargarh Transmission Line and Kishangang-Wagoora Transmission Line for evacuation of 330 MW power from Kishenganga H.E.P. under the scope of NHPC. The line diagram of Kishenganga H.E.P. (3x110 MW) (NHPC) is as follows:



24. From the above diagram, it is observed that 41.62 multi-circuit stretch is common for both the Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora Transmission Line. However, the Petitioner has claimed the entire cost of M/C portion under Kishanganga-Amargarh Transmission Line and the COD of the Kishanganga-Amargarh Transmission Line is approved as 27.2.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the associated generation under the scope of NHPC was not ready and NHPC was liable to pay the transmission charges for the mismatch in the COD of the Kishanganga-Amargarh Transmission Line and commissioning of its generation.

25. Regulation 6(2) of the 2014 Tariff Regulations provides as follows:

2) For the purpose of determination of tariff, the capital cost of a project may be broken up into stages, blocks, units, transmission lines and sub-stations, forming part of the project, if required:

*Provided that where break-up of the capital cost of the project for different stages or units or blocks and for transmission lines or sub-stations is not available and in case of on-going projects, **the common facilities shall be apportioned on the basis of the installed capacity of the units, line length and number of bays:***

Provided further that in relation to multi-purpose hydro schemes, with irrigation, flood control and power components, the capital cost chargeable to the power component of the scheme only shall be considered for determination of tariff.

26. As per the above Regulation 6(2) of the 2014 Tariff Regulations, the common facilities shall be apportioned on the basis of line length and number of bays. In the instant case, 41.62 km multi-circuit stretch is common between the Kishanganga-Amargarh transmission line and Kishanganga-Wagoora transmission line. Accordingly, the capital cost of the multi-circuit portion has been apportioned between the Kishanganga-Amargarh Transmission Line and Kishanganga-Wagoora transmission line. The Petitioner has further submitted the estimated completion cost of both the transmission asset after apportionment of common cost towards



land (freehold), transmission line, sub-station, PLCC for the assets Kishanganga-Amargarh transmission line and Kishanganga-Wagoora transmission line. We approve the apportionment of common cost between both the transmission assets. The instant transmission asset covers tariff for Kishanganga-Wagoora transmission line only. The estimated completion cost of the transmission asset based on the Auditor's Certificate works out to ₹24114.96 lakh including IEDC and IDC which is within the RCE apportioned approved cost of ₹24602.04 lakh and the same is approved.

Time Over-run

27. As per IA dated 29.1.2015, the transmission asset was scheduled to be put into commercial operation within 38 months from the date of IA. Accordingly, the SCOD was 1.3.2018, against which the transmission asset has been put under commercial operation on 31.7.2019. Therefore, there is time over-run of 517 days in the COD of the transmission asset.

28. The Petitioner has submitted that the delay is due to law and order problem in Kashmir valley, RoW problems at various locations and severe snowfall in districts of Bandipora, Baramulla, Budgam and Pulwama of Jammu & Kashmir.

29. Further, the Petitioner has submitted that 220 kV Kishanganga-Wagoora Transmission Line is passing through Shopian, Baramulla, Bandipora, Budgam and Pulwama areas of J&K where there has been a rise in the number militant activities. Encounters between militants and armed forces are frequent and day to day functioning and all activities of general life are disturbed. Search operations by security forces are day to day routine in these districts. Sometimes these search



operations result in encounters between the security forces and the militants. Several times, site engineers with construction gangs are struck in these search operations and construction works are strictly prohibited in these areas. Labour arrangement and shifting of machinery at different sites was affected several times.

The detailed reason for delay is as follows:

- i. Law & order problem and severe snowfall (10 months):** The work was started in March, 2015, however, the law and order situation was disturbed since 9.7.2016 in entire Kashmir valley after the death of Hizbul Mujahideen commander in an encounter. The agitation by local population and imposition of curfew and shutdown halted the construction activities. The agitation continued till January, 2017 and situation came back to normal in Kashmir valley only in the first week of February, 2017. Thereafter, due to severe snowfall and various law and order issue construction work was further disturbed till the end of April, 2017. Thus, the work was hampered for a total period of 10 months. Detailed chronology of newspaper cutting from July, 2016 to April, 2017 is as follows:

| Sl. No. | Headline | Date |
|---------|--|-----------|
| 1 | Burhan Wani killed, Kashmir on boil, Massive protest | 9.7.2016 |
| 2 | Fresh killing, Massive protest | 10.7.2016 |
| 3 | Curfew to continue for 6th straight day | 14.7.2016 |
| 4 | Hit by "full catridge" of pellets | 22.7.2016 |
| 5 | Stringent curfew | 28.7.2016 |
| 6 | 40 Injured in fresh clash | 29.7.2016 |
| 7 | 120 injured | 30.7.2016 |
| 8 | Valley remains tense | 31.7.2016 |
| 9 | Curfew, Clashes continue | 1.8.2016 |
| 10 | Civilian Killed, protest etc | 3.8.2016 |
| 11 | Massive rallies, shutdown against valley killings etc | 5.8.2016 |
| 12 | 3 more civilian, 400 injured | 6.8.2016 |
| 13 | Day 33: Protest continue 20 injured | 11.8.2016 |
| 14 | Day 50: situation as on day 1; Toll 70, Geelani Tetained | 28.8.2016 |
| 15 | 100 more injured, sudden curfew imposed etc. | 31.8.2016 |
| 16 | Day 55: Chased by forces, huge freedom ralies etc.. | 2.9.2016 |
| 17 | Student killed | 18.9.2016 |
| 18 | Day 72: forces foil pro-freedom rallies, 60 injured | 19.9.2016 |
| 19 | Day 73: Toll 87 | 20.9.2016 |
| 20 | Day 74: Clashes, protest continue,50 more injured | 21.9.2016 |
| 21 | Day 75:40 injured in forces' action | 22.9.2016 |



