# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No. 245/GT/2020

Coram:

Shri I.S. Jha, Member Shri Arun Goyal, Member Shri Pravas Kumar Singh, Member

Date of Order: 14th September, 2022

## IN THE MATTER OF

Petition for revision of tariff for the 2014-19 tariff period in respect of Koteshwar Hydro Power Station (400 MW).

#### AND

## IN THE MATTER OF

THDC India Limited, (A Joint Venture of Govt. of India & Govt. of UP), Pragatipuram, Bypass Road, Rishikesh – 249201 (Uttarakhand).

...Petitioner

#### Vs

- Punjab State Power Corporation Limited, The Mall, Near Kali Badi Mandir, Patiala - 147 001 (Punjab).
- Haryana Power Utilities, (DHBVNL & UHBVNL), Shakti Bhawan, Sector – 6, Panchkula-134 109 (Haryana).
- 3. Uttar Pradesh Power Corporation Limited, Shakti Bhawan, 14 Ashok Marg, Lucknow – 226001
- BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, Behind Nehru Place Bus Terminal, New Delhi-110019.
- BSES Yamuna Power Limited,
  3rd Floor, Shakti Kiran Building,
  Karkardooma, Near Court, New Delhi-110092.



- Tata Power Delhi Distribution Limited,
  33 kV, Grid Sub-Station Building,
  Hudson Lines, Kingsway Camp, Delhi-110009.
- Engineering Department, Chandigarh Administration, 1<sup>st</sup> Floor, UT Secretariat, Sector 9-D, Chandigarh-160009
- 8. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun-248001.
- 9. Himachal Pradesh State Electricity Board, Vidyut Bhawan, Shimla-171004.
- Jaipur Vidyut Vitran Nigam Limited, Vidyut Bhawan, Janpath, Jyotinagar, Jaipur-302005.
- 11. Ajmer Vidyut Vitran Nigam Limited, Old Powerhouse, Hatthi Bhatta, Jaipur road, Ajmer-305001.
- 12. Jodhpur Vidyut Vitran Nigam Limited, New Powerhouse, Industrial Area, Jodhpur-342003.
- 13. Power Development Department, Govt. of J&K, Civil Secretariat, Jammu -180001.
- 14. M. P. Power Management Company Limited, 3rd Floor, Block No. 11, Shakti Bhawan, Rampur, Jabalpur-482008.
- 15. Rajasthan Urja Vikas Nigam Limited, Vidyut Bhawan, Jyoti Nagar, Jaipur – 302005 (Rajasthan).
- Jammu and Kashmir State Power Trading Company Limited,
  PDD Complex, Bemina, Srinagar– 190010.
  ...Respondents



### **Parties Present:**

Ms. Anushree Bardhan, Advocate, THDC

Shri Rajesh Sharma, THDC

Shri Mukesh Kumar Verma, THDC

Shri Ajay Vaish, THDC

Shri Rakesh Singh, THDC

Shri Brijesh Kumar, UPPCL

Shri R.B. Sharma, Advocate, BRPL

Ms. Megha Bajpeyi, BRPL

Shri Mohit Mudgal, Advocate, BYPL

Shri Sachin Dubey, Advocate, BYPL

Shri Abhishek Srivastava, BYPL

Shri Sameer Singh, BYPL

Shri Ravindra Khare, MPPMCL

# <u>ORDER</u>

This petition has been filed by Petitioner, Tehri Hydro Development Corporation Ltd (THDC), for truing-up of tariff of Koteshwar Hydroelectric Project (400 MW) (hereinafter referred to as 'the generating station') for the 2014-19 tariff period, in terms of Regulation 8(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

# **Background**

2. The Petitioner is a joint venture company of Government of India (GOI) and the Government of Uttar Pradesh, with GOI holding majority and controlling shares. The generating station is a part of the Tehri Hydro Power Complex with an aggregate capacity of 2400 MWs, which comprises of Tehri HPP Stage-I (1000 MW), Tehri Pumped Storage Plant (1000 MW) and downstream power station Koteshwar Hydroelectric Project (400 MW) in Tehri Garhwal district in the State of Uttarakhand. The Koteshwar reservoir is designed to function as lower reservoir for Tehri Pumped Storage Plant and to regulate the water release from main Tehri reservoir for irrigation



and drinking water requirements. The power allocation from the generating station had been notified on 8.8.2007 by the Ministry of Power, Govt. of India. The petitioner has entered into Power Purchase Agreements with the Respondents for the capacity generated from the project. The generating station with a total capacity of 400 MW comprises of four units of 100 MW each and the COD of the units / generating station are as under:

| Unit / generating station    | COD        |
|------------------------------|------------|
| Unit-I                       | 01.04.2011 |
| Unit-II                      | 26.10.2011 |
| Unit-III                     | 13.02.2012 |
| Unit-IV / Generating Station | 01.04.2012 |

