

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.273/GT/2019

Coram:

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

Date of Order: 7th June, 2021

IN THE MATTER OF

Petition for revision of tariff of Ranganadi Hydro Electric Project (405 MW) for the period 1.4.2014 to 31.3.2019 after truing-up exercise

AND

IN THE MATTER OF

North Eastern Electric Power Corporation Limited
Corporate Office: Brookland Compound
Lower New Colony, Shillong-793003

...Petitioner

Vs

1. Assam Power Distribution Company Limited
"Bijulee Bhawan" Paltanbazar
Guwahati-781001, Assam
2. Meghalaya Power Distribution Corporation Limited
Lumjinshai, Short Round Road
Shillong-799001, Meghalaya
3. Tripura State Electricity Corporation Limited
Bidyut Bhavan, North Banamalipur
Agartala-799001, Tripura
4. Power & Electricity Department
Government of Mizoram
New Secretariat Complex
Kawlpetha, Aizwal-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

7. Department of Power
Government of Nagaland
Electricity House, AG Colony
Kohima-797001
8. North Eastern Regional Power Committee
NERPC Complex, Dong Parmaw
Lapalang, Shillong-793006
9. North Eastern Regional Load Despatch Centre
Dongtieh, Lower Nongrah
Lapalang, Shillong-793006

...Respondents

Parties Present:

Shri Ranjan Mallik, NEEPCO
Shri Devapriya Choudhury, NEEPCO
Ms. Elizabeth Pyrbot, NEEPCO
Shri Indrajit Tahbildar, APDCL
Shri Nil Madhab Deb, APDCL

ORDER

This petition has been filed by the Petitioner, North Eastern Electric Power Corporation Ltd (NEEPCO) for revision of tariff of Ranganadi Hydro Electric Project (3 x 135 MW) (hereinafter referred to as “the generating station”) for the 2014-19 tariff period, in terms of Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).

2. The generating station comprises of three units of 135 MW each and is a run of the river scheme with pondage, having a Head Race Tunnel and a surface Power House. The tail race discharge of the generating station is diverted to Dikrong River through an open channel of 56 meters length. The date of commercial operation of the three units of the generating station are as under:

Units	COD
Unit-I	12.2.2002
Unit-II	12.2.2002
Unit-III	12.4.2002

3. Petition No. 40/GT/2015 was filed by the Petitioner for approval of tariff of the generating station for the 2014-19 tariff period, in accordance with the 2014 Tariff Regulations. The Commission vide its order dated 5.1.2016 in Petition No. 40/GT/2015 had approved the Annual Fixed Charges of the generating station. This was subsequently amended vide Commission's order dated 7.3.2016 (corrigendum) in Petition No. 40/GT/2015 for the said period, as under:

	<i>(Rs in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	15311.27	15372.41	15387.98	15405.84	15420.65
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	7379.29	1808.62	1822.26	1835.58	1846.97
Interest on Working Capital	910.82	809.81	838.01	868.09	900.00
O & M Expenses	7033.08	7500.36	7998.68	8530.12	9096.86
Total	30634.46	25491.21	26046.93	26639.63	27264.49

4. The annual fixed charges determined as above, were subject to revision based on truing-up exercise in terms of Regulation 8 of the 2014 Tariff Regulations. Accordingly, the Petitioner vide affidavit dated 4.9.2019 has filed the present petition for truing-up of tariff for the 2014-19 tariff period. The Petitioner vide affidavit dated 31.8.2020 has claimed the capital cost and the annual fixed charges for the 2014-19 tariff period as stated below:

Capital cost

	<i>(Rs in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	146759.23	148067.75	148108.04	148187.47	148102.36
Add: Addition during the year/period	1379.89	41.69	297.71	1205.38	888.24
Less: Decapitalisation during the year/period	71.37	1.39	218.29	1290.48	20.29
Add: Discharges during the year/period	0.00	0.00	0.00	0.00	379.51
Closing Capital Cost	148067.75	148108.04	148187.47	148102.36	149349.82

Annual Fixed Charges

	<i>(Rs in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	7781.91	2830.05	2839.40	2851.63	2950.81
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	15290.71	16356.12	19500.08	17277.53	15544.29
Interest on Working Capital	919.61	855.97	905.42	870.92	837.01
O & M Expenses	7033.08	7500.36	7998.68	8530.12	9096.86
Total	31025.31	27542.50	31243.59	29530.20	28428.97

5. The Commission vide Record of the Proceedings (ROP) of the hearing dated 2.6.2020 directed the Petitioner to submit certain additional information and reserved order in the petition. In response, the Petitioner vide affidavits dated 31.8.2020 and 26.10.2020 has filed the additional information and served copies of the same on the Respondents. The Respondent No.1, Assam Power Distribution Company Limited (APDCL) vide its affidavit dated 17.6.2020 has filed its reply and the Petitioner vide affidavit dated 13.7.2020 filed its rejoinder to the said reply. Taking into consideration the submissions of the parties and the documents available on record, we proceed to true-up the tariff of the generating station, on prudence check, as stated in the subsequent paragraphs.

Capital Cost

6. Regulation 9 of the 2014 Tariff Regulations provides as under:

“9 (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 modernization as admitted by this Commission in accordance with Regulation 15.”*

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

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project inconformity 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) project in the affected area.”*

7. The Commission vide its order dated 5.1.2016 in Petition No. 40/GT/2015 had approved the closing capital cost of Rs.146759.23 lakh as on 31.3.2014. Accordingly, in terms of Regulation 9 of the 2014 Tariff Regulations, the closing capital cost of Rs.146759.23 lakh has been considered as the opening capital cost as on 1.4.2014, for the purpose of tariff.

Additional Capital Expenditure

8. Regulations 14(3) of the 2014 Tariff Regulations provides as under:

“14.(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 un-discharged 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 obsolescence 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-materialization 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.”

9. The Commission vide its order dated 5.1.2016 in Petition No. 40/GT/2015 had allowed the year-wise, net projected additional capital expenditure for the 2014-19 tariff period as under:

<i>(Rs in lakh)</i>					
2014-15	2015-16	2016-17	2017-18	2018-19	Total
1593.99	358.77	138.33	432.05	41.00	2564.14

10. The year-wise break-up of the actual additional capital expenditure claimed by the Petitioner is as under:

<i>(Rs in lakh)</i>						
	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Add: Addition during the year/period (a)	1379.89	41.69	297.71	1205.38	888.24	3812.91
Less: De-capitalisation during the year/period (b)	71.37	1.39	218.29	1290.48	20.29	1601.82
Add: Discharges during the year/period (c)	0.00	0.00	0.00	0.00	379.51	379.51
Net Additional Capital Expenditure(d)=(a)-(b)+(c)	1308.52	40.30	79.42	(-) 85.10	1247.46	2590.60

11. With respect to the actual additional capital expenditure claimed, the Petitioner has submitted the following:

“That there are certain works which are necessarily required for efficient operation of the generating station, which have been executed. The capital expenditure on this account and justification for carrying out these works has been included in the claim.

There are certain expenditures of capital nature, which have been allowed by the Hon’ble Commission while determining AFC for Ranganadi Hydro Electric Power Plant for the period of 2014-19 vide its order dated. 05.01.2016 & corrigendum dated. 07.03.2016 in petition no.40/GT/2015, but could not be completed by the Petitioner within the stipulated period of 31.03.2019 due to various practical constraints. It is the humble submission of NEEPCO before the Hon’ble Commission for allowing for carrying out the remaining works relating to the aforesaid allowed expenditures during the subsequent years based on the application being submitted before the CERC for the control period of 2019-24”

The impact on AFC due to the capitalization is being claimed after excluding the amount incurred on minor items/expenditure of O&M nature/spares etc., which are not allowed

for additional capitalization for tariff purposes as per provisions of above Tariff Regulation, 2014.”

12. The Respondent, APDCL has pointed out that as the actual additional capital expenditure of Rs.3812.91 lakh claimed by the Petitioner for the 2014-19 tariff period has exceeded additional capital expenditure of Rs.2564.14 lakh as approved in order dated 5.1.2016 in Petition No. 40/GT/2015, the claim of the Petitioner may not be admitted. The Petitioner, in its rejoinder has clarified that it has furnished detailed justification for the actual additional capital expenditure claimed, duly supported by auditor certificate, in terms of the 2014 Tariff Regulations.

