CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 548/GT/2020

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

Date of Order: 17th October, 2022

IN THE MATTER OF

Petition under Sections 62 and 79 (1) of the Electricity Act, 2003 read with related provisions of Regulations 48 (1)(a), 48 (1)(b), 54 and 55 under Chapter-10 (Miscellaneous Provisions), of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Regulations 66 (1), 66 (2), 76 and 77 under Chapter-15 (Miscellaneous Provisions) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations , 2019 for approval of tariff in respect of 110 MW Pare Hydro project for the useful plant life of 40 years.

AND

IN THE MATTER OF

North Eastern Electric Power Corporation Limited,
Corporate Office: Brookland Compound,
Lower New Colony, Shillong 793 003,
Meghalaya. **…Petitioner**

Vs

1. Assam Power Distribution Company Limited,
Bijulee Bhawan, Paltan Bazar,
Guwahati- 781001.

2. Meghalaya Power Distribution Corporation Limited,
Lumjinshai, Short Round Road,
Shillong- 793001.

3. Tripura State Electricity Corporation Limited
Bidyut Bhavan, North Banamalipur,
Agartala- 799001, Tripura.

4. Power & Electricity Department,
Government of Mizoram,
New Secretariat Complex, Kawlphetha,

Aizawl- 796001.

5. Manipur State Power Distribution Company Limited
3rd Floor, New Directorate Building, Near 2nd M.R Gate,
Imphal- Dimapur Road, Imphal- 795001 Manipur.

6. Department of Power,
Vidyut Bhawan, Government of Arunachal Pradesh,
Itanagar- 791111, Arunachal Pradesh

7. Department of Power, Government of Nagaland,
Electricity House, A.G Colony, Kohima – 797001 Nagaland.

8. North Eastern Regional Power Committee,
NERPC Complex, Dong Parmaw, Lapalang,
Shillong-793006 Meghalaya.

9. North Eastern Regional Load Despatch Centre,
Dongtieh, Lower Nongrah, Lapalang,
Shillong – 793006, Meghalaya.

Parties Present:

Shri M.G. Ramachandran, Senior Advocate, NEEPCO
Ms. Poorva Saigal, Advocate, NEEPCO
Shri Devapriya Choudhury, NEEPCO
Shri Sushanta Deka, NEEPCO
Shri Munin Choudhury, NEEPCO
Ms. Bornali Deori, NEEPCO
Ms. Elizabeth Pyrbot, NEEPCO

ORDER

This Petition has been filed by the Petitioner, North Eastern Electric Power Corporation Limited seeking the following reliefs:

(i) Approve the re-engineered tariff in respect of 110 MW Pare Hydro Electric Power Plant (PaHEP) for the useful life of 40 years of the Plant as determined in terms of the tariff rationalization measures approved by the Government of India and as detailed in paragraph 17 of this Petition.

(ii) Allow recovery of arrears from the beneficiaries, if any, on account of fixation of tariff.

(iii) Allow recovery of Statutory Charges to be claimed at actual through special Petition in due course.

(iv) *Allow recovery of filing fees relating to the petition from the beneficiaries as and when the same is paid to the Hon'ble Commission.*

(v) *Allow the recovery of the publication expenses incurred with regard to this petition.*

(vi) *Allow additions/ alterations/ changes/ modifications to the Petition at a future date.*

(vii) *Pass such order as this Hon'ble Commission deems fit and appropriate in the facts and circumstances of the case in the interest of justice.*

(viii) *Condone any inadvertent omissions/ errors.*

Background

2. PARE hydroelectric power plant (2 x 55 MW) (in short 'the Project/generating station') owned by the Petitioner, is located in the Papumpare district of the State of Arunachal Pradesh. The generating station is a run-of-river project, with pondage storage scheme on river Dikrong and tail race discharge of Ranganadi hydroelectric project (Stage-I). CCEA, on 4.12.2008, had accorded the investment approval (IA) for the setting up of the generating station at the estimated cost of Rs. 57399 lakh (at June, 2007 price level). As per the said investment approval, the project was scheduled to be commissioned in 44 months from the date of IA i.e., August 2012. Accordingly, the actual COD of the units of the generating station are as under:

Units	**Actual COD**
Unit II	21.5.2018
Unit I/ Generating Station	28.5.2018

3. The project generates 506.42 MU of Design Energy at 95% machine availability and 90% dependable year. The Environment Clearance (EC) along with the R&R plan, for project affected people, was accorded by the Ministry of Environment & Forests (MOEF), GOI, on 13.9.2006. The Memorandum of Agreement (MOA) for execution and operation of the project was executed on 21.9.2006, between the Petitioner and the Govt. of Arunachal Pradesh. The

Petitioner has entered into PPA with the beneficiaries of the North-Eastern States dated 24.11.2006, for sale of power from the project.