3. The Commission vide order dated 9.10.2018 in Petition No.117/GT/2018, had determined the tariff of the generating station for the 2014-19 tariff period, considering the capital cost of Rs. 262107.72 lakh as on 1.4.2014. Subsequently, vide order dated 4.6.2019 in Review Petition No. 47/RP/2018, the Commission revised the capital cost of the generating station as Rs. 262240.26 lakh, as on 31.3.2014. Accordingly, the capital cost and the annual fixed charges of the generating station allowed vide order dated 4.6.2019 are as under:

# **Capital Cost allowed**

(Rs. in lakh)

|                                    | 2014-15   | 2015-16   | 2016-17   | 2017-18   | 2018-19   |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|
| Opening Capital                    | 262240.26 | 266634.29 | 272747.88 | 273385.89 | 273577.04 |
| Cost                               |           |           |           |           |           |
| Admitted additional capitalization | 4394.03   | 6113.59   | 638.01    | 191.15    | 380.00    |
| Closing Capital Cost               | 266634.29 | 272747.88 | 273385.89 | 273577.04 | 273957.04 |

## **Annual Fixed Charges allowed**

(Rs. in lakh)

|                  | 2014-15  | 2015-16  | 2016-17  | 2017-18  | 2018-19  |
|------------------|----------|----------|----------|----------|----------|
| Return on Equity | 12390.90 | 12719.94 | 12931.36 | 12957.32 | 12975.21 |
| Interest on Loan | 21082.40 | 19776.69 | 18276.41 | 13195.89 | 11610.35 |
| Depreciation     | 12577.68 | 12825.98 | 12978.75 | 12995.79 | 13006.01 |



|                             | 2014-15  | 2015-16  | 2016-17  | 2017-18  | 2018-19  |
|-----------------------------|----------|----------|----------|----------|----------|
| Interest on Working Capital | 1387.70  | 1392.69  | 1389.75  | 1298.54  | 1289.08  |
| O&M Expenses                | 5932.00  | 6325.88  | 6745.92  | 7193.85  | 7671.52  |
| Total                       | 53370.68 | 53041.18 | 52322.19 | 47641.39 | 46552.16 |

4. Against the above order dated 9.10.2018, the Petitioner has filed appeal (Appeal No.126/2021) before the Appellate Tribunal for Electricity (APTEL) and the same is pending.

# **Present Petition**

5. In terms of Regulation 8(1) of the 2014 Tariff Regulations, the Petitioner has filed the present Petition for truing up of tariff of the generating station for the 2014-19 tariff period and has claimed capital cost and annual fixed charges as under:

# **Capital Cost claimed**

(Rs. in lakh)

|  | 2014-15   | 2015-16   | 2016-17   | 2017-18   | 2018-19   |
|--|-----------|-----------|-----------|-----------|-----------|
| Opening capital cost                           | 262240.26 | 266634.29 | 272756.98 | 273401.70 | 282629.58 |
| Add: Additional during the year                | 2017.31   | 5772.32   | 16.35     | 4643.24   | 4219.96   |
| Less: De-<br>capitalisation during<br>the year | 88.44     | 11.28     | 11.50     | 7.05      | 47.15     |
| Add: Discharges during the year                | 2465.16   | 361.66    | 639.87    | 4,591.69  | 101.56    |
| Closing capital cost                           | 266634.29 | 272756.98 | 273401.70 | 282629.58 | 286903.95 |
| Average capital cost                           | 264437.27 | 269695.63 | 273079.34 | 278015.64 | 284766.77 |

# **Annual Fixed Charges claimed**

(Rs. in lakh)

|                     | 2014-15  | 2015-16  | 2016-17  | 2017-18  | 2018-19  |
|---------------------|----------|----------|----------|----------|----------|
| Depreciation        | 12579.06 | 12821.46 | 12978.82 | 13213.41 | 13506.79 |
| Interest on Loan    | 21095.12 | 19789.90 | 18290.52 | 13493.45 | 12292.12 |
| Return on Equity    | 12396.69 | 12787.66 | 13000.60 | 13311.24 | 13772.37 |
| Interest on Working | 1388.53  | 1394.85  | 1318.34  | 1229.18  | 1203.89  |
| Capital             |          |          |          |          |          |
| O&M Expenses        | 5938.80  | 6333.14  | 6753.66  | 7202.10  | 7680.32  |
| Total               | 53398.20 | 53127.01 | 52341.93 | 48449.38 | 48455.50 |