13. It is observed that, in Petition No.40/GT/2015, the Petitioner had claimed projected additional capital expenditure in respect of certain assets/ works which were projected to be capitalized during the 2014-19 tariff period, and the same was allowed by the Commission in its order dated 5.1.2016. However, in this petition, the Petitioner has also claimed actual additional capital expenditure in respect of some new assets/ works, which were not projected earlier and, hence, there is variation between the actual additional capital expenditure claimed in this petition as against the projected additional capital expenditure allowed in order dated 5.1.2016 in Petition No. 40/GT/2015. The claims of the Petitioner are examined and shown in the table below:

2014-15

<i>(Rs in lakh)</i>			
Head of Work/Equipment	Actual additional capital expenditure Claimed (in Rs. lakh)	Justification	Admissibility
Payment made to GIL against construction of Dam	840.29	The Commission had already approved the expenditure in terms of Regulation 14(3)(i) of 2014 Tariff Regulations, for compliance with the Arbitration award amount. The Respondent APDCL has submitted that the Commission may examine	Since the expenditure incurred is for compliance with the arbitration award and has already been allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the said expenditure is

		and decide accordingly.	allowed.
Procurement of micro-processor based Digital Governor	344.62	<p>The Commission has already approved the expenditure, considering the necessity for implementation of RGMO for a successful and efficient operation of the plant, under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The original approved amount was Rs.222.59 lakh (=Rs. 241.57 lakh minus Rs. 18.98 lakh). The order for the work was issued during 2011-12 and final payment against the job, after implementation was released during the year 2014-15. The total amount released against the implementation of the work is ₹344.62 lakh.</p> <p>The Respondent APDCL has submitted that the Commission may examine the actual cost incurred.</p>	<p>As the expenditure incurred is in respect of assets/ works which was already allowed vide Commission's order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission in its order dated 5.1.2016 had allowed a projected expenditure of Rs.241.57 lakh towards 'Procurement of micro-processor based Digital Governor' on replacement basis and had considered the de-capitalized value of ₹18.98 lakh for the old asset in 2014-15. Against the said expenditure allowed on projection basis, the Petitioner, in this petition, has capitalised an amount of Rs.344.62 lakh in 2014-15, but has not indicated the de-capitalized value of old asset. Hence, the de-capitalized value of the old asset has been considered under 'Assumed Deletions'.</p>
Procurement of 2V battery for the 220 V DC System	97.59	<p>The Commission had already approved the additional capital expenditure of Rs.91.07 lakh under Regulation 14(3)(viii) of the 2014 Tariff Regulations for successful and proper functioning of the generating station.</p> <p>The Respondent APDCL has submitted that the Commission may examine</p>	<p>As the expenditure incurred is in respect of assets/ works which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission vide order dated 5.1.2016 in Petition No.</p>

		the actual cost incurred.	40/GT/2015, had allowed an additional expenditure of Rs.97.59 lakh towards 'Procurement of 2V battery for the 220 V DC System' on replacement basis and had considered the de-capitalized value of Rs.6.52 lakh for the old asset in 2014-15. Against the said expenditure allowed on projection basis, the Petitioner has capitalised total additional expenditure of Rs.97.59 lakh in 2014-15. The Petitioner has, however, indicated the 'assumed deletion' value of Rs.26.09 lakh for the said asset, in this petition. Accordingly, the same has been considered under 'Assumed Deletions'.
Up-Gradation of HMI System of Turbine Generator	45.11	<p>The Commission had already approved an expenditure of Rs.100.00 lakh under Regulation 14(3)(viii) of the 2014 Tariff Regulations based on tentative estimate. On actual execution, the amount incurred was Rs.45.10 lakh.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly.</p>	<p>As the expenditure incurred is in respect of assets/ works which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015 had allowed a total projected additional capital expenditure of Rs.300.00 lakh during 2014-19 (i.e., Rs.100.00 lakh each during the years 2014-15, 2015-16 and 2016-17, towards the said work). It is further noticed that against the projected</p>

			additional capital expenditure allowed, the Petitioner has incurred actual additional capital expenditure of Rs.120.09 lakh during 2014-19 (i.e., Rs.45.11 lakh in 2014-15, Rs.14.59 lakh in 2015-16, Rs.38.26 lakh in 2017-18 and Rs.22.13 lakh in 2018-19).
Design, Engineering, Installation & Commissioning of Numerical Protection Relays	52.28	<p>The retrofitting of 'numerical protection relay' was done against adoption of new technology, in pursuance to the compliance to the regulations notified by this Commission. The expenditure has been claimed under Regulation 14(3)(viii) of 2014 Tariff Regulations.</p> <p>The Respondent APDCL has submitted that the Petitioner should have discussed with NERPC and the beneficiary States about the necessity of this expenditure before installing the relay. It has, however, stated that the Commission may examine the same and decide keeping the interest of both sides.</p>	Considering the submissions of the Petitioner and considering the fact that the asset is necessary for successful and efficient operation of the generating station, the additional capital expenditure incurred by the Petitioner on this asset (as replacement) is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. However, the gross value of the old asset has been considered under 'Assumed Deletions'.
Total claimed	1379.89		
Total allowed			1379.89

2015-16

<i>(Rs in lakh)</i>			
Head of Work/Equipment	Actual additional capital expenditure Claimed (in Rs. lakh)	Justification	Remarks on admissibility
Retrofitting of 132 kV Line Circuit Breaker (6 Nos)	27.10	The Commission had approved an amount of Rs.45.33 lakh against retrofitting of 6 numbers of 132 kV breakers.	As the expenditure incurred is in respect of assets/ works which was already allowed vide order

		<p>However, retrofitting of only three 132 kV breakers was taken up amounting to Rs. 27.10 lakh. The same was claimed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly.</p>	<p>dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission vide order dated 5.1.2016 in Petition No.40/GT/2015 had allowed projected expenditure of Rs.100.00 lakh during 2014-19 (i.e., Rs.60 lakh in 2015-16, Rs.30 lakh in 2016-17 and Rs.10 lakh in 2017-18), for this asset, on replacement basis and had considered de-capitalization of Rs.24.45 lakh (i.e. Rs.14.67 lakh in 2014-15, Rs.7.33 lakh in 2016-17 and Rs.2.45 lakh in 2017-18). Against the expenditure allowed for Retrofitting of six 132 kV Line Circuit Breaker on projection basis in 2015-16, the Petitioner, in this petition, has claimed additional capital expenditure of Rs.27.10 lakh for only three retrofits. It is, however, noticed that the Petitioner has not indicated the de-capitalised value of old asset in this petition. Hence, the de-capitalised value of the old asset has been considered under 'Assumed Deletions'.</p>
Up-gradation of HMI System of Turbine Generator	14.59	The Commission had already approved an expenditure of Rs.100.00 lakh for this asset vide order dated 5.1.2016, under Regulation	As the expenditure incurred is in respect of assets/ works which was already allowed vide order dated 5.1.2016 in

		<p>14(3)(viii) of the 2014 Tariff Regulations, considering the need for augmentation of the existing systems of Power House. The amount claimed was based on a tentative estimate. However, on actual execution, the amount incurred is Rs.14.59 lakh.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly.</p>	<p>Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015 had allowed a total projected additional capital expenditure of Rs.300.00 lakh in 2014-19 (i.e., Rs.100.00 lakh each in 2014-15, 2015-16 and 2016-17) for this asset. It is, however, noticed that against the said projected additional capital allowed, the Petitioner has capitalised total actual amount of Rs.120.09 lakh during 2014-19 (i.e., Rs.45.11 lakh in 2014-15, Rs.14.59 lakh in 2015-16, Rs.38.26 lakh in 2017-18 and Rs.22.13 lakh in 2018-19).</p>
Total claimed	41.69		
Total allowed			41.69

2016-17

<i>(Rs in lakh)</i>			
Head of Work/Equipment	Actual additional capital expenditure claimed	Justification	Remarks on admissibility
Construction of check dam etc. (Abdullah Nallah)	11.95	An expenditure of Rs.12 lakh for the said work was allowed on projected basis, by order dated 5.1.2016 in Petition No. 40/GT/2015 under Regulation 14(3)(viii) of the 2014 Tariff Regulations, towards successful operation of the generating station. However, on execution, an actual amount of	As the actual additional capital expenditure incurred is in respect of works which was already allowed vide order dated 5.1.2016 in Petition No.40/GT/2015, the same are allowed .