| | | |
|----|---|------------|
| 22 | 40 injured as clashes, protest continue | 23.9.2016 |
| 23 | Day 80: forces continue to foil pro-freedom rallies | 27.9.2016 |
| 24 | Day 81: Amid stone pelting | 28.9.2016 |
| 25 | Day 82: Curfew returns to many parts as forces stop freedom rallies | 29.9.2016 |
| 26 | Shutdown continues on Day 83 | 30.9.2016 |
| 27 | Day 87: Protests clashes continue | 4.10.2016 |
| 28 | Kashmir uprising: Protest, clashes continue | 7.10.2016 |
| 29 | Govt Foils 'UN Chalo' with curfew | 8.10.2016 |
| 30 | 12 year old pelleted to death | 9.10.2016 |
| 31 | 93 days on, pellet horror continues across Kashmir | 10.10.2016 |
| 32 | Day 94: Strict curfew imposed in Srinagar | 11.10.2016 |
| 33 | Day 95: Curbs in Srinagar on Junaid's Chahurum | 12.10.2016 |
| 34 | Day 98: Over 50 injured in fresh clashes | 15.10.2016 |
| 35 | Unrest enters 100th days | 16.10.2016 |
| 36 | Kashmir uprising completes 100 days | 17.10.2016 |
| 37 | Day 115: Over 30 injured | 1.11.2016 |
| 38 | Day 116: Uneasy calm prevails in Kashmir | 2.11.2016 |
| 39 | Day 117: 40 civilians injured in Soura | 3.11.2016 |
| 40 | Day 118: Protest in Soura | 4.11.2016 |
| 41 | Day 119: 20 injured in clashes | 5.11.2016 |
| 42 | Day 121: Uneasy calm prevails in Kashmir | 7.11.2016 |
| 43 | Day 122: Shutdown continues | 8.11.2016 |
| 44 | Days 124: Agitation enters into 5th month | 9.11.2016 |
| 45 | Day 125: Clashes in Pulwama | 10.11.2016 |
| 46 | Day 126: Day after fresh claeendar; Mirwaiz, Malik detained again | 11.11.2016 |
| 47 | Day 127: Kashmir remains shut | 12.11.2016 |
| 48 | Day 127: Curfew lifter from Srinagar parts; shutdown continues | 13.11.2016 |
| 49 | Day 128: Kashmir continue to be shut | 14.11.2016 |
| 50 | Day 129: Uneasy calm in Kashmir | 16.11.2016 |
| 51 | After 4-months halt anti-militancy operation intensified | 19.11.2016 |
| 52 | Day 136: Kashmir shuts again | 22.11.2016 |
| 53 | Day 137: Pellets injure 15 in Sopore | 24.11.2016 |
| 54 | 2 cops killed, 1 injured in Kulgam attack | 26.11.2016 |
| 55 | Day 143: Shutters down again after 2-day relaxation | 29.11.2016 |
| 56 | Day 144: Shutdown continues | 30.11.2016 |
| 57 | Day 145: Several injured in Tehab clashes | 31.11.2016 |
| 58 | Government foils Lal chowk march | 6.12.2016 |
| 59 | Youth killed, scores injured in protests during gunfight | 9.12.2016 |
| 60 | Clashes leave 20 injured | 10.12.2016 |
| 61 | Resistance camp extends protest program till January, 2015 | 31.12.2016 |
| 62 | Fresh snow fall breaks Kashmir's longest dry spell | 4.1.2017 |
| 63 | More snowfall | 5.1.2017 |
| 64 | Fresh snow in Srinagar | 6.1.2017 |
| 65 | SASE continues with avalanche warning for J&K higher reaches | 9.1.2017 |
| 66 | Cold wave intensifies | 14.1.2017 |
| 67 | Slight respite from cold after fresh snowfall in Kashmir areas | 16.1.2017 |
| 68 | Brace up more snowfall tomorrow | 17.1.2017 |
| 69 | Fresh snowfall disrupts life | 25.1.2017 |



| | | |
|----|--|-----------|
| 70 | Snowfall claims 8 lives | 26.1.2017 |
| 71 | Gurez avalanche: 4 more bodies recovered , toll 14 | 28.1.2017 |
| 72 | Overnight snowfall in higher reaches | 1.2.2017 |
| 73 | Landslide at Mehar: Traffic hit, highway closed | 3.2.2017 |
| 74 | Fresh snowfall disrupts life, highway remains closed for 4th day | 6.2.2017 |
| 75 | Kashmir shuts on Afzal Guru anniversary | 10.2.2017 |
| 76 | Police foils UN chalo detains JKLF chief Yasin Malik | 11.2.2017 |
| 77 | Kashmir shuts to remember Maqbool Bhat | 12.2.2017 |
| 78 | Kashmir shuts in protest against killings | 14.2.2017 |
| 79 | 3 soldiers , militant killed in Hajin gun battale | 15.2.2017 |
| 80 | Police foil Kulgam March | 16.2.2017 |
| 81 | Drass receive fresh snowfall | 20.2.2017 |
| 82 | Landslides close Srinagar-Jammu highway | 1.3.2017 |
| 83 | Expect rains for 4 days | 8.3.2017 |
| 84 | Highway closed; Rains likely to continue | 9.3.2017 |
| 85 | 3 bullets pierce many dreams | 29.3.2017 |
| 86 | Kashmir mourns Chandoora killings | 30.3.2017 |
| 87 | Kashmir protests Chandoora killings | 1.4.2017 |
| 88 | Kashmir shut against PM visit | 3.4.2017 |
| 89 | Rains hit life in Kashmir | 4.4.2017 |
| 90 | Kashmir shuts against Sajad's Killing | 16.4.2017 |
| 91 | 2 LeT militants killed in Budgam | 23.4.2017 |
| 92 | Rains lash Kashmir | 29.4.2017 |
| 93 | Kashmir shuts against Kupwara civilian killings | 30.4.2017 |

ii. **RoW issue in district Baramulla & Bandipora (20 months):** There was continuous RoW issues in Bandipora and Baramulla Districts for around 20 months period from May, 2016 to January, 2018. The villagers were demanding for higher compensation and also started illegal construction. Various letters were written to the concerned authorities to resolve the RoW issue for early completion of the project. The details of the correspondence made by the Petitioner with the authorities for resolving the RoW issues are as follows:

| Chronology of RoW problem in District Baramulla (M/C Tower Stretch): | | | | |
|---|-------------|--|--------------------------|--|
| Sl. No. | Date | To | From | Particulars |
| 1 | 12.5.2016 | Additional Deputy commissioner, Baramulla | Chief Manager, Powergrid | RoW issue at Loc-16 M/0, 16N/0,16O/0,17/0 & 18/0 |
| 2 | 17.5.2016 | Meeting notice from Addl. Deputy commissioner, Baramulla | | Meeting notice to resolve RoW |
| 3 | 25.5.2016 | Additional Deputy commissioner, Baramulla | Chief Manager, Powergrid | RoW issue at Loc-16M/0, 16N/0,16O/0,17/0,13A/0,12/2, 9/0,9A/0,7B/0,8/0,5/0,6/0,6/1,6 /2,7/0 & 7A/0 |
| 4 | 1.6.2016 | The Deputy Commissioner, Baramulla | Additional GM, Powergrid | RoW issue at Loc-16M/0, 16N/0,16O/0,17/0,13A/0,12/2, |