6. The Respondent UPPCL, Respondent MPPMCL and the Respondent BRPL have filed their replies vide affidavits dated 9.9.2020, 5.10.2020 and 1.4.2021



respectively. The Petitioner has filed its rejoinder affidavits on 9.11.2020, 6.11.2020 and 11.5.2021 respectively to the above replies. The Petitioner has also submitted additional affidavits dated 5.8.2020, 25.5.2021, 31.8.2021 and 6.9.2021 after serving copy to the Respondents. This Petition, along with Petition No. 244/GT/2020 (tariff of the generating station for the period 2019-24) was heard through video conferencing on 25.1.2022 and the Commission after directing the Petitioner to file certain additional information reserved its order in the matter. In response, the Petitioner has filed the additional information on 19.2.2022, with copy to the Respondents. Based on the submissions of the parties and documents available on record and after prudence check, we proceed for truing up the tariff of the generating station for the 2014-19 tariff period, in this Petition, as stated in the subsequent paragraphs.

# **Capital Cost**

- 7. Regulation 9(3) of the 2014 Tariff Regulations provides as under:
  - "9. Capital Cost:
  - (3) The Capital cost of an existing project shall include the following:
  - (a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
  - (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
  - (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15."
- 8. The Respondent BRPL and the Respondent MPPMCL have submitted that in terms of order dated 9.10.2018 in Petition No. 117/GT/2018, the additional capitalization has been restricted to the Revised Cost Estimates (RCE) by the CCEA for this generating station and the CCEA has not agreed for any further capital expenditure. Accordingly, they have submitted that no further additional capital



expenditure can be permitted during the period 2014-15. The Petitioner, in its rejoinder has submitted that CCEA had approved the RCE for Rs. 2717.35 crore, including IDC of Rs. 383.88 crore. It has also submitted that the Commission vide its order dated 16.4.2019 in Review Petition No. 41/RP/2018 had revised the IDC to Rs. 400.12 crore. i.e., increase in IDC of Rs. 16.24 crore (Rs. 400.12 crore – Rs. 383.88 crore) and therefore, the completion cost of the project is Rs. 2733.59 crore (Rs. 2717.35 crore + Rs. 16.24 crore).

9. We have considered the submissions of both parties. The Commission vide its order dated 4.6.2019 in Review Petition No. 47/RP/2018 had approved the opening capital cost of Rs. 262240.26 lakh as on 1.4.2014. Accordingly, the capital cost of Rs. 262240.26 lakh has been considered as the opening capital cost as on 1.4.2014, for the purpose of determination of tariff for the 2014-19 tariff period.

# **Additional Capital Expenditure**

- 10. Regulation 14 of the 2014 Tariff Regulations provides as under:
  - 14. Additional Capitalisation and De-capitalisation:
  - (1) The capital expenditure in respect of the 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:
  - (i) Undischarged liabilities recognized to be payable at a future date;
  - (ii) Works deferred for execution;
  - (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
  - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
  - (v) Change in law or compliance of any existing law:

Provided that 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 shall be submitted along with the application for determination of tariff.

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



- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law:
- (ii) Change in law or compliance of any existing law;
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work; and
- (iv) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.
- (3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:
- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
- (ii) Change in law or compliance of any existing law;
- (iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;
- (iv) Deferred works relating to ash pond or ash handling system in the original scope of work:
- (v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;
- (vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;
- (vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal / lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;
- (viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;
- (ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and
- (x) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receiving system arising due to non-materialisation of coal supply corresponding to full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station:



Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2014:

Provided further that any capital expenditure other than that of the nature specified above in (i) to (iv) in case of coal / lignite based station shall be met out of compensation allowance:

Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M), repairs and maintenance under (O&M) expenses and Compensation Allowance, same expenditure cannot be claimed under this regulation.