		<p>Rs.11.95 lakh was incurred. The difference is due to actual execution of the work, as per site conditions.</p> <p>The Respondent APDCL has submitted that even though the accrued cost is less than the admitted cost, the accrued cost could have been still lower if completed within the specified timeline as approved by Commission. The Commission is requested to look into the matter and deduct the additional cost incurred due to reasons attributable to the Petitioner.</p>	
Construction of Check Dam etc. (Roi Nallah).	9.50	An expenditure of Rs.10 lakh was allowed for the said work, on projected basis, by order dated 5.1.2016 in Petition No. 40/GT/2015 under Regulation 14(3)(viii) of the 2014 Tariff Regulations for the successful operation of Plant. However, on execution, an actual amount of Rs.9.50 lakh was incurred. The difference is due to actual execution of work, as per site conditions.	
Procurement & installation of Online Vibration Monitoring for Units-I,II & III	56.10	A projected additional capital expenditure of Rs.120 lakh for the said work, was allowed on projected basis, by order dated 5.1.2016 in Petition No. 40/GT/2015 under Regulation 14(3)(viii) of the 2014 Tariff Regulations towards the 'implementation of the Online vibration monitoring system in RHEP' on the ground that the same was necessary for successful operation of the	

		<p>generating station. The amount claimed was against tentative estimate submitted. However, on actual execution, the amount expended is Rs.56.10 lakh.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly.</p>	
Retrofitting of Cooling water pump (2 Nos)	21.68	<p>A projected additional capital expenditure of Rs.67.33 lakh was allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015 under Regulation 14(3)(viii) of the 2014 Tariff Regulations towards the 'retrofitting of two nos. CW pumps' as considered necessary for the successful operation of the generating station. However, on execution, an actual amount of Rs.21.68 lakh was incurred, due to retrofitting of motors only.</p>	<p>As the additional capital expenditure incurred is in respect of work/ asset which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015 had allowed a total projected additional capital expenditure of Rs.200.00 lakh during 2014-19 (i.e., Rs.100.00 lakh each for 2014-15 and 2015-16) and had considered an amount of Rs.65.38 lakh as the de-capitalized value of the old asset (i.e., Rs.32.69 lakh each during 2014-15 and 2015-16) with respect to the said asset/ work. It is further noticed that against the projected expenditure, the Petitioner has capitalised total actual expenditure of Rs.101.94 lakh during 2014-19 (i.e., Rs.21.68 lakh in 2014-15 and Rs. 80.26 lakh in 2015-16). The Petitioner has, however, not Indicated the de-capitalized value of the old asset in this</p>

			petition. Hence, the de-capitalized value of the old asset has been considered under 'Assumed Deletions'
VRF Based Samsung A.C System	67.80	<p>The retrofitting of the A/C system with VRF based A/C system was done in compliance to the norms for phasing out of normal refrigerants/ CFCs in the A/C system. The same has been claimed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. It was claimed as being necessary for the successful and proper functioning of the generating station.</p> <p>The Respondent APDCL has submitted that the claim of the Petitioner is in respect of expenditure on minor items and, hence, cannot be part of determination of tariff.</p>	<p>Considering the fact that the assets/ works will facilitate the successful and efficient operation of generating station, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. Since the Petitioner has stated that the deletion value of old asset is not available, the old asset has been de-capitalized under "Assumed Deletions".</p>
Arbitral Award against Construction of Main Plant Building	127.65	<p>The amount has been claimed under Regulation 14(3)(i) of the 2014 Tariff Regulations, against an Arbitral award in favour of M/s S. Marbaniang, towards settlement of outstanding claims.</p> <p>The Respondent APDCL has submitted that the Commission may examine the admissibility and authenticity of the claim</p>	<p>As the expenditure incurred is in respect of compliance of an arbitration award, the same is allowed under Regulation 14(3)(i) of the 2014 Tariff Regulations.</p>
Automatic Float Cum Booster Battery Charger	1.42	<p>The amount is claimed against a new battery charger as replacement of the existing battery charger which had become non-functional. The amount has been claimed under Regulation 14(3)(viii) of the 2014 Tariff Regulations and is necessary for the proper</p>	<p>Considering the fact that the asset/ work will facilitate the successful and efficient operation of generating station, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. Since the Petitioner has stated that the deletion value of the old asset is</p>

		operation of the DPH system and of the generating station as a whole. The Respondent APDCL has submitted that the replacement of an old item should not be additional capital expenditure in nature.	not available, the old asset has been decapitalized under "Assumed Deletions".
CCTV Camera Along With Its Accessories	1.61	The same is claimed in compliance to the recommendations of Ministry of Home Affairs., GOI under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The Respondent APDCL has submitted that the claim of the Petitioner is in respect of expenditure on minor items and, hence, cannot be part of determination of tariff.	The additional capital expenditure incurred by the Petitioner is on account of need for higher security and safety of the generating station as per recommendations/ directions of the Governmental agencies/ statutory authorities. Accordingly, in terms of the documentary evidence furnished by the Petitioner, the additional capital expenditure is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The Petitioner has capitalised a total amount of Rs.4.60 lakh under this head during 2014-19 (i.e., Rs.1.61 lakh in 2016-17 and Rs.2.99 lakh in 2017-18).
Total claimed	297.71		
Total allowed			297.71

2017-18

<i>(Rs in lakh)</i>			
Head of Work/Equipment	Actual additional capital expenditure claimed	Justification	Remarks on admissibility
Construction of Check Dam etc. (Taw Nallah).	14.43	A projected expenditure of Rs.16 lakh was allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, under Regulation 14(3)(viii) for the said work towards the successful operation of the generating station.	As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No.40/GT/2015, the same is

		<p>However, on execution, an actual amount of Rs.14.43 lakh was incurred. The difference is due to actual execution of work as per site conditions.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly</p>	allowed.
Up-gradation of HMI System of Turbine Generator	38.26	<p>The Commission vide its order dated 5.1.2016 in Petition No. 40/GT/ 2015 had already allowed an expenditure of Rs.100.00 lakh under Regulation 14(3)(viii) of the 2014 Tariff Regulations considering the need for augmentation of the existing systems of Power House. The amount claimed was on estimated basis and on execution, an actual amount of Rs.38.26 lakh was incurred.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly.</p>	<p>As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission vide its order dated 5.1.2016 in Petition No.40/GT/2015 had allowed a total projected additional capital expenditure of Rs.300.00 lakh during 2014-19 (i.e. Rs.100.00 lakh each during 2014-15, 2015-16 and 2016-17), with respect to the said work/ asset. It is further noticed that against the expenditure allowed, the Petitioner has capitalised a total actual expenditure of Rs.120.09 lakh during 2014-19 on actual basis (i.e., Rs.45.11 lakh in 2014-15, Rs.14.59 lakh in 2015-16, Rs.38.26 lakh in 2017-18 and Rs.22.13 lakh in 2018-19).</p>
Procurement, Installation & commissioning of	11.21	The Commission vide its order dated 5.1.2016 in Petition No. 40/GT/2015	As the additional capital expenditure claimed is in respect

<p>new 33 kV SF6 Outdoor Breaker (feeder - II)</p>		<p>had already allowed an expenditure of Rs.8.50 lakh for the said work, under Regulation 14(3)(viii) of the 2014 Tariff Regulations considering the replacement of old breaker needed for proper functioning of the generating station. The amount claimed was on estimated basis and on execution, actual amount of Rs.11.21 lakh was incurred.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly</p>	<p>of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission vide its order dated 5.1.2016 in Petition No.40/GT/2015 had allowed a total projected additional capital expenditure of Rs.12.00 lakh in 2017-18 and has considered an amount of Rs.3.50 lakh as de-capitalised value of old asset with respect to the said asset/ work. Against the expenditure allowed, the Petitioner has capitalised an amount of Rs.11.21 lakh in 2018-19.</p> <p>The Petitioner has, however, not indicated the de-capitalised value of the old asset in this petition. Accordingly, the de-capitalised value of the old asset has been considered under 'Assumed Deletions'.</p>
<p>LILO Bay</p>	<p>949.15</p>	<p>The expenditure claimed is against the construction of additional bay in the 132 kV Switchyard, as the same was necessary to increase the redundancy of power evacuation through inter-linking of Ranganadi HE Plant & Pare HE Plant as per the recommendations in the Minutes of Meeting held between the Department of Power (Arunachal Pradesh), CEA & the Petitioner. The same has been claimed under</p>	<p>The Petitioner has submitted that the evacuation of power through the additional LILO bay constructed at Ranganadi HEP Switchyard was done as per the decision taken in the meeting dated 11.5.2016 held by the Central Electricity Authority (CEA), the Department of Power, Arunachal Pradesh and the Petitioner (NEEPCO). In the said meeting,</p>