4. Petition No. 149/GT/2018 was filed by the Petitioner for approval of tariff for the generating station for the period from COD of the units till 31.3.2019, based on the capital cost of Rs. 1686.19 crore upto the COD of the generating station. However, the Commission, after considering the deduction of undischarged liabilities, the recommendations of CEA on the capital cost and adjustment in FC and FERV, the time and cost overrun, by its order dated 28.1.2020, allowed the annual fixed charges for the period from 21.5.2018 till 31.3.2019, on the basis of the capital cost of Rs. 81481.01 lakh as on COD of Unit-II (21.5.2018) and Rs.163348.84 lakh as on the COD of Unit-I/generating station (28.5.2018). The Commission also considered the discharge of liabilities of Rs.386.83 lakh for the period from 28.5.2018 to 31.3.2019. Accordingly, the capital cost and the fixed charges allowed by order dated 28.1.2020 are as under:

Capital Cost

(Rs in lakh)

	2018-19	
	21.5.2018 to 27.5.2018	**28.5.2018 to 31.3.2019**
Opening Capital Cost	81481.01	163348.84
Net additional capital expenditure allowed	0.00	0.00
Add: Discharges during the year	0.00	386.83
Closing Capital Cost	**81481.01**	**163735.67**

Annual Fixed Charges

(Rs in lakh)

	2018-19	
	21.5.2018 to 27.5.2018	**28.5.2018 to 31.3.2019**
Return on Equity	97.87	8642.84
Interest on Loan	60.34	5169.07
Depreciation	77.66	6858.74
Interest on Working Capital	7.94	701.26
O&M Expenses	61.11	5465.16
Total (pro-rata)	**304.92**	**26837.06**

5. The fixed charges approved as above, are subject to revision based on truing-up exercise in terms of Regulation 8 of the 2014 Tariff Regulations.

Present Petition

6. In the above background, the Petitioner vide affidavit dated 22.5.2020 has filed the present petition (filed on 2.9.2020), seeking the prayers as stated in para 1 above, based on the following submissions:

(a) As per the Commission's order dated 28.1.2020 and based on the actual plant performance parameters, the tariff calculated for 2018-19 is Rs.8.14 per unit and for 2019-20 is Rs.7.75 per unit. The tariff based on normative parameters of the 2014 Tariff Regulations, the approved design energy and the fixed charges allowed for 2018-19, works out to Rs.6.27 per unit;

(b) Prior to the decision dated 28.1.2020, a provisional tariff of Rs.5.00 per kWh was being billed to all the beneficiaries from COD till date, as mutually agreed at the 35th Commercial Sub-Committee meeting of NERPC held on 18th March 2018;

(c) Several long-term beneficiaries of the generating station viz, Assam, Manipur and Nagaland have expressed reservations on the tariff being excessively high and have communicated the possibility of surrendering their share allocations from the generating station. Copies of letters are attached and marked as Annexures-C;

(d) Paragraphs 4.1 and 4.2 of the "Measures to Promote Hydro Power Sector" approved by GOI, and notified by the Ministry of Power on 18.3.2019, incorporate rationalisation measures to bring down hydropower tariff in order to make the same more attractive to buyers. In terms of this, the Petitioner has considered recourse to the said measures approved by the GOI, in order to rationalise the tariff over the useful life of 40 years of the plant and rationalise the tariff design for recovery of tariff, in a manner conducive to the beneficiaries;

(e) The detailed tariff calculations based on the tariff rationalisation measures approved by the GOI and the MOP, GOI stands at a levelized tariff over the useful life of the plant at Rs 6.60 per unit and the first-year tariff at Rs 5.00 per unit, with 2.83% escalation.

(f) The following data have been considered for re-engineering of tariff:

A. Project Cost: The project cost has been taken as Rs.1654.13 crore (i.e after deducting an amount of Rs. 2.59 crore received against sale of infirm power from the CEA vetted cost of Rs.1656.74 crore)

B. Annual rate of escalation of tariff of 3%.

C. For the first year (2018-19) the normative parameters have been considered as per Tariff Regulations, 2014.

D. From the second year onwards (2019-20 onwards) for the entire life of the plant (i.e. 40 years) the normative parameters have been considered as per the Tariff Regulations, 2019.

E. The Rate of Return on Equity is considered as 16.50%.

F. Operation and Maintenance charges as 4.00 % of project cost (excluding R&R cost) and thereafter escalated annually @ 4.77 % as per Tariff Regulations, 2019.

G. Rate of Depreciation has been taken as 5.28 %.

(g) As per the accounting policy of the Petitioner, the revenue from operation of a plant is required to be recognized in the annual accounts on the basis of tariff determined by the Commission. Many of the beneficiaries of the generating station have expressed their desire to surrender their allocated shares citing high tariff as the reason. Therefore, the Petitioner has been constrained to provisionally bill the beneficiaries at the mutually agreed provisional rate of Rs. 5.00 /kWh pending the decision in the present Petition.

(h) As a result of the above, revenue has not been recognized till 31.3.2020 based on the order dated 28.1.2020 applicable from May 2018 (i.e. COD). Consequently, the Petitioner's closing of accounts for the year ending 31st March, 2020 may not be possible due to incorrect revenue recognition on account of deviation from its approved accounting policy, leading to qualified observations on the said matter by Auditors during their audit of annual accounts for 2019-20.