| | | | | |
|----|-----------|---|---|---|
| | | | | 9/0,9A/0,7B/0,8/0,5/0,6/0,6/1,6/2,7/0 & 7A/0 |
| 5 | 15.6.2016 | The tehsildar, Dangerpora | Chief Manager, Powergrid | RoW at 4 Numbers location |
| 6 | 3.2.2017 | Additional Deputy commissioner, Baramulla | Assistant GM, Powergrid | To expedite land compensation and RoW issue at various locations |
| 7 | 11.3.2017 | The SDM, Sapore | Additional Deputy commissioner, Baramulla | To stop illegal construction in Span:-9A/0-9/0 |
| 8 | 13.4.2017 | The Deputy Commissioner, Baramulla | Additional GM, Powergrid | To expedite land compensation and RoW issue at various 17 Numbers locations |
| 9 | 21.4.2017 | The Deputy Commissioner, Baramulla | Additional GM, Powergrid | To expedite land compensation and RoW issue at various 15 Numbers locations |
| 10 | 21.4.2017 | Additional Deputy commissioner, Baramulla | Assistant GM, Powergrid | RoW issue in span: 1/0 to T-point |
| 11 | 4.5.2017 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | To expedite land compensation and RoW issue at various 9 Numbers locations |
| 12 | 19.5.2017 | The Deputy Commissioner, Baramulla | Additional GM, Powergrid | To expedite land compensation and RoW issue at various 10 Numbers locations |
| 13 | 23.5.2017 | Additional Deputy Commissioner, Baramulla | Assistant GM, Powergrid | RoW issue at Loc-14E/0 |
| 14 | 30.6.2017 | Additional Deputy Commissioner, Baramulla | Assistant GM, Powergrid | To expedite land compensation |
| 15 | 26.7.2017 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | Regarding distribution of land compensation |
| 16 | 29.7.2017 | Additional Deputy Commissioner, Baramulla | Assistant GM, Powergrid | For Administrative help at Loc-6/1, 6/2, 9/0,14E/0, 16C/0, 16N/0,18/0 |
| 17 | 3.8.2017 | The Deputy Commissioner, Baramulla | GM, Powergrid | For Administrative help at Loc-6/1, 6/2, 9/0,14E/0, 16C/0, 16N/0,18/0 |
| 18 | 9.8.2017 | Assistant Commissioner Baramulla | Assistant GM, Powergrid | For Administrative help at Loc-6/1, 6/2, 9/0,14E/0, 16C/0, 16N/0,18/0 |
| 19 | 6.9.2017 | The Deputy Commissioner, Baramulla | GM, Powergrid | RoW issue at 1/0, t-point, 2/0, 6/1, 7A/0, 9/0, 14A/0, 14C/4 &14E/0 |
| 20 | 14.9.2017 | Assistant Commissioner Baramulla | Assistant GM, Powergrid | Critical RoW at Loc-9A/4 |



| | | | | |
|----|------------|---|---|--|
| 21 | 18.9.2017 | Assistant Commissioner Baramulla | Assistant GM, Powergrid | Critical RoW at Loc-14C/4 |
| 22 | 20.9.2017 | Assistant Commissioner Baramulla | Assistant GM, Powergrid | Critical RoW at Loc-1/0 DC, T-point, 1/0 MC, 2/0 MC |
| 23 | 21.9.2017 | The Tehsildar, Baramulla | Assistant Commissioner Baramulla | To take necessary action |
| 24 | 3.10.2017 | Assistant Commissioner Baramulla | Assistant GM, Powergrid | Critical RoW at Loc-9A/4,14A/0,14C/4 & 14E/0 |
| 25 | 6.10.2017 | The Tehsildar, Watergram | Assistant GM, Powergrid | RoW at Loc-9A/4 |
| 26 | 2.11.2017 | Additional Deputy commissioner, Baramulla | Assistant GM, Powergrid | Critical RoW at Loc-14C/4 |
| 27 | 2.11.2017 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | RoW at Loc-1/0 DC, T-point, 1/0 MC, 2/0 MC,6/1, 14C/4, 14E/0 |
| 28 | 3.11.2017 | Additional Deputy commissioner, Baramulla | Assistant GM, Powergrid | RoW in span-3/0 to 4A/0 |
| 29 | 3.11.2017 | The Tehsildar, Bomia | Additional Deputy Commissioner, Baramulla | To take necessary action |
| 30 | 4.11.2017 | Additional Deputy Commissioner, Baramulla | Assistant GM, Powergrid | For land compensation |
| 31 | 8.11.2017 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | Threat by locals |
| 32 | 9.11.2017 | The tehsildar Baramulla | Assistant Commissioner Baramulla | To provide police protection |
| 33 | 13.11.2017 | Additional Deputy Commissioner, Baramulla | Assistant GM, Powergrid | Critical RoW issue at Loc-12/2 |
| 34 | 13.11.2017 | The Tehsildar, Watergram | Assistant Commissioner Baramulla | To take necessary action |
| 35 | 13.11.2017 | Additional Deputy Commissioner, Baramulla | Assistant GM, Powergrid | RoW issue in village Hardshiva |
| 36 | 21.11.2017 | Additional Deputy Commissioner, Baramulla | Assistant GM, Powergrid | Critical RoW issue at Loc-7A/0 |
| 37 | 28.11.2017 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | RoW issue at Loc-13A/0 and in Span:13/0 to 13B/0 |
| 38 | 5.12.2017 | The Chief Engineer, Srinagar | Assistant GM, Powergrid | RoW issue in village Hardshiva |
| 39 | 15.12.2017 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | For land compensation |



| | | | | |
|----|------------|---|-------------------------|--------------------------------|
| 40 | 20.12.2017 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | RoW issue at Loc-13A/0 |
| 41 | 1.1.2018 | Office order Deputy Commissioner, Baramulla | | Committee to look of RoW issue |
| 42 | 23.1.2018 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | RoW issue at Loc-6/1 |
| 43 | 29.1.2018 | The Deputy Commissioner, Baramulla | Assistant GM, Powergrid | RoW at Loc-2/0 and 4/0 |

| Chronology for RoW problem in District Bandipora (M/C Tower Stretch): | | | | |
|--|-------------|---|---|--|
| Sl. No. | Date | To | From | Particulars |
| 1 | 19.12.2016 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW at Loc-24/1 & 24B/1 |
| 2 | 20.12.2016 | The Tehsildar, Aloosa | Additional Deputy Commissioner, Bandipura | To sort out the issue |
| 3 | 18.2.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | Regarding 5 Number land acquisition and 16 tower location RoW issue |
| 4 | 23.2.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW at Loc 19A/0 |
| 5 | 23.2.2017 | The Divisional Commissioner, Kashmir | Assistant GM, Powergrid | RoW at Loc- 19A/0,19A/1 & 20/0 |
| 6 | 25.2.2017 | The Tehsildar, Aloosa | Additional Deputy Commissioner, Bandipura | To take appropriate action |
| 7 | 1.3.2017 | The Deputy Commissioner, Bandipora | Additional GM, Powergrid | Administrative action for RoW issue at 25 Number location |
| 8 | 7.4.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW at Loc-27/2 |
| 9 | 12.4.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW in span-25/0 to 25/1 |
| 10 | 13.4.2017 | The Deputy Commissioner, Bandipora | Additional GM, Powergrid | To expedite land compensation and to solve RoW at 17 Number location |
| 11 | 21.4.2017 | The Deputy Commissioner, Bandipora | Additional GM, Powergrid | To expedite land compensation and to solve RoW at 17 Number location |
| 12 | 4.5.2017 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | To expedite land compensation and to solve RoW at 17 Number location |
| 13 | 8.5.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW at span 25/0-27/1 |
| 14 | 8.5.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW at span 25/0-27/1 |
| 15 | 9.5.2017 | The Tehsildar, Aloosa & S.H.O bandipora | Additional Deputy Commissioner, Bandipura | To provide police protection |