		<p>Regulation 14(3)(iii) of the 2014 Tariff Regulations.</p> <p>The Respondent, APDCL has submitted that the Commission may examine and decide keeping the interest on both sides.</p>	<p>CEA had advised the Petitioner that the additional LILO bay at 132 kV at Ranganadi HEP Switchyard would increase the reliability of evacuation of power from Pare HEP as well as the generating station (Ranganadi HEP). Hence, cost of construction of the LILO Bay at Ranganadi HEP may be borne by NEEPCO and the recovery of the cost for construction of the additional bay may be done by filing appropriate tariff petition before the Commission. The total additional expenditure of Rs.949.15 lakh for the 'Construction of the LILO bay at 132 kV Ranganadi HEP Switchyard' has been claimed through this petition, considering the fact that the expenses have been booked at this project (Ranganadi HEP).</p> <p>In view of the justification submitted by the Petitioner and considering the fact that the said asset will ensure reliability of evacuation of power from this generating station also, the additional capital expenditure incurred is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations.</p>
145 kV, 85 KVAR Neutral Grounding Reactor	38.19	The expenditure has been claimed against the replacement of damaged Neutral Grounding Reactor (NGR) which is necessary for the efficient operation of the generating station. Hence,	In view of the submissions of the Petitioner and considering the fact that the said asset is necessary for the successful and efficient operation of

		it is claimed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	the generating station, capitalization of the additional expenditure on these assets (as replacement) is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.
Replacement of Radiator of Shunt Reactor	104.18	<p>The amount is claimed against the replacement of the damaged Radiators of the Shunt Reactor. This has increased the efficiency of the equipment which is necessary for the efficient operation of the generating station and, hence, claimed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.</p> <p>The Respondent APDCL has submitted that the cost has been incurred due to lack of O&M activities on the part of the Petitioner resulting in damaged equipment and as such, this expenditure should not be passed on to the ultimate consumer.</p>	<p>Since the Petitioner has stated that the deletion value of the old assets such as Neutral Grounding Reactor, Numerical Distance Protector and Numerical Single Bus Bar Protection Relay is not available, the old assets have been de-capitalized under "Assumed Deletions". However, the de-capitalised value of Rs.49.67 lakh for old shunt reactor as indicated by the Petitioner has been considered under 'Deletions'</p>
Numerical Distance Protector	11.43	<p>The retrofitting of Numerical Protection Relay was done against adoption of new technology in pursuance of the regulations notified by this Commission. The expenditure has been claimed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide keeping the interest on both sides</p>	
Numerical Single Bus Bar Protection Relay	35.54		
CCTV camera along With Its accessories	2.99	<p>The expenditure has been claimed in compliance with the recommendations of Ministry of Home Affairs, GOI under Regulation 14(3)(iii) of the 2014 Tariff Regulations.</p> <p>The Respondent APDCL has submitted that the</p>	<p>The additional capital expenditure incurred by the Petitioner is on account of need for higher security and safety of plant as per recommendations/ directions of the Governmental agencies/ statutory authorities.</p>

		claim of the Petitioner is in respect of expenditure on minor items and, therefore, cannot be part of tariff.	Accordingly, in terms of the documentary evidence furnished by the Petitioner, the additional capital expenditure is allowed under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The Petitioner has capitalised a total amount of Rs.4.60 lakh under this head during 2014-19 (i.e. Rs.1.61 lakh in 2016-17 and Rs.2.99 lakh in 2017-18).
Total claimed	1205.38		
Total allowed			1205.38

2018-19

<i>(Rs in lakh)</i>			
Head of Work/Equipment	Actual additional capital expenditure claimed	Justification	Remarks on admissibility
Retrofitting of Cooling Water Pump (2 Nos)	80.26	<p>An expenditure of Rs.67.33 lakh was allowed vide order dated 5.1.2016 in Petition No.40/GT/2015 under Regulation 14(3)(viii) of the 2014 Tariff Regulations towards the 'Retrofitting of two nos CW Pumps' as considered necessary for the successful operation of Plant. However, on execution, an actual amount of Rs.80.26 lakh was incurred on this asset/ work.</p> <p>The Respondent APDCL has submitted that the accrued cost is more than the cost approved by the Commission. The Commission may, therefore, look into the matter and deduct the additional cost incurred due to reasons attributable to the Petitioner.</p>	<p>As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No.40/GT/2015, the same is allowed.</p> <p>It is noticed that the Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015, had allowed a total projected additional expenditure of Rs.200.00 lakh during 2014-19 (i.e. Rs.100.00 lakh each during 2014-15 and 2015-16) and had considered an amount of Rs.65.38 lakh as the de-capitalised value of the old asset (i.e. Rs.32.69 lakh each</p>

			during 2014-15 & 2015-16) with respect to the said asset/work. As against the said expenditure allowed, the Petitioner has incurred actual additional capital expenditure of Rs.101.94 lakh during 2014-19 (i.e., Rs.21.68 lakh in 2014-15 and Rs.80.26 lakh in 2015-16). The Petitioner has, however, not indicated the de-capitalised value of the old asset in this petition. Hence, the de-capitalised value of the old asset has been considered under 'Assumed Deletions'.
Up-gradation of HMI System of Turbine Generator	22.13	The Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015 had approved an expenditure of Rs.100.00 lakh for this work/ asset under Regulation 14(3)(viii) of the 2014 Tariff Regulations, considering the need for augmentation of the existing systems of Power House. The approval was based on estimate, and on execution, an actual amount of Rs.23.41 lakh was incurred.	As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed . It is noticed that the Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015, had allowed a total projected additional capital expenditure of Rs.300.00 lakh during 2014-19 (i.e., Rs.100.00 lakh each during 2014-15, 2015-16 and 2016-17), with respect to the said asset/ work. As against the said expenditure allowed, the Petitioner has capitalised actual amount of Rs.120.09

			lakhduring 2014-19 (i.e., Rs.45.11 lakh in 2014-15, Rs.14.59 lakh in 2015-16, Rs.38.26 lakh in 2017-18 and Rs.22.13 lakh in 2018-19).
Procurement of Fire Tender	22.28	An amount of Rs.4.23 was allowed by Commission that was based on estimates. However, on actual implementation, the expenditure amounted to Rs.22.28 lakh.	As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed . It is noticed that the Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015 had allowed a total projected additional capital expenditure of Rs.25.00 lakh in 2015-16 and had considered an amount of Rs.20.77 lakh as the de-capitalized value of the old asset with respect to the said work/ asset. As against the said expenditure allowed, the Petitioner has capitalized an actual amount of Rs.22.28 lakh in 2018-19. The Petitioner has, however, not indicated the de-capitalized value of the old asset in this petition. Hence, the de-capitalized value of the old asset has been considered under 'Assumed Deletions'.
Erection of new 33 kV self-supporting Tower line from	51.65	An expenditure of Rs.2.06 lakh and Rs.1.66 lakh was allowed by the	As the additional capital expenditure claimed is in respect

<p>Potin to DPH in phase manner (Phase-I) AND</p> <p>Erection of new 33 kV self-supporting Tower line from Potin to DPH in phase manner (Phase-II)</p>		<p>Commission vide order dated 5.1.2016 in Petition No. 40/GT/ 2015, on projected estimate. However, on implementation, the actual expenditure incurred is Rs.51.65 lakh and the increase in the expenditure is attributed to multiple re-alignment of the 33 kV line, which was done additionally to facilitate construction of Trans-Arunachal Highway at different locations.</p> <p>The Respondent APDCL has submitted that the additional accrued cost should be realised from the authority for which the re-alignment expenses is necessitated. Therefore, this should be a deposit nature of work and may not be loaded in tariff.</p>	<p>of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/ 2015, the same is allowed.</p> <p>It is noticed that Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015 had allowed a total projected expenditure of Rs.20.00 lakh during 2014-19 (i.e Rs.10.00 lakh each during 2015-16 and 2016-17) and had also considered an amount of Rs.16.28 lakh as the de-capitalized value of the old asset (i.e. Rs.7.94 lakh in 2015-16 and Rs.8.34 lakh in 2016-17) with respect to the said work/ asset. As against the said expenditure allowed, the Petitioner has capitalised actual amount of Rs.51.65 lakh in 2018-19. The Petitioner has, however, not indicated the de-capitalized value of the old asset in this petition. Accordingly, the de-capitalized value of the old asset has been considered under 'Assumed Deletions'.</p>
<p>Raising of tail pool wall of Dikrong Power House, Hoz, RHEP</p>	<p>71.77</p>	<p>The expenditure was allowed by order dated 5.1.2016 in Petition No. 40/GT/2015 for Rs.100 lakh. The completion of the work for two sections amounting to Rs.71.77 lakh has been done, which was necessary to ensure the safe operation</p>	<p>As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p>