(i) In view of the above, it is extremely urgent that the revised tariff in the present petition in respect of the generating station be approved at the earliest. This will facilitate the closure of the accounts for 2019-20 by recognizing the revenue, at the provisional agreed rate of Rs. 5.00 / kWh till the said petition is disposed of.

(j) The rationalization of the tariff is in accordance with the Regulations of the Commission and is not inconsistent with the norms and parameters adopted by the Commission in the Tariff Regulations. Further, such rationalization is being proposed at the instance of the beneficiaries, as they have expressed their inability to pay higher tariff in the present tariff period and the initial tariff be aligned to the provisional tariff recovered by the Petitioner for 2018-19. The Petitioner has only rationalized the front loading of tariff and such rationalization is to the benefit of the consumer at large and not against public interest.

(k) In accordance with Regulation 48 of the 2014 Tariff Regulations and Regulation 66 of the 2019 Tariff Regulations, read with Regulation 54 (Power to Relax) and Regulation 55 (Power to Remove Difficulty) of the 2014 Tariff Regulations and Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the 2019 Tariff Regulations, the Petitioner has filed the present petition for approval of a re-engineered tariff in respect of 110 MW project for the useful plant life of 40 years, on adoption of tariff rationalization measures approved by GOI. The levelized tariff has been calculated for the entire plant life of 40 years based on the aforementioned tariff rationalization measures

Hearing dated 27.7.2020

7. The petition was heard through video conferencing on 27.7.2020, and the Commission after directing the Petitioner to file additional information, granted time to the parties to complete the pleadings in the matter. In compliance to the directions, the Petitioner vide its affidavit dated 21.8.2020 (filed on 2.9.2020) has submitted the additional information, after serving copy on the Respondents.

Hearing dated 25.5.2021

8. During the hearing of the petition through virtual hearing on 25.5.2021, the learned Senior counsel for the Petitioner made detailed oral submissions. He also submitted that the Commission has the power to approve the levelized tariff in deviation of the norms, subject to the same not exceeding the levelized tariff calculated as per norms specified under the 2014 Tariff Regulations and the 2019 Tariff Regulations. The representative of the Respondent, APDCL submitted that the levelized tariff proposed by the Petitioner was very high. He also submitted that the Assam State Electricity Regulatory Commission, in its order, had approved the average tariff of all stations for 2019-20 as Rs 4.84/unit and, therefore, any tariff beyond this amount is not affordable and that the Respondent will have no option except to surrender the power. The representative further submitted that it has vide letter dated 2.9.2020 requested the Petitioner to re-engineer and further reduce the tariff and the response of the Petitioner on the said letter is awaited. The Commission after hearing the parties, directed the Petitioner to examine the communication dated 2.9.2020 of the Respondent, APDCL and undertake mutual negotiations, if required, pending final hearing of the matter. At the request of the learned Senior counsel for the Petitioner, the Commission permitted the Petitioner to continue to bill the Respondent beneficiaries at the provisional tariff of Rs.5.00 per unit, until further orders.

9. In response to the aforesaid directions, the Petitioner vide affidavit dated 5.12.2021 (filed on 16.2.2022), has submitted that there were bilateral discussions/ meetings between the Petitioner and the Respondent, APDCL on 16.8.2021, regarding the re-engineering of tariff, for the project, and the minutes of the meeting recording the consensus arrived between the parties has been attached as

Annexure-A, which may be taken on record. The relevant portion of the proceedings dated 16.8.2021, duly signed by the parties are extracted hereunder:

> "*After detailed deliberation on all aspects and various propositions from both sides, mutual consensus is arrived at on the following resolutions to keep the tariff at a rational level for both the parties:*
>
> *(a) Consideration of ROE base rate at 11.50%*
>
> *(b) The tariff thus arrived at will be fixed for the period of entire 40 years (from FY 2018-19);*
>
> *(c) Tentative levelized tariff thus work out to Rs 5.75 per unit for 40 years with first year tariff of Rs 5.00 per unit (copy enclosed as* ***Annexure-III);***
>
> *(d) There will neither be any escalation nor de-escalation on the mutually agreed tariff on any factors (controllable as well as uncontrollable) over the entire period and the same will be beyond the coverage of 'change in law' chapter of the PPA.*
>
> *(e) Neither of the party will be entitled to invoke Force majeure to alteration of the mutually agreed tariff at any point of time*
>
> *(f) However, there will be scope for mutual discussion on any significant issue(s) necessitating alteration of tariff and in the event of unviability, the aggrieved party will be free to opt for termination as per the terms of the PPA.*
>
> *NEEPCO will place the matter before the competent authority and intimate APDCL an approved proposal. Subsequently, APDCL will place the proposal from NEEPCO before competent authorities, for approval*
>
> *Representatives from both sides have agreed to put concerted efforts to reap the benefit of the regional project…."*

Hearing dated 15.3.2022

10. During the hearing of the petition through virtual hearing on 15.3.2022, the learned Senior counsel for the Petitioner informed that as per the directions of the Commission, mutual discussions took place between the Petitioner and the Respondent, APDCL, and both parties had arrived at a settlement, mainly on issues related to ROE and levelized tariff, which is applicable for a period of 30 years. On a specific query by the Commission as to whether the said settlement has been ratified by the respective Boards of both the parties and whether the terms of the settlement would be applicable to all beneficiaries of the project, the learned Senior

counsel answered in affirmative. He also sought permission to place on record, the documents supporting the same which was permitted by the Commission.