| | | | | |
|----|------------|---|---|---|
| 16 | 17.5.2017 | Office order Deputy Commissioner, Bandipora | | Committee to look of RoW issue |
| 17 | 19.5.2017 | The Deputy Commissioner, Bandipora | Additional GM, Powergrid | To expedite land compensation and to solve RoW at 179 Number location |
| 18 | 3.6.2017 | The S.H.O Bandipora | The Deputy Commissioner, Bandipora | To take immediate action |
| 19 | 3.6.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW at Loc-24B/2 |
| 20 | 9.6.2017 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | RoW at Loc-19/0 |
| 21 | 12.6.2017 | The Tehsildar, Aloosa & S.H.O bandipora | Additional Deputy Commissioner, Bandipura | To take immediate action |
| 22 | 4.7.2017 | The S.H.O Bandipora | Assistant GM, Powergrid | RoW at Loc-24B/2 |
| 23 | 11.7.2017 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | RoW at Loc-31/0 |
| 24 | 12.7.2017 | The S.H.O Bandipora | The District Magistrate, Bandipora | To take strict action |
| 25 | 18.8.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW at Loc- 38/0 |
| 26 | 18.8.2017 | The Tehsildar, Bandipora | Additional Deputy Commissioner, Bandipura | To present in office |
| 27 | 6.9.2017 | The Deputy Commissioner, Bandipora | GM, Powergrid | To reolve RoW issue at 24B/0, 27/2, 30C/0, & 40/0 |
| 28 | 15.9.2017 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | RoW issue at Loc-30A/0 |
| 29 | 19.9.2017 | The Tehsildar, Bandipora | Additional Deputy Commissioner, Bandipura | To take necessary action |
| 30 | 28.9.2017 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | RoW at location 24B/2 |
| 31 | 28.9.2017 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | RoW at span:-29A/1-29A/3, 30/1 & 30C/0 |
| 32 | 11.10.2017 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | RoW at Loc-29A/3 |
| 33 | 11.10.2017 | The Tehsildar, Bandipora | Additional Deputy commissioner, Bandipura | To present in office |
| 34 | 13.10.2017 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | RoW at Span:-29/2-29A/0 |
| 35 | 20.11.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW at Loc-30A/0 |
| 36 | 20.11.2017 | Additional Deputy Commissioner, Bandipura | Assistant GM, Powergrid | RoW in span:- 23C/0-23D/0 |
| 37 | 9.1.2018 | Office order Deputy Commissioner, Bandipora | | Committee to look of RoW issue |
| 38 | 9.1.2018 | The Deputy Commissioner, Bandipora | Assistant GM, Powergrid | RoW at span-25/0 to 25/1 |



iii. RoW issue in Baramulla, Budgam & Pulwama Districts (21 months):

There was continuous RoW issues in Baramulla, Budgam and Pulwama Districts spanning around 9 months from September, 2017 to June, 2019. The villagers were demanding for higher compensation and also started illegal construction. Various letters were written to the concerned authorities to resolve the RoW issue for timely completion of the project. Detailed chronology of correspondence's are as follows:

| Chronology for RoW issue in Baramulla, Budgam and Pulwama District (D/C Tower Stretch): | | | |
|--|---|----------------------------|--|
| Date | To | From | Particulars |
| 27.9.2017 | Collector Land Acquisition, Baramulla | Assistant GM, Powergrid | RoW at Loc. No. 13/0 & 16/0 after land acquisition. |
| 15.2.2018 | Collector Land Acquisition, Budgam | Assistant GM, Powergrid | RoW at Loc. No. 31/2, 31/3 & 32/2 after land acquisition. |
| 21.2.2018 | Collector Land Acquisition, Baramulla | Assistant GM, Powergrid | RoW at Loc. No. 21B/1 after land acquisition. |
| 26.2.2018 | Collector Land Acquisition, Budgam | Assistant GM, Powergrid | RoW at Loc. No. 38/0 after land acquisition. |
| 3.3.2018 | Collector Land Acquisition, Additional DC Baramulla | Assistant GM, Powergrid | RoW at Loc. No. 12/0 after land acquisition. |
| 8.3.2018 | SHO, Police Station Khansahib, Budgam | Assistant GM, Powergrid | Administrative help for execution of work in waterhail, Tehsil Khansahib. |
| 15.3.2018 | Collector Land Acquisition, Budgam | Assistant GM, Powergrid | RoW at Loc. No. 38/0, 39B/2 & 39/2 after land acquisition. |
| 20.3.2018 | Collector Land Acquisition, Additional DC Budgam | Assistant GM, Powergrid | RoW at Loc. No. 33B/9 after land acquisition. |
| 4.4.2018 | Collector Land Acquisition, Additional DC Budgam | Assistant GM, Powergrid | RoW at Loc. No. 32/2, 40/6, 57/0, 61/0, 59/0, 59A/0, 60/0, Gantry, 62/0, Ap 38/0 & 39 B/2 after land acquisition. |
| 5.4.2018 | Collector Land Acquisition, Additional DC Pulwama | Assistant GM, Powergrid | Row at Loc No. 51/2 in village Khedermoh, Tehsil Kakapora. |
| 20.4.2018 | Divisional Commissioner, Kashmir | General Manager, Powergrid | RoW in District Baramulla, Budgam & Pulwama. |
| 21.4.2018 | SSP, Budgam | Additional DC, Budgam | Police Protection for RoW Loc. No. 32/2, 40/6, 57/0, 61/0, 59/0, 59A/0, 60/0, Gantry, 62/0, Ap 38/0 & 39 B/2 in District Budgam. |
| 30.4.2018 | Collector Land Acquisition, Additional DC Budgam | Assistant GM, Powergrid | RoW at Loc. No. 32/2, 40/6, 57/0, 61/0, 59/0, 59A/0, 60/0, Gantry, 62/0, Ap 38/0 & 39 B/2 after land acquisition. |



| | | | |
|------------|---|---|--|
| 1.5.2018 | SSP, Budgam | Collector Land Acquisition, Additional DC Budgam | Police Protection for carrying out construction work at location under RoW. |
| 3.5.2018 | Tehsildar, Beerwah, Budgam | Assistant GM, Powergrid | RoW at Loc No. 32/2 in Malpora, Budgam. |
| 15.5.2018 | Tehsildar Khansahib, Budgam | Assistant GM, Powergrid | Row at Loc. No. 33B/9 in Shoru, Khansahib, Budgam. |
| 18.8.2018 | Divisional Commissioner, Kashmir | General Manager, Powergrid | RoW at Loc. No. 40/6, Gantry 3 & RoW in Stringing at Khansahib, Budgam. |
| 6.9.2018 | Collector Land Acquation, ADC, Budgam | Assistant GM, Powergrid | Obstruction in construction activites in Village Gangipora and Pohru district Budgam. |
| 7.9.2018 | Chief Secretary, Jammu & Kashmir | General Manager, Powergrid | RoW at Loc. No. 40/6, Gantry 3 & RoW in Stringing at Khansahib, Budgam. |
| 3.10.2018 | Tehsildar, Chadoora | Assistant GM, Powergrid | RoW at Loc. No. 40/6 & RoW in Stringing. |
| 6.10.2018 | Collector Land Acquation, Powergrid ADC, Budgam | Assistant GM, Powergrid | Regarding revisit of Tower Locations 38/0 in Village Borwah, Chadoora |
| 9.10.2018 | Chief Secretary, Jammu & Kashmir | Joint Secretary, Project Monitoring Group, PMO, new Delhi | RoW at 1 number Foundation, 2 number Tower Erection & 8 km Stringing in district Budgam. |
| 15.10.2018 | MoM from asst. Commissioner with DC, Kashmir. | | RoW & pending Issues for Kishanganga – Amargarh - Wagoora line. |
| 18.10.2018 | SDM, Khansahib | Assistant GM, Powergrid, Kishenganga | Regarding administrative assistance in Village Yakhbug and Shamsabad of Tehsil - Khansahib. |
| 18.10.2018 | SDM, Chadoora | Assistant GM, Powergrid, Kishenganga | Regarding administrative assistance in Borwah Chadoora |
| 25.10.2018 | SDM, Khansahib, Budgam | Assistant GM, Powergrid, Kishenganga | Regarding administrative assistance in Village Yakhbug and Shamsabad of Tehsil - Khansahib. |
| 29.10.2018 | SDM, Chadoora | Tehsildar, Chadoora | Regarding obstruction in construction activities i.r.o Tower Loc. No. 40/6 in Village Wadipora, Chadoora. |
| 3.11.2018 | Tehsildar, Chadoora | Sr. DGM, Powergrid, Kishenganga | Regarding obstruction in construction work-at Loc. 40/6 village wadipora, Tehsil Chadoora, District Budgam, |
| 14.11.2018 | Tehsildar Pulwama | Collector Land Acquation, ADC, Pulwama | Application on behalf of Wali Mohd. Wani & others regarding revisit of land which comes under the erection of tower No. AP 42A/0 at village Jagir Parigam. |