		<p>of the generating station.</p> <p>The Respondent APDCL has submitted that the Petitioner had deferred the work from 2017-18 to 2018-19 which may lead to extra expenditure, thereby increasing the tariff of the Project for reasons attributable to the Petitioner.</p>	
<p>Purchasing of new Distribution transformer (2 Nos) 11/.4 kV, 630 KVA</p>	31.86	<p>An expenditure of Rs.4.23 lakh was allowed by order dated 5.1.2016 in Petition No. 40/GT/2015, on estimated bases. However, on implementation, an actual expenditure of Rs.22.28 lakh was incurred.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly.</p>	<p>As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed.</p> <p>It is noticed that the justification submitted by the Petitioner do not relate to the said asset/ work claimed. However, it is observed that the Petitioner in Petition No. 40/GT/2015 had claimed expenditure on this asset, on replacement basis and the Commission vide its order dated 5.1.2016 had allowed additional capitalisation of ₹30 lakh in 2018-19 and had considered an amount of Rs.7.00 lakh as the de-capitalized value of the old asset with respect to this asset/ work. As against the expenditure allowed, the Petitioner has capitalised an actual amount of Rs.31.86 lakh in 2018-19.</p> <p>The Petitioner has, however, not indicated de-capitalized value of</p>

			the old asset in this petition. Hence, the de-capitalized value of the old asset has been considered under 'Assumed Deletions'.
Construction of Check dam etc., (Rodor Nallah).	16.40	<p>An expenditure of Rs.18.00 lakh was allowed by order dated 5.1.2016 in Petition No. 40/GT/2015 for this asset/ work under Regulation 14(3)(viii) of the 2014 Tariff Regulations towards successful operation of the generating station. However, on execution the actual amount incurred was Rs.16.40 lakh. This difference is due to actual execution of work as per site conditions.</p> <p>The Respondent APDCL has submitted that the Commission may examine and decide accordingly.</p>	As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed .
Construction of Check dam etc. (Pai Nallah)	14.79	<p>An expenditure of Rs.14 lakh was allowed by order dated 5.1.2016 in Petition No. 40/GT/2015 for this asset/ work under Regulation 14(3)(viii) of the 2014 Tariff Regulations towards the successful operation of the generating station. However, on execution the actual amount incurred was Rs.14.79 lakh. This difference is due to actual execution of work as per site conditions.</p> <p>The Respondent APDCL has submitted that the Petitioner had deferred the work from 2016-17 to 2018-19 which may lead to extra expenditure, thereby increasing the tariff of the project for reasons attributable to the Petitioner.</p>	As the additional capital expenditure claimed is in respect of the asset/ work which was already allowed vide order dated 5.1.2016 in Petition No. 40/GT/2015, the same is allowed .

Arbitration award against Construction works of Reservoir & Dam	155.87	The expenditure claimed is in respect of the Arbitral award in favour of M/s GIL towards the settlement of outstanding claims, which was considered un-tenable by the Petitioner. The expenditure has been claimed under Regulation 14(3)(i) of 2014 Tariff Regulations.	In view of the submissions of the Petitioner and considering the fact that the expenditure incurred is in order to comply with the award of the Arbitrator, the expenditure claimed is allowed under Regulation 14(3)(i) of the 2014 Tariff Regulations.
Arbitration award against Construction works of Tunnel	370.80	The Respondent APDCL has submitted that the Petitioner has never intimated earlier in any forum of NERPC about such arbitration cases. The Commission may, therefore, examine the admissibility and authenticity of such claim.	
Supply, Retrofitting, Testing, Commissioning of Numerical Single Bus Bar Protection Relays	45.52	The retrofitting of Numerical protection relay was done against adoption of new technology in pursuance to the compliance of the Regulations. The expenditure has been claimed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	In view of the submissions of the Petitioner and considering the fact that the expenditure incurred for the asset is considered necessary for the successful and efficient operation of the generating station, the capitalization of the expenditure on these assets (as replacement) is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.
Supply, Installation & Commissioning of 33 kV panel	4.91	The amount is claimed against the replacement of the damaged 33 kV VCB Panel which is necessary for the efficient operation of the generating station and, hence, claimed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	Since the Petitioner has stated that the deletion value of the old assets is not available, the old assets have been decapitalized under "Assumed Deletions".
Total claimed	888.24		
Total allowed			888.24

14. Based on the above discussion, the actual additional capital expenditure, excluding discharge of liabilities, allowed for the 2014-19 tariff period is as under:

<i>(Rs in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
1379.89	41.69	297.71	1205.38	888.24

Exclusions

[capitalized in books but not to be claimed for purpose of tariff]

15. The following are the year-wise expenditure incurred by the Petitioner towards the replacement of minor assets, purchase of capital spares, residential building, plant & machinery, other E.D.P machines, electrical & auxiliaries, refrigerator, purchase of miscellaneous assets etc:

<i>(Rs in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
298.88	125.07	1217.55	504.65	943.49

16. The above said expenditure incurred on procurement/replacement of minor assets and capital spares are not allowed for the purpose of tariff after the cut-off date, in terms of the provisions of the 2014 Tariff Regulations. Accordingly, the Petitioner has put these additions under exclusion category. The aforesaid exclusion of positive entries, as effected by the Petitioner, are allowed for the purpose of tariff.

De- capitalization

17. The Petitioner has claimed the following de-capitalization as per Form 9Bi, for assets/ works such as special tools and plants, transport equipment, office equipment, other EDP machine, permanent residential building, freehold land, switchgear including cable connection, survey equipment, special tools & plants, etc. due to various reasons such as asset handed over to State authorities, obsolete assets/ works, assets/ works disposed of, etc., during the 2014-19 tariff period:

<i>(Rs in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
31.30	1.39	199.79	1277.33	7.47

18. Regulation 14(4) of the 2014 Tariff Regulations provides as under:

“In case of de-capitalization 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 de-capitalization 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-capitalization takes place, duly taking into consideration the year in which it was capitalized.”

19. Since these assets are not in use, the de-capitalization as claimed by the Petitioner is allowed.

Assumed Deletions

20. As per consistent methodology adopted by the Commission in its orders, the expenditure on replacement of assets, if found justified, is allowed for the purpose of tariff provided that the capitalization of the said asset, is followed by de-capitalization of the gross value of the old asset. However, in certain cases, where the de-capitalization is proposed to be effected during the future years to the year of capitalization of the new asset, the de-capitalization of the old asset for the purpose of tariff, is shifted to the very same year in which the capitalization of the new asset is allowed. Such de-capitalization which is not a book entry in the year of capitalization is termed as “Assumed Deletion”. Accordingly, the amounts considered by the Petitioner under this head are as under:

<i>(Rs in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
40.07	0.00	18.50	13.15	12.82

21. The Petitioner vide its affidavit dated 31.8.2020 has submitted as under:

“It is observed that in absence of the original value of the old assets, the de-cap value has been evaluated considering the value of the new assets procured and WPI. The de-cap value of the assets has accordingly been evaluated.”

22. On scrutiny of the assumed deletions claimed by the Petitioner and considering the vintage of the plant, the de-capitalized value furnished by the Petitioner appears to be low. The gross value of the assets de-capitalized under ‘assumed deletions’ as considered by the Petitioner based on WPI and capitalized value of new asset is not acceptable. Therefore, the methodology of arriving at the fair value of the de-capitalized asset, i.e. escalation rate of 5% per annum from the COD has been considered in order to arrive at the gross value of old asset in comparison to the cost of new asset. In the

instant petition, year of COD of the generating station is 2002-03. We have considered the value of asset under consideration as on COD as 100 and escalated it @5% till the year during which additional capital expenditure is claimed against replacement of the same. The amount claimed for additional capital expenditure against the asset is multiplied by the derived ratio from above two values i.e. value in year of COD divided by value in capitalized year.

23. Further, the Petitioner has claimed assets/ works on replacement basis such as procurement of 2V battery for the 220 V DC system; Numerical Protection Relays; retrofitting of 132 kV Line Circuit Breaker; retrofitting of cooling water pump; procurement, installation & commissioning of new 33 kV SF6 Outdoor Breaker; procurement of fire tender; erection of new 33 kV self-supporting tower line; purchasing of new distribution transformer, etc., which were allowed on projection basis and the de-capitalized value of the old assets (as provided by the Petitioner on projection basis) were also considered in order dated 5.1.2016 in Petition No. 40/GT/2015. However, in the present petition, the Petitioner has claimed these assets on replacement basis, but the de-capitalized value of the old assets has not been furnished. Accordingly, the de-capitalized value of the assets/ works has been calculated in terms of the above-mentioned methodology (paragraph 22 above). Accordingly, the 'assumed deletions' claimed and allowed for the purpose of tariff are detailed as under:

(Rs in lakh)

	Assets/Works	Additions claimed for new assets/works	Assumed Deletions for old assets/works	
			Claimed	Allowed
2014-15				
1	2V battery For 220V DC System	97.59	26.09	54.34
2	Numerical Protection Relays	52.28	13.98	29.11
3	Procurement of micro-processor based Digital Governor	344.62	0.00	191.90
	Total	494.49	40.07	275.35
2015-16				
1	Retrofitting of 132 kV Line Circuit Breaker	27.10	0.00	14.37
2016-17				