11. In the meanwhile, the Petitioner was directed to submit the following additional information, after serving copy to the Respondents:

> *(i) Documents relating to the decision of the respective Boards of the Petitioner and Respondent APDCL to enter into such settlement;*
>
> *(ii) Details of quantum of power allocated to the beneficiaries;*
>
> *(iii) Details of consultations/ discussions with beneficiaries other than Respondent APDCL;*
>
> *(iv) Details of PLF of the plant.*

12. The Commission also directed other Respondent beneficiaries, to submit their consent on the terms of the settlement reached between the Petitioner and the Respondent APDCL. Subject to these, order in the petition was reserved.

13. In compliance to the above directions, the Petitioner vide affidavit dated 6.4.2022, has furnished the in-principle approval by the CMD of the Petitioner Company, on the settlement reached between the Petitioner and Respondent APDCL *(vide proceedings dated 16.8.2021),* at Annexure-I to the affidavit. It has also submitted that the in-principle approval was granted with a note that the ratification by the Board of Directors shall be taken, after issuance of order by the Commission. It was also agreed, as part of the settlement with Respondent APDCL, that the ratification by Board of Directors of the Petitioner Company, shall be communicated to the respondent for needful at their end, for obtaining ratification by their Board of Directors. The details of the quantum of power allocated to the beneficiaries from the project by the MOP, GOI and NERPC Committee has also been enclosed as Annexures-II & III. The details of the communication made by Petitioner to beneficiaries, other than Respondent APDCL is enclosed as Annexure-IV. Also, the relevant pages of the MOM of the discussions in the 39th, 40th and 41st

Commercial Committee meeting and the replies received on the communications is enclosed as Annexures-V & VI respectively. The PLF of the generating station from COD till 28.2.2022 has been enclosed as Annexure-VII to the said affidavit. Based on the settlement reached between the Petitioner and the Respondent APDCL, vide proceedings dated 16.8.2021, the mutually agreed tariff (*as per Annexure-III of the affidavit*) is extracted below:

Year	***Tariff (Rs. /unit)***
2018-19	5.00
2019-20	5.06
2020-21	5.13
2021-22	5.20
2022-23	5.27
2023-24	5.34
2024-25	5.41
2025-26	5.49
2026-27	5.56
2027-28	5.64
2028-29	5.71
2029-30	5.79
2030-31	5.87
2031-32	5.95
2032-33	6.03
2033-34	6.11
2034-35	6.19
2035-36	6.27
2036-37	6.36
2037-38	6.44
2038-39	6.53
2039-40	6.62
2040-41	6.71
2041-42	6.80
2042-43	6.89
2043-44	6.98
2044-45	7.08
2045-46	7.17
2046-47	7.27
2047-48	7.37
2048-49	7.47
2049-50	7.57
2050-51	7.67
2051-52	7.78
2052-53	7.88
2053-54	7.99
2054-55	8.09
2055-56	8.20
2056-57	8.31

2057-58	8.43

14. The Petitioner has also served the copy of the said affidavit, containing the in-principle approval on the settlement between the parties (Petitioner and Respondent APDCL) etc., on the other Respondents beneficiaries of the project, and has filed an affidavit dated 6.4.2022, indicating the proof of service.

15. The Respondent APDCL vide its affidavit dated 13.4.2022 (filed on 4.5.2022) has furnished a copy of the in-principle approval of the Competent Authority of the Respondent (Annexure-I) to the mutually agreed tariff and has stated that the said approval is with a note that the ratification of the Board of Directors shall be taken after issuance of order by this Commission. Except for this, none of the other Respondents, who are also the beneficiaries of the project, have furnished their objections/ comments, on the mutually agreed tariff.

Analysis and Decision

16. Regulation 48 of the 2014 Tariff Regulations provides as under:

> *"48. Deviation from ceiling tariff:*
>
> *(1) Tariff for sale of electricity by the generating company or for transmission charges of the transmission licensee, as the case may be, may also be determined in deviation of the norms specified in these regulations, subject to the conditions that:*
>
> *(a) The levelized tariff over the useful life of the project on the basis of the norms in deviation does not exceed the levelized tariff calculated on the basis of the norms specified in these regulations and upon submission of complete workings with assumptions to be provided by the generator or the transmission licensee at the time of filing of the application; and*
>
> *(b) Any deviation shall come into effect only after approval by the Commission, for which an application shall be made by the generating company or the transmission licensee, as the case may be."*

17. Regulation 66 of the 2019 Tariff Regulations provides as under:

> *"66. Deviation from ceiling tariff:*
> *(1) The tariff determined in these regulations shall be a ceiling tariff. The generating company or the transmission licensee and the beneficiaries or the long-term customer, as the case may be, may mutually agree to charge a lower tariff.*

(2) The generating company or the transmission licensee, may opt to charge a lower tariff for a period not exceeding the validity of these regulations on agreeing to deviation from operational parameters, reduction in operation and maintenance expenses, reduced return on equity and incentive specified in these regulations.