- (4) In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of decapitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised."
- 11. The projected additional capital expenditure allowed vide order dated 9.10.2018 in Petition No. 117/GT/2018 for the 2014-19 tariff period, is as under:

(Rs. In lakh)

|  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|---------|
| Total additional capital                                       | 4482.47 | 6124.87 | 649.51  | 191.15  | 380.00  |
| expenditure (A)  |         |         |         |         |         |
| De-capitalization (B)  | 88.44   | 11.28   | 11.50   | 0.00    | 0.00    |
| Total projected additional capital expenditure allowed (C=A-B) | 4394.03 | 6113.59 | 638.01  | 191.15  | 380.00  |

12. The reconciliation of additional capital expenditure claimed by the Petitioner, duly supported by auditor certificate, for the 2014-19 tariff period is as under:

(Rs. In lakh)

|                              | 2014-15   | 2015-16   | 2016-17   | 2017-18   | 2018-19   |
|------------------------------|-----------|-----------|-----------|-----------|-----------|
| Closing Gross Block as per   | 265620.09 | 272046.65 | 276685.41 | 281448.99 | 286054.05 |
| books (A)                    |           |           |           |           |           |
| Less: Opening Gross          | 263691.22 | 265620.09 | 272046.65 | 276685.41 | 281448.99 |
| Block as per books (B)       |           |           |           |           |           |
| Total Additions as per       | 1928.87   | 6426.56   | 4638.76   | 4763.58   | 4605.05   |
| books (C=A-B)                |           |           |           |           |           |
| Exclusions (items not        | 0.00      | 29.08     | 46.86     | 26.00     | 69.68     |
| allowable / not claimed) (D) |           |           |           |           |           |
| Net Additional Capital       | 1928.87   | 6397.48   | 4591.90   | 4737.58   | 4535.37   |
| Expenditure claimed          |           |           |           |           |           |
| before adjustment of         |           |           |           |           |           |



|  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|---------|---------|---------|---------|---------|
| liability but after Decapitalisation (E=C-D) |         |         |         |         |         |
| Add Discharged Liability as per Form 11      | 2465.16 | 361.66  | 639.87  | 4591.69 | 101.56  |
| Less Liability as per Form 9A                | 0.00    | 636.45  | 4587.06 | 101.38  | 362.56  |
| Total Additions as per Form 9 or Form 11     | 4394.03 | 6122.68 | 644.72  | 9227.88 | 4274.37 |

13. Based on the above reconciliation, the year-wise claim for additional capital expenditure, under various heads, is as under:

(Rs. In lakh)

| S. No. | Particulars                                   | 2014-15        | 2015-16 | 2016-17 | 2017-18 | 2018-19 |  |  |  |
|--------|---|----------------|---------|---------|---------|---------|--|--|--|
| Α      | Additions being claimed for                   | tariff purpose | е       |         |         |         |  |  |  |
| i      | Capitalization claimed against admitted items |                |         |         |         |         |  |  |  |
|        | Claim under Regulation 14(1)(ii)              | 1965.23        | 63.00   | 0.00    | 0.00    | 0.00    |  |  |  |
|        | Claim under Regulation 14(3)(iii)             | -              | -       | 2.37    | -       | -       |  |  |  |
|        | Claim under Regulation 14(3)(vii)             | 0.31           | -       | -       | -       | -       |  |  |  |
|        | Claim under Regulation 14(3)(viii)            | 51.78          | 5709.32 | 13.97   | -       | -       |  |  |  |
| ii     | Capitalization claimed again                  | st new items   |         |         |         |         |  |  |  |
|        | Claim under Regulation 14(3)(iii)             | -              | -       | -       | 32.95   | -       |  |  |  |
|        | Claim under Regulation 14(3)(viii)            | -              | -       | -       | 4610.29 | 4219.96 |  |  |  |
|        | Sub-total (A)                                 | 2017.31        | 5772.32 | 16.35   | 4643.24 | 4219.96 |  |  |  |
| В      | Decapitalization                              | 88.44          | 11.28   | 11.50   | 7.05    | 47.15   |  |  |  |
| С      | Discharge of undischarged Liabilities         | 2465.16        | 361.66  | 639.87  | 4591.69 | 101.56  |  |  |  |
| Е      | Net additions claimed (E=A-B+C-D)             | 4394.03        | 6122.69 | 644.72  | 9227.88 | 4274.37 |  |  |  |

14. The Respondent UPPCL has submitted that during 2018-19 an amount of Rs. 4582.52 lakh were earlier disallowed by the Commission. Hence claim is currently inadmissible and needs to be disallowed. The Petitioner vide rejoinder submitted that the liability of Rs. 4321.52 lakh against Rs. 4582.52 lakh had been discharged during the FY 2018-19, which has already been indicated at Form 9A of the year-wise statement of additional capital expenditure for 2018-19.