1	Retrofitting of Cooling water pump	21.68	0.00	10.95
2	VRF Based Samsung AC System	67.80	18.50	34.24
3	Automatic Float Cum Booster Battery Charger	1.42	0.00	0.72
	Total	90.90	18.50	45.91
2017-18				
1	Procurement, Installation & commissioning of new 33 kV SF6 Outdoor Breaker	11.21	0.00	5.39
2	Numerical Single Bus Bar Protection Relay	35.54	0.00	17.10
3	145KV, 85KVAR Neutral Grounding Reactor	38.19	10.12	18.37
4	Numerical Distance Protector	11.43	3.03	5.24
	Total	96.37	13.15	46.10
2018-19				
1	Retrofitting of Cooling water pump	80.26	0.00	36.77
2	Procurement of Fire Tender	22.28	0.00	10.21
3	Erection of new 33 kV self-supporting Tower line	51.65	0.00	23.66
4	Purchasing of new Distribution transformer (2 Nos) 11/.4 kV, 630 KVA	31.86	0.00	14.60
5	Numerical Single Bus Bar Protection Relays	45.52	11.57	20.85
6	Supply, Installation & Commissioning of 33 KV Panel	4.91	1.25	2.25
	Total	236.48	12.82	108.33
	Grand total	945.34	84.54	490.06

24. Accordingly, the net additional capital expenditure allowed, excluding discharge of liabilities, is as under:

	<i>(Rs in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Additions allowed (a)	1379.89	41.69	297.71	1205.38	888.24	3812.91
Deletions considered (b)	31.30	1.39	199.79	1277.33	7.47	1517.28
Assumed Deletions allowed (c)	275.35	14.37	45.91	46.10	108.33	490.06
Net Additional Capital Expenditure allowed (d)=(a)-(b)-(c)	1073.24	25.93	52.01	(-) 118.05	772.44	1805.57

Discharge of Liabilities

25. The Petitioner has considered the following discharge of liabilities in 2018-19:

	<i>(Rs in lakh)</i>
	Amount
Liabilities as on 31.3.2014 (as derived from Commission's order dated 17.5.2010 in Petition No.	743.13

211/2009 and Commission's order dated 28.9.2015 in Petition No. 457/GT/2014)	
Discharges during 2018-19	379.51
Liabilities as on 31.3.2019	363.62

26. The discharge of liabilities amounting to Rs.379.59 lakh in 2018-19 as claimed by the Petitioner has been considered for the purpose of tariff.

Capital Cost allowed for 2014-19

27. Accordingly, the capital cost allowed for the 2014-19 tariff period is as under:

	(Rs in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost (a)	146759.23	147832.47	147858.40	147910.41	147792.36
Additional Capital Expenditure allowed (b)	1073.24	25.93	52.01	(-) 118.05	772.44
Discharge of liabilities (c)	0.00	0.00	0.00	0.00	379.51
Capital Cost as on 31st March of the year [(a)+(b)+(c)]	147832.47	147858.40	147910.41	147792.36	148944.31

Return on Equity

28. Regulation 24 of the 2014 Tariff Regulations provides as under:

"24. Return on Equity:

(1) Return on equity shall be computed in rupee terms on the equity base determined in accordance with regulation 19.

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

(i) in case of projects commissioned on or after 1st April 2014 an additional return of 0.50% shall be allowed if such projects are completed within the timeline specified in Appendix-I:

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

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

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission if the generating station or transmission system is found to be declared under commercial operation without commissioning any of the Restricted Governor Mode Operation (RGMO) / Free Governor Mode Operation (FGMO) data telemetry communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirement are found lacking in a generating station based on the report submitted by the respective RLDC ROE shall be reduced by 1% for the period for which the deficiency continues: (vi) additional ROE shall not be admissible for transmission line having length of less than 50 kilometres."

29. Regulation 25 of the 2014 Tariff Regulations provides as under:

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee as the case may be. The actual tax income on other income stream (i.e. income of non-generation or non-transmission business as the case may be) shall not be considered for the calculation of “effective tax rate”.

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

Rate of pre-tax return on equity = Base rate / (1-t) Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business as the case may be and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT) “t” shall be considered as MAT rate including surcharge and cess.

Illustration.

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 20.96% including surcharge and cess: Rate of return on equity = $15.50/(1-0.2096) = 19.610\%$

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

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

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

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

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

(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 2014-15 to 2018-19 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 transmission customers/DICs as the case may be on year to year basis.”

30. For the purpose of Tax rate for grossing up of the Rate of Return on Equity (ROE), the Commission vide ROP of the hearing dated 2.6.2020 prescribed a proforma and directed the Petitioner to furnish details as per the said proforma, with tax audit report for each year. The Petitioner has furnished the details as per the proforma, duly

certified by Chartered Accountant. Based on the claim and the proforma furnished by the Petitioner, the effective tax rates considered are as under:

2014-15

(i) Income Tax payable as per Income Tax Return (ITR) for the Assessment Year (AY) 2015-16 was ₹85,11,37,508 (₹85.11 crore). The Petitioner has submitted that the scrutiny assessment was done in normal course and the issue was settled.

(ii) However, the Assessing Officer (AO) reopened the assessment, under Sections 147 and 148 of the Income Tax (IT) Act, 1961. The AO effected many additions and demanded additional tax of ₹113,81,61,459/- (₹113.82 crore). The Assessment Order showed total tax paid as ₹99,17,47,564/- (₹99.17 crore). Aggrieved on such assessment, the Petitioner has filed Writ Petition before the Hon'ble High Court of Meghalaya and the matter is still pending. The assessee has not paid the tax demanded, amounting to ₹113,81,61,459/- (₹113.82 crore).

(iii) The Petitioner has clarified that while filling the Return, the tax calculated was as per Corporate Tax rate of 33.9900%. However, after taking credit under section 115JAA of the IT Act, 1961 for MAT credit accrued from earlier years, the tax liability has been restricted to tax calculated under MAT. Thus, the Effective Tax Rate claimed in the petition for 20.9605% was calculated on MAT rate (MAT tax payable ÷ Deemed Total Income under section 115JB of the IT Act, 1961).

(iv) However, Effective tax rate as per provisions of the 2014 Tariff Regulations i.e. actual tax paid (based on ITR) ÷ PBT as per audited financial statements is 20.2521%, which has been mentioned in the prescribed format submitted by the Petitioner as additional information vide affidavit dated 31.8.2020.

(v) As the tax has been calculated under normal corporate tax provisions, effective tax rate (based on ITR) i.e., 20.2521% is considered for calculation of grossing up of ROE, instead of MAT rate.

2015-16

(i) Income Tax payable as per ITR for the Assessment Year (AY) 2016-17 was ₹115,42,43,613 (₹115.42 crore). The Petitioner has submitted that the scrutiny assessment was done in normal course and the issue was settled.

(ii) However, the Assessing Officer (AO) reopened the assessment under section 147/148 of the IT Act, 1961. The AO effected many additions and demanded additional tax of ₹91,12,51,806/- (₹91.13 crore). The Assessment Order showed total tax paid as ₹124,41,71,634/- (₹124.42 crore). Aggrieved on such assessment, the Assessee has filed a Writ petition before the Hon'ble High

Court of Meghalaya and the matter is pending. The assessee has not paid the tax demanded amounting to ₹91,12,51,806/- (₹91.13 crore).

(iii) The Effective tax rate as per provisions of the 2014 Tariff Regulations i.e. actual tax paid (based on ITR) ÷ PBT as per audited financial statements is 25.9099%, which has also been mentioned in the prescribed format submitted by the Petitioner as additional information vide affidavit dated 31.8.2020. Based on the above, the Effective Tax rate of 25.9099% has been considered.

2016-17

(i) The Petitioner has availed the Vivad-Se-Vishwas Scheme as announced by Government of India (GOI).

(ii) The Petitioner has clarified vide affidavit dated 31.8.2020 that the scrutiny assessment of the AY 2017-18 under Section 143(3) of the IT Act, 1961 was completed on 20.11.2019. The AO raised a demand of ₹81,98,35,201/- (₹81.98 crore) (after adjusting tax refundable of ₹12,36,80,140/- (₹12.37 crore) as per the ITR submitted by NEEPCO Ltd. which comprised of income tax of ₹62,1,087,297/- (₹62.11 crore) and interest under section 234(B) of the IT Act, 1961 amounting to ₹19,87,47,904/- (₹19.87 crore) due to unexplained income considering customs duty payments on imports as per Export Import Summary Data reported by CBEC.