(3) If the generating company or the transmission licensee opts to charge a lower tariff for a period not exceeding the validity of these regulations on account of lower depreciation based on the requirement of repayment in such case, the unrecovered depreciation on account of reduction of depreciation by the generating company or the transmission licensee during useful life shall be allowed to be recovered after the useful life in these regulations.

(4) The deviation from the ceiling tariff specified by the Commission, shall come into effect from the date agreed to by the generating company or the transmission licensee and the beneficiaries or the long-term customer, as the case may be.

(5) The generating company and the beneficiaries of a generating station or the transmission licensee and the long-term customer of transmission system shall be required to approach the Commission for charging lower tariff in accordance with clauses (1) to (3) above. The details of the accounts and the tariff actually charged under clauses (1) to (3) shall be submitted at the time of true up."

18. Thus, in terms of Regulation 48(1) of the 2014 Tariff Regulations and Regulation 66(5) of the 2019 Tariff Regulations, the generating company (as in the present case) is required to approach the Commission by way of an application, for charging mutually agreed tariff, for a period not exceeding the validity of the said regulations, in deviation from norms. While Regulation 48(1)(b) provides that the deviation shall come into effect only after approval of the Commission, Regulation 66(1)(4) provides that the deviation from ceiling tariff, shall come into effect, from the date agreed to by the generating company and the details of the accounts and tariff actually charged are required to be submitted at the time of truing up.

19. The Petitioner has submitted that the Commission is vested with the power to remove difficulty in giving effect to the objective of regulations under Regulation 77 of the 2019 Tariff Regulations. Accordingly, the Petitioner has prayed that the Commission may approve tariff in deviation from norms specified in the 2014 Tariff Regulations (for 2018-19) and the 2019 Tariff Regulations (for the period 2019-24),

in respect of the generating station for a period of 40 years (till 2057-58) upto the useful life of the plant.

20. Regulation 55 of the 2014 Tariff Regulations provides as under:

> *"55. Power to Remove Difficulty: If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations."*

21. Regulation 77 of the 2019 Tariff Regulations provides as under:

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

22. Thus, the above quoted provisions under the 2014 Tariff Regulations and the 2019 Tariff Regulations, provides that in case of giving effect to the regulations, the Commission, may, by order, make such provisions not inconsistent with the Act or Regulations, as may be considered necessary. So, the primary consideration is the difficulty in 'giving effect to the provisions of the regulations' and if such difficulty is encountered, then the Commission, in exercise of its power of removing the difficulty, can provide the missing link to make the regulations workable, without violating the express provisions of the said Regulations.

23. The Hon'ble Supreme Court in M.U. Sinai Vs Union of India {(1975) 2 SCR 640} has laid down as under:

> *"The existence or arising of a difficulty is the sine qua non for the exercise of power. If this condition precedent is not satisfied as an objective fact, the power under this clause cannot be invoked at all. Again, the "difficulty" contemplated by the clause must be a difficulty arising in giving effect to the provisions of the Act and not a difficulty arising aliunde, or an extraneous difficulty. Further, the Central Government can exercise the power under the clause only to the extent it is necessary for applying or giving effect to the Act etc., and no further. It may slightly tinker with the Act to round off angularities, and smoothen the joints or remove minor obscurities to make it workable, but it cannot change, disfigure or do violence to the basic structure and primary features of the Act. In*

no case, can it, under the guise of removing a difficulty change the scheme and essential provisions of the Act".

24. As per the above judgement, the difficulty must arise in giving effect to the provisions of the Act, and not any extraneous difficulty which would justify the exercise of power to remove difficulty. Further, the power of removal of difficulty cannot be exercised to change the scheme and essential provisions of the Act.

25. In the present case, the charging of lower tariff by the Petitioner, which has been mutually agreed between the Petitioner and the Respondent APDCL through mutual negotiation, is for a period of 40 years of useful life of the plant, which is in deviation of the norms specified under the Tariff Regulations, and is in terms of the provisions of Regulation 48 of the 2014 Tariff Regulations and Regulation 66 of the 2019 Tariff Regulations. These provisions, enable the parties to charge lower tariff for a period not exceeding the validity of the said regulations i.e upto 31.3.2024. In our view, the power to remove difficulty can be exercised only to round off the angularities or minor obscurities to make the regulations workable and cannot be used to change the basic structure of the regulations. Since there is no difficulty in giving effect to the provisions of the Regulations with regard to the Petitioner charging mutually decided lower tariff, till the validity of the regulations, the prayer of the Petitioner to approve the tariff, in deviation of the norms for a period of 40 years, i.e for the period beyond the validity of the regulations (i.e 31.3.2024) is not acceptable. Therefore, the mutually decided tariff is restricted for a period till 2023-24. However, the Petitioner is at liberty to approach the Commission seeking the approval of the Commission, to charge the said mutually agreed tariff beyond 31.3.2024, at the time of truing up of tariff along with the tariff petition, in terms of the tariff regulations applicable for the next tariff period.