| | | | |
|------------|---|---------------------------------|---|
| 26.11.2018 | Tehsildar, Chadoora | SDM, Chadoora | Regarding obstruction in construction activities in village Wagoora Tehsil Chadoora at Tower No 40/6. |
| 27.11.2018 | Chief Secretary Jammu & Kashmir | Chief GM, Powergrid Jammu | Regarding RoW & other pending issues in District Budgam. |
| 27.11.2018 | SDM Chadoora | Tehsildar Chadoora | Shifting of aate for construction work due to bad weather. |
| 13.12.2018 | SDM, Khansahib | Sr. DGM | Regarding RoW issues in village Burgoo, Tehsil Khansahib. |
| 15.12.2018 | Sub Divisonal Police officer, Khansahib | SDM, Khansahib | Adequate Police protection for Powergrid officials during construction in RoW locations. |
| 26.12.2018 | Commissioner Secretary (Power) Jammu | Chief GM, Powergrid, Jammu | Regarding severe RoW constraints & other long pending issues in District Budgam. |
| 28.1.2019 | SDM, Khansahib | Sr. DGM, Powergrid, Kishenganga | Regarding administrative assistance in Village Yakhbug and Bugroo of Tehsil - Khansahib. |
| 28.1.2019 | Sub Divisonal Police officer, Khansahib | SDM, Khansahib | Adequate Police protection for Powergrid officials during construction in RoW locations in village Yakhbug and Bugroo of Tehsil -Khansahib. |
| 28.3.2019 | Divisional Commissioner Kashmir | Sr. GM, Projects, Jammu | Regarding RoW & other pending issues in the District Budgam. |
| 3.4.2019 | SDM Chadoora | Sr. DGM, Powergrid, Kishenganga | Regarding administrative assistance in village Wadipora, of Tehsil Chadoora. |
| 12.6.2019 | Divisional Commissioner Kashmir | Sr. DGM, Powergrid, Kishenganga | Regarding severe RoW constraints in District Budgam. |

30. The Petitioner has further submitted that the time over-run in completion of M/C portion of the 220 kV D/C Kishanganga-Amargarh line i.e. upto January, 2018 has already been condoned in Petition No. 124/TT/2018. The Petitioner has further submitted that the D/C portion of the transmission line passes through other disturbed areas like Budgam, Chandoora, Pulwama etc. areas of J&K. In these areas also there had been law and order problems as well as RoW issues at different locations which could be resolved progressively upto June, 2019 with support of local administration. The Petitioner has submitted that the Petitioner has made timely



efforts in raising the issues to appropriate authorities and persistent follow-up for resolution of the disputes.

31. The summary of delay as submitted by the Petitioner is as follows:

| Sl. No. | Month | | Reason | Document Submitted /Remarks |
|---------|-----------------|---------------|--|--|
| | From | To | | |
| 1 | July, 2016 | April, 2017 | Law & order problem due to militant activity and severe snowfall | <ul style="list-style-type: none"> • Newspaper cutting, law and order situation is submitted with the petition. • Total months affected: 10 months |
| 2 | May, 2016 | January, 2018 | RoW issue in district Baramulla | <ul style="list-style-type: none"> • Supporting documents/ letters for RoW issue is submitted with the petition. • Total months affected: 20 months |
| 3 | December, 2016 | January, 2018 | RoW issue in district Bandipora | <ul style="list-style-type: none"> • Supporting documents/ letters for RoW issue is submitted with the petition. • Total months affected: 13 months |
| 4 | September, 2017 | June, 2019 | RoW issue in districts of Budgam, Pulwama, Chadoora, Khansahib & Baramulla | <ul style="list-style-type: none"> • Supporting documents/ letters for RoW issue is submitted with the petition. • Total months affected: 21 months |

32. UPPCL has submitted that the transmission project has been delayed by about 17 months in case of Line-(ii) and impact of additional IDC is ₹767 lakh. This cost would be lower if the cost quoted by the successful bidder is considered for comparison of the completion cost. Therefore, the Petitioner should recalculate IDC based on cost quoted in the bid and completion cost calculated based on actual expenditure incurred on the transmission project.

33. In response, the Petitioner has submitted that comparison is to be done with cost estimates as per the format of Form-5. Further, there was a delay in execution of the transmission asset due to uncontrollable factors.



34. We have considered the submissions of the Petitioner and UPPCL. There is time over-run of about 517 days in case of the instant asset. The Petitioner has submitted that the transmission asset is delayed due to RoW problems in construction of the transmission line, law and order problems due to militant activity and severe snow fall.

35. The time over-run in completion of 41.62 km M/C portion of the 220 kV D/C Kishanganga-Amargarh transmission line upto Janaury, 2018 has been condoned vide order dated 25.4.2019 in Petition No. 124/TT/2018. The Petitioner has submitted that the D/C portion of the transmission line passes through other disturbed areas like Budgam, Chandoora, Pulwama etc. areas of J&K. It is observed that the Petitioner has faced RoW problems at various locations 12/0, 13/0, 16/0, 31/2, 31/3, 32/2, 33B/9, 38/0, 39B/2, 39/2, 40/6, 51/2, 57/0, 59/0, 59A/0, 60/0, 61/0, 62/0, AP 38/0&39 B/2 AP 42A/0. The last such RoW problem faced by the Petitioner was on 12.6.2019.