(iii) The assessment was felt arbitrary and erroneous by the Petitioner and an appeal under section 246A was filed before the Commissioner of Income Tax (CIT), Appeals (A). Meanwhile, the Vivad Se Vishwas Scheme, 2020 was announced by the GOI. NEEPCO Ltd. was advised by Ministry of Power (MOP) to pay the balance tax and avail the Vivad Se Vishwas Scheme, 2020. Accordingly, ₹45,71,20,257/- (₹45.71 crore) was paid on 30.3.2020. Effectively a total payment of ₹74,47,67,437/- (₹74.48 crore) was made over and above the tax as per Income Tax Returned vide the ITR-6 for settling the Assessment process. The appeal filed against the order with the CIT(A) will stand withdrawn.

(iv) Effective tax rate as per AO considering 'income tax paid on total income (normal income and unexplained income) and PBT as per audited financial statement', as also mentioned by the Petitioner in the prescribed format, is 41.1919%. The assessment order mentions about discrepancy in income and states that "*Having failed to address the issue in its reply dated 20.2.2019, it is presumed that the Assessee had no satisfactory explanation to justify the discrepancy*". It is also noted that special rate of income tax i.e., 77.25% is applied on unexplained income due to availing of 'Vivad Se Vishwas' scheme.

(v) The Petitioner has submitted the details of Corporate Tax at the rate computed by the Assessing Officer under section 143(3) of IT Act, 1961 and is as under:

(a) On Normal Income of ₹3815687850/- @34.6080% = ₹1320533251/-

(b) On Income of ₹288750242/- @77.25% (Special rate under section 115BBE of IT Act, 1961) = ₹223059562/-
Total = ₹1543592813/-
Rate of Income Tax is (₹1543592813/ ₹4104438092) = 37.6079%

(vi) Thus, tax paid on unexplained income has not been considered for the calculation of effective tax rate. Effective tax rate considering 'income tax paid on normal income (excluding un-explained income) and PBT as per audited financial statement is considered for the calculation of effective tax rate, which comes to 35.2394%. However, this is more than the corporate tax rate of 34.608%, as mentioned in the prescribed format submitted by the Petitioner. Thus, the effective tax rate of 35.2394%, as discussed above is restricted to corporate tax rate of 34.608%.

(vii) Paragraph 25.8 of 'Statement of Reasons to 2014 Tariff Regulations' clarifies the provisions mentioned under Regulation 25 together with the intent of the provisions, which are reproduced as below:

"25.8 The term 'Effective Tax Rate' has been introduced to compute the tax rate at which the base ROE is to be grossed up and is expected to be lower than the corporate tax rate. The Regulation provides for the computation of effective tax rate. The effective tax rate will be computed by the generating company or transmission licensee on the basis of estimated tax payable and estimated gross income from generation and transmission business, which refers the estimated gross profit before tax. The effective tax rate will be applied on the extent of return on equity admitted by the Commission for tariff purposes."

(viii) As per aforesaid Paragraph 25.8 of SOR, the term 'Effective Tax Rate' has been introduced to compute the tax rate at which the base ROE is to be grossed up and is expected to be lower than the corporate tax rate. Based on above deliberations, the effective tax rate has been restricted to corporate tax rate of 34.608%.

2017-18

(i) The Petitioner has claimed 29.5696% as the Corporate Tax rate as per ITR. Effective tax rate (based on ITR) calculated as per provisions of the 2014 Tariff Regulations i.e., considering tax paid by Petitioner and PBT as per audited financial accounts is 27.3764%, which has also been mentioned in the prescribed format submitted by the Petitioner as additional information vide affidavit dated 31.8.2020. Assessment is still pending for the AY 2018-19. Based on the above, the effective tax rate of 27.3764% has been considered.

2018-19

(i) The Petitioner has claimed MAT rate of 1.5488% and assessment is still pending. The same has been considered as effective tax rate.

31. Based on the above submissions, the following effective tax rates have been considered for the purpose of grossing up of rate of ROE. The impact in tariff on account of any changes that would be necessitated on finalization of the Assessment Order, shall be settled between the parties mutually under information to this Commission, on affidavit. Accordingly, the effective tax rate for the 2014-19 tariff period for the Petitioner is worked out as under:

Year	Effective Tax rate
2014-15	20.2521%
2015-16	25.9099%
2016-17	34.6080%
2017-18	27.3764%
2018-19	21.5488%

32. Accordingly, Return on Equity has been computed as under:

	(Rs in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Notional Equity	73106.04	73428.01	73435.79	73451.39	73415.98
Addition due to Additional capital expenditure	321.97	7.78	15.60	(-) 35.41	345.59
Closing Equity	73428.01	73435.79	73451.39	73415.98	73761.56
Average Equity	73267.03	73431.90	73443.59	73433.69	73588.77
Return on Equity (Base Rate)	16.500%	16.500%	16.500%	16.500%	16.500%
Effective Tax rate for the year	20.252%	25.910%	34.608%	27.376%	21.549%
Rate of Return on Equity (pre-tax)	20.690%	22.270%	25.232%	22.720%	21.032%
Return on Equity	15158.95	16353.28	18531.29	16684.13	15477.19

Interest on loan

33. Regulation 26 of the 2014 Tariff Regulations provides as under:

“26. Interest on loan capital:

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

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

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

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

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

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

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

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

(7) The generating company or the transmission licensee as the case may be shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee as the case may be in the ratio of 2:1.

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

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

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

34. The normative loan of the generating station has already been repaid. The normative loan on account of admitted additional capital expenditure during the respective years of the 2014-19 tariff period has also been considered as fully paid, as the admitted depreciation is more than the amount of normative loan in these years. As such, the Interest on loan during the 2014-19 tariff period is 'Nil'.

Depreciation

35. Regulation 27 of the 2014 Tariff Regulations provides as under:

“27. Depreciation:

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

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the

generating station or capital cost of all elements of the transmission system for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year depreciation shall be charged on pro rata basis.

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

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

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

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

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

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

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

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

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

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

36. The COD of the generating station is 12.4.2002. Since the generating station has completed 12 years of commercial operation as on 12.4.2014, the weighted average rate of depreciation of 5.279%, calculated in terms of the above regulations, has been considered for calculation of depreciation during the year 2014-15. The remaining

depreciable value has been spread over the balance useful life of the assets during the years from 2015-16 to 2018-19. Accordingly, depreciation has been worked out as under:

	(Rs in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	146759.23	147832.47	147858.40	147910.41	147792.36
Additional capital expenditure	1073.24	25.93	52.01	(-)118.05	1151.95
Closing Capital Cost	147832.47	147858.40	147910.41	147792.36	148944.31
Average Capital Cost	147295.85	147845.43	147884.40	147851.38	148368.33
Rate of Depreciation	5.279%	0.00	0.00	0.00	0.00
Depreciable Value	132350.32	132844.94	132880.01	132850.30	133315.55
Balance Useful life of the asset (Year)	23.03	22.03	21.03	20.03	19.03
Remaining Depreciable Value	46050.55	38964.92	37241.52	35602.54	35168.90
Depreciation	7775.70	1768.68	1770.83	1777.41	1848.02

O&M Expenses

37. Regulation 29(3)(a) of the 2014 Tariff Regulations provides as under:

“29. Operation and Maintenance Expenses:

(a) Following operations and maintenance expense norms shall be applicable for hydro generating stations which have been operational for three or more years as on 01.04.2014:

Ranganadi hydro generating station of NEEPCO:

(Rs in lakh)				
2014-15	2015-16	2016-17	2017-18	2018-19
7033.08	7500.36	7998.68	8530.12	9096.86

....”

38. The Petitioner, in Petition No. 40/GT/2015, had claimed O&M expenses for the 2014-19 tariff period in terms of Regulation 29(3)(a) of the 2014 Tariff Regulations and the same was allowed vide order dated 5.1.2016. In the present petition also, the Petitioner has claimed O&M expenses for the 2014-19 tariff period in terms of the above Regulation and in addition, has claimed the impact of wage revision. Considering the fact that the generating station is in operation for three or more years as on 1.4.2014, the O&M expenses as allowed by the Commission vide order dated 5.1.2016 in Petition No. 40/GT/2015, in terms of the above regulation, has been allowed. As regard the impact of wage revision, the same is examined below:

Additional O&M Expenditure on account of Pay revision

39. The Petitioner has claimed an amount of Rs.15.37 crore as additional O&M expenses, on account of wage revision of its employees and for Meghalaya Home Guards for the period from 1.1.2017 to 31.3.2019. The Petitioner has prayed that the additional O&M expenses may be allowed to be recovered from the Respondents as a one-time payment under provisions of Regulation 54 (Powers to Relax) and Regulation 55 (Powers to Remove Difficulties) of the 2014 Tariff Regulations. The Petitioner has also submitted audited statements showing the details of the impact of wage revision. The audited statements, showing the details of the impact of wage revision as submitted by the Petitioner, are as under:

(Rs in lakh)