26. In order to examine whether the mutually agreed tariff, in terms of Regulation 48 and Regulation 66 of the Tariff Regulations, are lesser than the tariff to be determined in terms of the provisions of the 2014 Tariff Regulations and 2019 Tariff Regulations, we compute the tariff of the generating station for the period 2018-19 (*as decided vide order dated 28.1.2020 in Petition No.149/GT/2018*) and in accordance with the provisions of the 2019 Tariff Regulations (*for the period 2019-24*), as discussed in the subsequent paragraphs

Tariff for 2018-19

27. As stated, the Commission vide order dated 28.1.2020 in Petition 149/GT/ 2018 has determined the tariff of the generating station, for 2018-19. Hence, the annual fixed charges determined by the said order is considered for the purpose of comparison with the mutually decided tariff. Based on the Design Energy of 506.424 Mus, as approved by order dated 28.1.2020 in Petition 149/GT/2018, and keeping in view the provision for Auxiliary Consumption of 1.2% and free energy to the State as 13% the saleable energy from the generating station, works out to 435.302 MUs. Considering the fixed charges approved by order dated 28.1.2020, the composite tariff for 2018-19 is worked out below:

		21.5.2018 to 27.5.2018	**28.5.2018 to 31.3.2019**	**2018-19**
Fixed Charges	*Rs in crore*	**304.92**	**26837.06**	27141.98
Design Energy	MU	10.099	425.951	435.663
Auxiliary Consumption	%	1.20%	1.20%	1.20%
Free Power	%	13.00%	13.00%	13.00%
Saleable Energy	MU	8.681	366.131	374.479
Composite Tariff	**Rs. /kWh**	**3.513**	**7.330**	**7.248**

28. It is evident from the above, that the mutually agreed tariff to be charged by the Petitioner in terms of the settlement dated 16.8.2021(*and agreed by affidavit dated 6.4.2022*), is lower than the tariff for the year 2018-19, worked out in terms of the 2014 Tariff Regulations.

Tariff for 2019-24

Capital Cost as on 1.4.2019

29. The fixed charges for 2018-19 had been computed based on the closing capital cost of Rs. 163735.67 lakh, as on 31.3.2019, as approved by order dated 28.1.2020 in Petition No. 149/GT/2018. The same has been considered as the opening capital cost as on 1.4.2019.

Additional Capital Expenditure

30. No additional capital expenditure has been considered for the purpose of computation of tariff.

Capital Cost for the 2019-24 tariff period

31. Accordingly, the capital cost considered for the purpose of tariff for the 2019-24 period is as under:

(Rs.in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Capital Cost	163735.67	163735.67	163735.67	163735.67	163735.67
Add: Additional capital expenditure	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	**163735.67**	**163735.67**	**163735.67**	**163735.67**	**163735.67**
Average Capital Cost	163735.67	163735.67	163735.67	163735.67	163735.67

Debt Equity Ratio

32. The gross loan and equity amounting to Rs.114614.97 lakh and Rs.49120.70 lakh respectively as on 31.3.2019, as allowed in the ratio of 70:30 vide order dated 28.1.2020 in Petition No. 149/GT/2018 has been considered.

Return on Equity

33. In terms of Regulation 30 and Regulation 31 of the 2019 Tariff Regulations, Return on Equity has been calculated considering the base rate of ROE of 16.5% and MAT rate of 17.472%. Hence, the rate of ROE considered for the 2019-24 tariff period works out as 19.993%. Accordingly, ROE has been worked out as under:

(Rs.in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (a)	49120.70	49120.70	49120.70	49120.70	49120.70
Addition of Equity due to additional capital expenditure (net of de-capitalisation) (b)	0.00	0.00	0.00	0.00	0.00
Closing Equity (c)=(a)+(b)	49120.70	49120.70	49120.70	49120.70	49120.70
Average Equity (d)=(a)+(c)/2	49120.70	49120.70	49120.70	49120.70	49120.70
Base Rate (%) (e)	16.500%	16.500%	16.500%	16.500%	16.500%
Effective Tax Rate (%) (f)	17.472%	17.472%	17.472%	17.472%	17.472%
Effective ROE Rate (%) (g)=((e)/1-(f))	19.993%	19.993%	19.993%	19.993%	19.993%
Return on Equity (h)=(d)*(g)	**9820.70**	**9820.70**	**9820.70**	**9820.70**	**9820.70**

Interest on loan

34. In terms of Regulation 32 of 2019 Tariff Regulations, Interest on loan has been worked out as mentioned under:

(i) The gross normative loan amounting to Rs.114614.97 lakh has been considered as on 1.4.2019.

(ii) Cumulative repayment amounting to Rs.6936.40 lakh, as on 31.3.2019 as approved vide order dated 28.1.2020, has been considered as on 1.4.2019.

(iii) Accordingly, the net normative opening loan as on 1.4.2019 works out to Rs.107678.57 lakh.

(iv) Depreciation calculated has been considered as repayment of normative loan during the respective year of the period 2019-24.