36. We have also gone through the monthly progress report of Central Electricity Authority (CEA) pertaining to the transmission projects for the months of May, 2019, June, 2019 and July, 2019. The status of progress of the transmission project has been recorded in the report and the same is as follows:

| Month | Length in CKM | Total Locations | Foundation completed | Tower erected | Stringing completed | Remarks |
|-----------------|---------------|-----------------|----------------------|---------------|---------------------|--|
| As on 30.4.2019 | 232 | 252 | 252 | 252 | 228 | Progress affected due to RoW compensation issue. 1.6 km stringing stretch was held up due to severe RoW which is now being resolved. Progress is slow due to |



| | | | | | | |
|--------------------|-----|-----|-----|-----|-----|---|
| | | | | | | snowfall and law & order problem also. |
| As on 30.5.2019 | 232 | 252 | 252 | 252 | 228 | Progress affected due to RoW compensation issue. 1.6 km stringing stretch was held up due to severe RoW which is now being resolved. Progress is slow due to snowfall and law & order problem also. |
| As on 30.6.2019 | 232 | 252 | 252 | 252 | 228 | "Progress affected due to RoW compensation issue. Line is yet to be charged after dismantling of one house below line." |
| As on 30.7.2019 | 232 | 252 | 252 | 252 | 232 | Executed in July, 2019 |

37. From the above, it is observed that the Petitioner has completed foundation, tower erection work at all 252 numbers of locations as on 30.4.2019. However, the Petitioner has faced RoW problem in stringing of 1.6 km and finally charged in the month of July, 2019 after resolving the RoW problems.

38. The Petitioner has furnished the details of correspondences exchanged with various authorities along with supporting documents. The Petitioner was affected by land & problems and severe snowfall from July, 2016 to April, 2017, which was subsumed in the RoW issues faced by the Petitioner for 623 days from 27.9.2017 to 12.6.2019 at various locations, which affected the execution of the transmission asset. As RoW issues are beyond the control of Petitioner and accordingly, the time over-run of 517 days in execution of the transmission asset is condoned.



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

39. The Petitioner has claimed IDC in respect of the transmission asset and has submitted the revised Auditor’s Certificate dated 4.1.2023 in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged.

40. The loan amount as on COD has been mentioned in Form-6 and Form-9C. The loan details submitted in Form-9C for 2019-24 tariff period and IDC computation statement have been considered for the purpose of IDC calculation on cash basis and on accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged. However, in the statement showing IDC discharged up to COD, the Petitioner has indicated the floating rate of interest of the loans deployed. IDC on cash basis up to COD has been worked out on the basis of loan details given in the statement showing discharge of IDC and Form-9C for the transmission asset. The Petitioner is directed to submit the information on actual interest rates at the time of truing-up.

41. Accordingly, based on the information furnished by the Petitioner, IDC considered, is as follows:

| IDC as per Auditor’s Certificate | IDC Admissible | IDC disallowed due to computational difference | IDC Discharged as on COD | IDC Un-discharged as on COD | IDC Discharge During | |
|----------------------------------|----------------|--|--------------------------|-----------------------------|----------------------|---------|
| | | | | | 2019-20 | 2020-21 |
| A | B | C=A-B | D | E=B-D | F | G |
| 2241.21 | 2219.49 | 21.72 | 1715.97 | 503.53 | 486.88 | 16.65 |

42. The Petitioner has claimed IEDC of ₹1339.81 lakh and has submitted Auditor’s Certificate in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission asset. Accordingly,



IEDC of ₹1339.81 lakh is allowed.

Initial Spares

43. Regulation 23(d) of the 2019 Tariff Regulations provides the following ceiling norms:

| | | |
|---|--|-------|
| <i>“(d) Transmission System</i> | | |
| <i>i. Transmission line:</i> | | 1.00% |
| <i>ii. Transmission sub-station</i> | | |
| - Green Field: | | 4.00% |
| - Brown Field: | | 6.00% |
| <i>iii. Series Compensation devices and HVDC Station:</i> | | 4.00% |
| <i>iv. Gas Insulated Sub-station (GIS)</i> | | |
| - Green Field: | | 5.00% |
| - Brown Field: | | 7.00% |
| <i>v. Communication System:</i> | | 3.50% |
| <i>vi. Static Synchronous Compensator:</i> | | 6.00% |

44. The Petitioner has claimed the following Initial Spares:

| Particulars | Plant & Machinery cost up to cut-off date (₹ in lakh) (excluding IDC and IEDC) | Initial Spares Claimed (₹ in lakh) | Ceiling (in %) |
|--------------------|---|---|-----------------------|
| Transmission Lines | 16484.48 | 160.69 | 1 |
| Sub-station | 867.78 | 25.32 | 6 |

45. We have considered the submissions of the Petitioner. Initial Spares allowed are as follows:

| Particulars | Plant & Machinery cost up to cut-off date (₹ in lakh) (excluding IDC and IEDC) (A) | Initial Spares Claimed (₹ in lakh) (B) | Ceiling limit (in %) (C) | Allowable Initial Spares (₹ in lakh) $D=(A-B)*C/(100-C)$ | Initial Spares allowed (₹ in lakh) |
|--------------------|---|---|---------------------------------|--|---|
| Transmission Lines | 16484.48 | 160.69 | 1 | 164.89 | 160.69 |
| Sub-station | 867.78 | 25.32 | 6 | 53.77 | 25.32 |

Capital Cost allowed as on COD

46. Accordingly, capital cost allowed in respect of the transmission asset as on



COD is as follows:

| (₹ in lakh) | | | |
|--|---|------------------------------------|---|
| Capital cost claimed in Auditor's Certificate as on COD (A) | Less: IDC disallowed due to computational difference (B) | Un-discharged IDC as on COD (C) | Capital cost as on COD (D) = (A-B-C) |
| 21679.87 | 21.72 | 503.53 | 21154.63 |

Additional Capital Expenditure ("ACE")

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

"24. Additional Capitalization within the original scope and up to the cut-off date:

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

(a) Undischarged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

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

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

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

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



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

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

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

48. The Petitioner has claimed actual/ projected ACE for 2019-24 tariff period on account of balance and retention payments including accrual IDC and work executed after COD and is within cut-off date and is claimed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations (31.3.2022). The details are as follows:

| (₹ in lakh) | | | |
|-----------------------|---------|---------|---------|
| Actual/ Projected ACE | | | |
| 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| 1072.87 | 1251.34 | 39.97 | 70.90 |

49. We have considered the submissions of the Petitioner. ACE claimed is allowed on account of balance and retention payments and work executed after COD and is within cut-off date and is allowed under Regulation 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The actual/ projected ACE allowed is subject to truing up in respect of the transmission asset and the same is as follows:



(₹ in lakh)

| Particulars | Actual / Proposed ACE | | | |
|---|-----------------------|----------------|--------------|--------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
| Proposed ACE allowed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations | 1072.87 | 1251.34 | 39.97 | 70.90 |
| Add: IDC discharge | 486.88 | 16.65 | 0.00 | 0.00 |
| Total | 1559.75 | 1267.99 | 39.97 | 70.90 |

Capital Cost as on 31.3.2024

50. Accordingly, capital cost allowed in respect of the transmission asset as on 31.3.2024 is as follows:

| Capital cost claimed as on COD | Actual / Projected ACE | | | | Total capital cost as on 31.3 2024 |
|--------------------------------|------------------------|---------|---------|---------|------------------------------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | |
| 21154.63 | 1559.75 | 1267.99 | 39.97 | 70.90 | 24093.23 |

Debt-Equity Ratio

51. 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:

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

52. The details of debt-equity considered for the purpose of computation of tariff for 2019-24 period in respect of the transmission asset is as follows:

| Particulars | Capital cost as on COD (₹ in lakh) | (in %) | Total capital cost as on 31.3.2024 (₹ in lakh) | (in %) |
|--------------|---------------------------------------|---------------|---|---------------|
| Debt | 14808.24 | 70.00 | 16865.26 | 70.00 |
| Equity | 6346.39 | 30.00 | 7227.97 | 30.00 |
| Total | 21154.63 | 100.00 | 24093.23 | 100.00 |

Depreciation

53. 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.”