(v) The interest rate has been calculated by applying the weighted average rate of interest (WAROI) of 5.520% as considered in order dated 28.1.2020.

35. Necessary calculations for interest on loan are as under:

(Rs.in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Loan – Opening (a)	114614.97	114614.97	114614.97	114614.97	114614.97
Cumulative repayment of loan upto previous year/ period (b)	6936.40	15074.06	23211.73	31349.39	39487.05
Net Loan – Opening (c)=(a)-(b)	107678.57	99540.91	91403.24	83265.58	75127.92
Addition of loan due to additional capital expenditure (d)	0.00	0.00	0.00	0.00	0.00
Repayment of loan during the year/ period (e)	8137.66	8137.66	8137.66	8137.66	8137.66
Net Loan – Closing (f)=(c)+(d)-(e)	99540.91	91403.24	83265.58	75127.92	66990.26
Average Loan (g)=(c)+(f)/2	103609.74	95472.08	87334.41	79196.75	71059.09
WAROI (h)	5.5200%	5.5200%	5.5200%	5.5200%	5.5200%
Interest on Loan (i)=(g)*(h)	**5719.26**	**5270.06**	**4820.86**	**4371.66**	**3922.46**

Depreciation

36. Cumulative depreciation amounting to Rs.6936.40 lakh, as on 31.3.2019, as approved vide order dated 28.1.2020 in Petition No. 149/GT/2018, has been considered, as on 1.4.2019. The balance useful life as on 1.4.2019, works out to 39.11 years from station COD. The weighted average rate of depreciation (WAROD) of 4.970% as approved by order dated 28.1.2020, has been considered for the calculation of depreciation. Accordingly, depreciation has been calculated as under:

(Rs.in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Average Capital Cost (a)	163735.67	163735.67	163735.67	163735.67	163735.67
Rate of Depreciation (%) (b)	4.9700%	4.9700%	4.9700%	4.9700%	4.9700%
Depreciable Value (c)=90%*(a)	147362.10	147362.10	147362.10	147362.10	147362.10
Balance life (d)	39.11	38.11	37.11	36.11	35.11
Cumulative depreciation beginning (e)	6936.40	15074.06	23211.73	31349.39	39487.05
Remaining Depreciable Value (f) = (c)-(e)	140425.70	132288.04	124150.38	116012.71	107875.05
Depreciation during the period (g)=(a)*(b)	8137.66	8137.66	8137.66	8137.66	8137.66
Cumulative depreciation (h)=(e)+(g)	15074.06	23211.73	31349.39	39487.05	47624.71
Less: Adjustment on account of de-capitalisation (i)	0.00	0.00	0.00	0.00	0.00
Net Cumulative Depreciation (j)	15074.06	23211.73	31349.39	39487.05	47624.71

Operation & Maintenance Expenses

37. Regulation 35(2)(c) of the 2019 Tariff Regulations provides that:

"In case of hydro generating stations which have not completed a period of three years as on 1.4.2019, operation and maintenance expenses for 2019-20 shall be worked out by applying escalation rate of 4.77% on the applicable operation and maintenance expenses as on 31.3.2019. The operation and maintenance expenses for subsequent years of the tariff period shall be worked out by applying escalation rate of 4.77% per annum."

38. Accordingly, based on the O&M expenses allowed by order dated 28.1.2020 in Petition 149/GT/2018, the O&M expenses allowed for the 2019-24 tariff period is as under:

(Rs.in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
6709.51	7029.55	7364.86	7716.16	8084.23

39. The expenses on account of wage revision and R&R expenses, have not been considered.

Interest on Working Capital

40. In terms of Regulation 34(1)(c) of the 2019 Tariff Regulations, working capital and interest on working capital has been worked out as under:

Maintenance Spares for working capital

41. Maintenance spares for working capital has been worked out on the basis of 15% of O&M expenses as under**:**

(Rs in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1006.43	1054.43	1104.73	1157.42	1212.63

Receivables for working capital

42. Receivables for working capital has been worked out on the basis of 45 days of fixed cost as under**:**

(Rs in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
3815.85	3805.97	3787.67	3776.52	3757.08

O&M Expenses for working capital

43. O&M expenses for working capital has been worked out on the basis of one month of O&M expenses including security expenses as under**:**

(Rs in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
559.13	585.80	613.74	643.01	673.69

44. In terms of Regulations 34(3) of the 2019 Tariff Regulations the rate of interest on working capital shall be considered as 12.05% (i.e., one-year SBI MCLR of 8.55% as on 1.4.2019 *plus* 350 bps) for the period 2019-24. In order to safeguard against additional interest burden due to excess/ under recovery of tariff, the rate of interest on working capital considered for 2019-20 is 12.05%, 11.25% for 2020-21 (i.e. one-year SBI MCLR of 7.75% as on 1.4.2020 *plus* 350 bps), 10.50% for 2021-22 (i.e. one-year SBI MCLR of 7.50% as on 1.4.21 plus 350 bps) and 10.50% for the period 2022-24 (i.e., one-year SBI MCLR of 7% as on 1.4.2022 plus 350 bps). Accordingly, interest on working capital has been computed as under:

(Rs in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Working capital for Receivables (45 days of fixed cost)	3815.85	3805.97	3787.67	3776.52	3757.08
Working capital for O&M Expenses (1 month of O&M expenses)	559.13	585.80	613.74	643.01	673.69
Working capital for Maintenance spares (15% of O&M expenses)	1006.43	1054.43	1104.73	1157.42	1212.63
Total Working Capital	**5381.40**	**5446.20**	**5506.14**	**5576.96**	**5643.40**
Rate of interest on Working Capital (%)	12.050%	11.250%	10.500%	10.500%	10.500%
Interest on Working Capital	**648.46**	**612.70**	**578.14**	**585.58**	**592.56**

Annual Fixed Charges

45. Accordingly, the annual fixed charges, computed for the generating station for the 2019-24 tariff period, are summarized below:

(Rs.in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	8137.66	8137.66	8137.66	8137.66	8137.66
Interest on Loan	5719.26	5270.06	4820.86	4371.66	3922.46
Return on Equity	9820.70	9820.70	9820.70	9820.70	9820.70
Interest on Working Capital	648.46	612.70	578.14	585.58	592.56
O&M Expenses	6709.51	7029.55	7364.86	7716.16	8084.23
Total	**31035.59**	**30870.67**	**30722.23**	**30631.77**	**30557.61**

Composite Tariff

46. The Design Energy of the generating station is 506.424 MU and keeping in view the provision of Auxiliary Consumption at 1.2% and Free Energy at 13%, the

saleable energy works out to be 435.302 MU. Based on the above, the saleable energy, per unit tariff, is worked out as under:

	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed charges (*Rs in lakh)*	31035.59	30870.67	30722.23	30631.77	30557.61
Saleable Design Energy (MUs)	435.302	435.302	435.302	435.302	435.302
Rate per unit (Rs/kWh)	**7.130**	**7.092**	**7.058**	**7.037**	**7.020**
Tariff mutually agreed between Petitioner and Respondent, APDCL	**5.063**	**5.131**	**5.200**	**5.271**	**5.342**

47. It is therefore evident from the above, that the mutually agreed tariff between the Petitioner and Respondent APDCL (*as per proceedings dated 16.8.2021*), is much lower than the tariff determined in terms of the provisions of the 2019 Tariff Regulations.

48. Now, the issue for consideration is whether the mutually agreed tariff, between the Petitioner and the Respondent, APDCL, vide proceedings dated 16.8.2021, (*which is lesser than the tariff determined in terms of the provisions of the Tariff Regulations*), is to be adopted/made applicable to the other Respondent beneficiaries of the project.

49. It is noticed from records that the Commission, based on the submissions of the Petitioner, during the proceedings in Petition No.149/GT/2018, had directed that the tariff @Rs.5/kWh, as decided in the NRPC meeting, shall continue to be charged by the Petitioner, till the determination of tariff. However, pursuant to the Commission's order dated 28.1.2020 determining the tariff of the generating station for 2018-19, several long-term Respondent beneficiaries, (including Respondent APDCL) had expressed reservations on the tariff being excessively high and have communicated the possibility of surrendering their share of allocations from the project. It is in this background that the Petitioner, taking recourse to the 'measures

to promote hydro power sector' laid down by the GOI, has filed the present petition, with the proposal for approval of the re-engineered levelized tariff over the useful life of 40 years, as stated in para 6 (f) above. It is pertinent to mention that, except for the Respondent APDCL, none of the Respondent beneficiaries herein, participated in the hearing of the present petition, nor have furnished their comments on the same. However, based on the submissions of the Respondent APDCL, during the hearing on 25.5.2021, the Commission had directed the parties to undertake mutual negotiations, pending final hearing of the matter. Until further orders, the Petitioner was permitted to bill the Respondent beneficiaries at the provisional tariff of Rs. 5/- per unit.

50. It is evident that the provisional tariff billing of Rs.5/- per unit, by the Petitioner, on all the Respondents, was subject to the orders of this Commission, in the present petition. It is also noticed that the Respondent beneficiaries (*except Respondent, APDCL*) have neither submitted their comments/objections to the petition nor their consent/objections, for the mutually agreed tariff (*vide proceedings dated 16.8.2021*), despite the directions of this Commission, vide ROP dated 15.3.2022. Considering these aspects in totality and keeping in view that the mutually agreed tariff is lesser than the tariff determined in terms of the Tariff Regulations, as demonstrated above, and in the overall interest of stakeholders, we accord approval to the tariff mutually agreed, in respect of the generating station, for 2018-19 and for the 2019-24 tariff period, as under, and adopt/make the same applicable, to the other Respondent beneficiaries of the project.

(Rs./kWh)

2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
5.000	5.063	5.131	5.200	5.271	5.342

51. The Petitioner, is permitted to bill the Respondent beneficiaries in terms of the above said tariff, including adjustment of arears, if any.

52. Petition No. 548/GT/2020 is disposed of in terms of the above.

Sd/-	Sd/-	Sd/-
(Pravas Kumar Singh)	**(Arun Goyal)**	**(I.S. Jha)**
Member	**Member**	**Member**