54. We have considered the submissions of the Petitioner. The IT equipment has been considered as part of the gross block and depreciated using Weighted Average Rate of Depreciation (WAROD). WAROD has been worked out and placed as Annexure-I after considering the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil i.e. IT asset has been considered as 100% depreciable. Depreciation allowed in respect of the transmission assets for 2019-24 tariff period is as follows:

| (₹ in lakh) | | | | | | |
|-------------|---|---------------------------------------|----------|----------|----------|----------|
| | Particulars | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| A | Opening Gross Block | 21154.63 | 22714.38 | 23982.36 | 24022.33 | 24093.23 |
| B | Addition during the year 2019-24 due to projected ACE | 1559.75 | 1267.99 | 39.97 | 70.90 | 0.00 |



| | Particulars | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|--|---------------------------------------|----------|----------|----------|----------|
| C | Closing Gross Block (A+B) | 22714.38 | 23982.36 | 24022.33 | 24093.23 | 24093.23 |
| D | Average Gross Block (A+C)/2 | 21934.50 | 23348.37 | 24002.35 | 24057.78 | 24093.23 |
| E | Average Gross Block (90% depreciable assets) | 21934.50 | 23348.37 | 24002.35 | 24057.78 | 24093.23 |
| F | Average Gross Block (100% depreciable assets) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| G | Depreciable value (excluding IT equipment and software) (E*90%) | 19741.05 | 21013.53 | 21602.11 | 21652.00 | 21683.91 |
| H | Depreciable value of IT equipment and software (F*100%) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| I | Total Depreciable Value (G+H) | 19741.05 | 21013.53 | 21602.11 | 21652.00 | 21683.91 |
| J | Weighted average rate of Depreciation (WAROD) (in %) | 5.01 | 5.02 | 5.03 | 5.03 | 5.03 |
| K | Elapsed useful life at the beginning of the year (Year) | 0.00 | 0.00 | 1.00 | 2.00 | 3.00 |
| L | Balance useful life at the beginning of the year (Year) | 33.00 | 33.00 | 32.00 | 31.00 | 30.00 |
| M | Depreciation during the year (D*J) | 735.18 | 1172.24 | 1206.77 | 1209.69 | 1211.56 |
| N | Cumulative Depreciation at the end of the year | 735.18 | 1907.42 | 3114.19 | 4323.88 | 5535.44 |
| O | Remaining Aggregate Depreciable Value at the end of the year | 19005.87 | 19106.11 | 18487.92 | 17328.12 | 16148.47 |

Interest on Loan (“IoL”)

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

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

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

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

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

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



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

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

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

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

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

56. The weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on COD for respective loans. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.

57. In view of above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset is as follows:

| (₹ in lakh) | | | | | | |
|-------------|--|---------------------------------------|----------------|----------------|----------------|---------------|
| | Particulars | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| A | Gross Normative Loan | 14808.24 | 15900.06 | 16787.65 | 16815.63 | 16865.26 |
| B | Cumulative Repayments up to Previous Year | 0.00 | 735.18 | 1907.42 | 3114.19 | 4323.88 |
| C | Net Loan-Opening (A-B) | 14808.24 | 15164.88 | 14880.23 | 13701.45 | 12541.38 |
| D | Addition due to ACE | 1091.83 | 887.59 | 27.98 | 49.63 | 0.00 |
| E | Repayment during the year | 735.18 | 1172.24 | 1206.77 | 1209.69 | 1211.56 |
| F | Net Loan-Closing (C+D-E) | 15164.88 | 14880.23 | 13701.45 | 12541.38 | 11329.82 |
| G | Average Loan (C+F)/2 | 14986.56 | 15022.56 | 14290.84 | 13121.41 | 11935.60 |
| H | Weighted Average Rate of Interest on Loan (in %) | 7.84 | 7.78 | 7.77 | 7.82 | 7.81 |
| I | Interest on Loan (G*H) | 786.50 | 1168.24 | 1110.12 | 1026.53 | 932.13 |



Return on Equity (“RoE”)

58. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as follows:

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

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

Provided that return on equity in respect of Additional Capitalization after cut-off date beyond the original scope excluding Additional Capitalization 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.”



59. The Petitioner has submitted that MAT rate is applicable to it. MAT rate applicable in the year 2019-20 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission assets is as follows:

| (₹ in lakh) | | | | | | |
|-------------|---|---------------------------------------|----------------|----------------|----------------|----------------|
| | Particulars | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| A | Opening Equity | 6346.39 | 6814.31 | 7194.71 | 7206.70 | 7227.97 |
| B | Addition due to ACE | 467.93 | 380.40 | 11.99 | 21.27 | 0.00 |
| C | Closing Equity (A+B) | 6814.31 | 7194.71 | 7206.70 | 7227.97 | 7227.97 |
| D | Average Equity (A+C)/2 | 6580.35 | 7004.51 | 7200.70 | 7217.33 | 7227.97 |
| E | Return on Equity (Base Rate) (in %) | 15.500 | 15.500 | 15.500 | 15.500 | 15.500 |
| F | Tax Rate applicable (in %) | 17.472 | 17.472 | 17.472 | 17.472 | 17.472 |
| G | Rate of Return on Equity (Pre-tax) | 18.782 | 18.782 | 18.782 | 18.782 | 18.782 |
| H | Return on Equity (Pre-tax) (D*G) | 827.32 | 1315.59 | 1352.44 | 1355.56 | 1357.56 |

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

60. O&M Expenses claimed by the Petitioner are as follows:

| (₹ in lakh) | | | | | |
|--|---------|---------|---------|---------|---------|
| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Sub-station Bays (Number) | | | | | |
| 2 numbers of 220 kV bays at Kishenganga | 30.14 | 46.60 | 48.24 | 49.92 | 51.68 |
| AC Lines (km) | | | | | |
| 220 kV Kishanganga-Wagoora D/C Line (Upto T Point) (41.620 km) | 29.04 | 44.99 | 46.48 | 48.22 | 49.82 |
| Kishanganga-Wagoora (T Point to Wagoora) (73.450 km) | | | | | |

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

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

| Particulars | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|---------|---------|---------|---------|---------|
| Norms for sub-station Bays (₹ Lakh per bay) | | | | | |
| 765 kV | 45.01 | 46.60 | 48.23 | 49.93 | 51.68 |
| 400 kV | 32.15 | 33.28 | 34.45 | 35.66 | 36.91 |
| 220 kV | 22.51 | 23.30 | 24.12 | 24.96 | 25.84 |
| 132 kV and below | 16.08 | 16.64 | 17.23 | 17.83 | 18.46 |
| Norms for Transformers (₹ Lakh per MVA) | | | | | |
| 765 kV | 0.491 | 0.508 | 0.526 | 0.545 | 0.564 |



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

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

Provided further that:

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



on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;

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

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

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

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

62. We have considered the submissions of the Petitioner. It is observed that the Petitioner has claimed O&M Expenses of 41.620 km M/C portion of Kishanganga-Wagoora Line (Upto T Point) under Double circuit (Single conductor) as there is no specific norms for Multi circuit single conductor. Accordingly, O&M Expenses for 41.620 km M/C portion of Kishanganga-Wagoora Line (Upto T Point) is allowed under D/C (Single conductor). The O&M Expenses claimed by the Petitioner and allowed are as follows:



| Particulars | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|---------------------------------------|--------------|--------------|--------------|---------------|
| Sub-station Bays (Number) | | | | | |
| 220 kV: Wagoora-Kishenganga Bays | 2 | 2 | 2 | 2 | 2 |
| Norms | | | | | |
| 220 kV (AIS) | 22.51 | 23.30 | 24.12 | 24.96 | 25.84 |
| Total Sub-station Bays | 30.14 | 46.60 | 48.24 | 49.92 | 51.68 |
| AC Lines (km) | | | | | |
| Kishanganga-Wagoora D/C Line (Upto T Point) | 41.620 | 41.620 | 41.620 | 41.620 | 41.620 |
| Kishanganga-Wagoora (T Point to Wagoora) | 73.450 | 73.450 | 73.450 | 73.450 | 73.450 |
| Norms | | | | | |
| D/C Single Conductor | 0.377 | 0.391 | 0.404 | 0.419 | 0.433 |
| Total Transmission Line | 29.04 | 44.99 | 46.49 | 48.21 | 49.83 |
| Total O&M Expenses (₹ in lakh) | 59.18 | 91.59 | 94.73 | 98.13 | 101.51 |

Interest on Working Capital (“IWC”)

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

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

.....

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

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

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

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

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

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

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



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

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

64. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI base rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, the rate of IWC considered is 11.25% (SBI 1year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and 10.50% (SBI 1year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-24. The components of the working capital and interest allowed thereon is as follows:

| Particulars | (₹ in lakh) | | | | |
|--|---------------------------------------|---------------|---------------|---------------|---------------|
| | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Working Capital for O&M Expenses (O&M expenses for one month) | 7.37 | 7.63 | 7.89 | 8.18 | 8.46 |
| Working Capital for Maintenance Spares (15% of O&M expenses) | 13.26 | 13.74 | 14.21 | 14.72 | 15.23 |
| Working Capital for Receivables (Equivalent to 45 days of annual fixed cost /annual transmission charges) | 449.28 | 468.84 | 470.44 | 461.19 | 449.07 |
| Total Working Capital | 469.91 | 490.21 | 492.54 | 484.09 | 472.75 |
| Rate of Interest for working capital (in %) | 12.05 | 11.25 | 10.50 | 10.50 | 10.50 |
| Interest of working capital | 37.90 | 55.15 | 51.72 | 50.83 | 49.64 |

Annual Fixed Charges for 2019-24 Tariff Period

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



| Particulars | (₹ in lakh) | | | | |
|-----------------------------|---------------------------------------|----------------|----------------|----------------|----------------|
| | 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Depreciation | 735.18 | 1172.24 | 1206.77 | 1209.69 | 1211.56 |
| Interest on Loan | 786.50 | 1168.24 | 1110.12 | 1026.53 | 932.13 |
| Return on Equity | 827.32 | 1315.59 | 1352.44 | 1355.56 | 1357.56 |
| O&M Expenses | 59.18 | 91.59 | 94.73 | 98.13 | 101.51 |
| Interest on Working Capital | 37.90 | 55.15 | 51.72 | 50.83 | 49.64 |
| Total | 2446.08 | 3802.81 | 3815.78 | 3740.74 | 3652.40 |

Filing Fee and Publication Expenses

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

Licence Fee and RLDC Fees and Charges

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

Goods and Services Tax

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



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

Security Expenses

70. The Petitioner has submitted that security expenses in respect of transmission assets is not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and consequential IWC.

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

Capital Spares

72. The Petitioner has sought reimbursement of capital spares at the end of 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

73. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations and with effect from 1.11.2020, the 2010 Sharing Regulations has been



repealed and sharing is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the billing, collection and disbursement of the transmission charges for the 2014-19 tariff period and 2019-24 tariff period shall be governed by the 2010 Sharing Regulations and 2020 Sharing Regulations as provided in Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations.

74. To summarise,

(a) AFC allowed in respect of the transmission assets for 2019-24 tariff period in the instant order are as follows:

| (₹ in lakh) | | | | |
|--|----------------|----------------|----------------|----------------|
| 2019-20 (Pro-rata for 245 days) | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 2446.08 | 3802.81 | 3815.78 | 3740.74 | 3652.40 |

75. Annexure-I given hereinafter shall form part of the order.

76. This order disposes of Petition No. 22/TT/2021 in terms of the above discussions and findings

**sd/-
(P. K. Singh)
Member**

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

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



Annexure - I

| 2019-24 Capital Expenditure as on COD | Admitted Capital Cost as on COD (₹ in lakh) | Actual / Projected ACE | | | | Admitted Capital Cost as on 31.3.2024 (₹ in lakh) | Rate of Depreciation (in %) | Annual Depreciation as per Regulations | | | | |
|--|---|------------------------|---------------------|---------------------|---------------------|---|-----------------------------|--|---------------------|---------------------|---------------------|---------------------|
| | | 2019-20 (₹ in lakh) | 2020-21 (₹ in lakh) | 2021-22 (₹ in lakh) | 2022-23 (₹ in lakh) | | | 2019-20 (₹ in lakh) | 2020-21 (₹ in lakh) | 2021-22 (₹ in lakh) | 2022-23 (₹ in lakh) | 2023-24 (₹ in lakh) |
| Transmission Line | 17249.10 | 1388.97 | 1148.99 | 39.97 | 70.90 | 19897.94 | 5.28 | 947.42 | 1014.42 | 1045.81 | 1048.74 | 1050.61 |
| Sub-Station | 696.38 | 96.92 | 118.40 | 0.00 | 0.00 | 911.70 | 5.28 | 39.33 | 45.01 | 48.14 | 48.14 | 48.14 |
| PLCC | 102.67 | 2.36 | 0.08 | 0.00 | 0.00 | 105.11 | 6.33 | 6.57 | 6.65 | 6.65 | 6.65 | 6.65 |
| Leasehold Land | 3106.47 | 71.50 | 0.51 | 0.00 | 0.00 | 3178.48 | 3.34 | 104.95 | 106.15 | 106.16 | 106.16 | 106.16 |
| Total | 21154.63 | 1559.75 | 1267.99 | 39.97 | 70.90 | 24093.23 | | 1098.27 | 1172.24 | 1206.77 | 1209.69 | 1211.56 |
| | | | | | | Average Gross Block (₹ in lakh) | | 21934.50 | 23348.37 | 24002.35 | 24057.78 | 24093.23 |
| | | | | | | Weighted Average Rate of Depreciation (in %) | | 5.01 | 5.02 | 5.03 | 5.03 | 5.03 |