1	Impact of wage revision – NEEPCO Employees	2016-17		2017-18		2018-19		Total
		Salary	Leave Encashment	Salary	Leave Encashment	Salary	Leave Encashment	
	(i) Employees cost before pay revision (w.e.f. 1.1.2017)	641.75	0.00	2543.14	0.00	2011.10	0.00	5195.99
	(ii) Employees cost after pay revision (w.e.f. 1.1.2017)	815.25	7.88	3228.49	51.25	2578.92	9.52	6691.30
	A. Impact of wage revision (ii-i)	173.50	7.88	685.35	51.25	567.82	9.52	1495.31
2	Impact of wage revision – Meghalaya Home Guards (MLHG)	Salary	Leave Encashment	Salary	Leave Encashment	Salary	Leave Encashment	
	(i) Employees cost before pay revision (w.e.f. 1.1.2017)	36.17	0.00	151.40	0.00	0.00	0.00	187.57
	(ii) Employees cost after pay revision (w.e.f. 1.1.2017)	43.40	0.00	186.26	0.00	0.00	0.00	229.65
	B. Impact of wage revision (ii-i)	7.23	0.00	34.85	0.00	0.00	0.00	42.08
3	Total Impact of wage revision (A+B)	180.73	7.88	720.20	51.25	567.82	9.52	1537.40
	Total Impact of wage revision	188.61		771.45		577.34		1537.40

40. The Respondent, APDCL has submitted that the claim of the Petitioner for reimbursement of wage revision of employees and for Home Guards under Regulations 54 and 55 of the 2014 Tariff Regulations cannot be allowed as the Petitioner should file a separate petition with legal grounds to claim the same.

41. The Petitioner vide its rejoinder has submitted that the amount claimed is in accordance with the Commission's order dated 5.1.2016 in Petition No. 40/GT/2015 and has clarified that the submission of the Respondent, APDCL that the entire amount is being recovered from it is erroneous.

42. As regards the claim of the Petitioner for additional O&M expenses of Rs.15.37 crore on account of wage revision from 1.1.2017 to 31.3.2019, the Commission vide ROP of the hearing dated 2.6.2020, directed the Petitioner to submit the following details:

“(i) PRP/Incentive included in the wage revision impact claimed (year wise details duly certified by the Auditor);

“(ii) Comparative statement of the normative O&M expenses allowed to the station versus the actual audited O&M expenses for the period from 2014-15 to 2018-19;”

43. In response, the Petitioner vide affidavit dated 31.8.2020, has submitted that no PRP/ incentive has been included in the wage revision impact claimed, but has not furnished details of the PRP/ incentive. The Petitioner has, however, provided a comparative statement of the normative O&M expenses allowed to the generating station vis-à-vis the actual audited O&M expenses incurred for the period 2014-19 which is as under:

(Rs in lakh)

	Normative O&M expenses	Actual audited O&M expenses
2014-15	7033.08	6269.96
2015-16	7500.36	6480.96
2016-17	7998.68	6855.09
2017-18	8530.12	9240.81
2018-19	9096.86	8559.26

44. SOR to the 2014 Tariff Regulations stipulates the following, with respect to recovery of wage revision impact by a generator:

*“29.26 Some of the generating stations have suggested that the impact of pay revision should be allowed on the basis of actual share of pay revision instead of normative 40% and one generating company suggested that the same should be considered as 60%. In the draft Regulations, the Commission had provided for a normative percentage of employee cost to total O&M expenses for different type of generating stations with an intention to provide a ceiling limit so that it does not lead to any exorbitant increase in the O&M expenses resulting in spike in tariff. The Commission would however, like to review the same considering the macroeconomics involved as these norms are also applicable for private generating stations. In order to ensure that such increase in employee expenses on account of pay revision in case of central generating stations and private generating stations are considered appropriately, **the Commission is of the view that it shall be examined on case to case basis, balancing the interest of generating stations and consumers.**”*

*33.2 The draft Regulations provided for a normative percentage of employee cost to total O&M expenses for generating stations and transmission system with an intention to provide a ceiling limit so that the same should not lead to any exorbitant increase in the O&M expenses resulting in spike in tariff. The Commission shall examine the increase in employee expenses on case to case basis and shall consider the same if found appropriate, to ensure that overall impact at the macro level is sustainable and thoroughly justified. Accordingly, clause 29(4) proposed in the draft Regulations has been deleted. **The impact of wage revision shall only be given after seeing impact of one full year and if it is found that O&M norms provided under Regulations are inadequate/insufficient to cover all justifiable O&M expenses for the particular year including employee expenses, then balance amount may be considered for reimbursement.**”*

45. It is observed that the above methodology as indicated in the SOR suggests a comparison of the normative O&M expenses with the actual O&M expenditure on year to year basis. However, in this respect, the following facts need consideration:

- a) The norms are framed based on the averaging of the actual O&M expenses of past five years to capture the year on year variations in sub-heads of O&M.
- b) Certain cyclic expenditure may occur with a gap of one year or two years and as such adopting a longer duration i.e. five years for framing of norms also captures such expenditure which is not incurred on year to year basis.
- c) Generators when find that their actual expenditure has gone beyond the normative O&M in a particular year put departmental restrictions and try to bring the expenditure for the next year below the norms.

46. In consideration of above facts, the Commission finds it appropriate to compare the normative O&M expenses with the actual O&M expenses for a longer duration, so as to capture the variation in the sub-heads of O&M. Accordingly, it is decided that for

ascertaining 'whether the O&M norms provided under Regulations are inadequate/insufficient to cover all justifiable O&M expenses including employee expenses', a comparison of the normative and actual O&M expenses in this case is made for three years i.e. 2016-19 on combined basis, which is commensurate with the wage revision claim being spread over these three years. The comparative statement of the normative O&M expenses allowed to the generating station for the 2016-19 tariff period versus the actual audited O&M expenses incurred for the said period are as under:

<i>(Rs in lakh)</i>			
	Normative O&M Expenses (a)	Actual audited O&M Expenses (b)	Difference (c)=(b)-(a)
2016-17	7998.68	6855.09	(-)1143.59
2017-18	8530.12	9240.81	710.69
2018-19	9096.86	8559.26	(-)537.60
Total	25625.66	24655.16	(-)970.50

47. From the above submission of the Petitioner, it is observed that the actual O&M expenses which also includes wage revision impact of Rs.1537.40 lakh is less than the normative O&M expenses received during the 2016-19 period. As such, considering the fact that the normative O&M expenses allowed to the generating station in terms of the 2014 Tariff Regulations for the period 2016-19 exceeds the actual audited O&M expenses, including the wage revision impact of Rs.1537.40 lakh, the impact of the wage revision amounting to Rs.1537.40 lakh, as claimed by the Petitioner, is not allowed.

Interest on Working Capital

48. Regulation 28(1)(c) of the 2014 Tariff Regulations provides as under:

"28. Interest on Working Capital:

(1) The working capital shall cover

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

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

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

(iii) Operation and maintenance expenses for one month."

49. Interest on Working Capital has been calculated in terms of the above regulations. Also, in terms of Regulation 28(3) of the 2014 Tariff Regulations, the Bank Rate of 13.50% (Base Rate + 350 Basis Points) as on 1.4.2014 as claimed by the Petitioner, has been considered in calculation of tariff. Accordingly, Interest on Working Capital is worked out and allowed as under:

	<i>(Rs in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	1054.96	1125.05	1199.80	1279.52	1364.53
O & M expenses	586.09	625.03	666.56	710.84	758.07
Receivables	5147.36	4408.97	4868.33	4647.97	4553.90
Total	6788.41	6159.05	6734.69	6638.33	6676.50
Interest on Working Capital	916.44	831.47	909.18	896.18	901.33

Annual Fixed Charges

50. Based on the above, the annual fixed charges allowed in respect of the generating station for the 2014-19 tariff period is summarized as under:

	<i>(Rs in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	15158.95	16353.28	18531.29	16684.13	15477.19
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Depreciation	7775.70	1768.68	1770.83	1777.41	1848.02
Interest on Working Capital	916.44	831.47	909.18	896.18	901.33
O&M Expenses	7033.08	7500.36	7998.68	8530.12	9096.86
Annual Fixed Charges	30884.16	26453.79	29209.98	27887.84	27323.40

Normative Annual Plant Availability Factor

51. Clause (4) of Regulation 37 of the 2014 Tariff Regulations provides for the Normative Annual Plant Availability Factor (NAPAF) for hydro generating stations already in operation. Accordingly, the NAPAF of 85% has been considered for this generating station for the 2014-19 tariff period in this order.

Design Energy

52. The Commission in its order dated 5.1.2016 in Petition No. 40/GT/2015 had considered the annual Design Energy (DE) of 1509.69 million units for this generating station. It is, however, noticed that in Petition No. 139/MP/2016 (NEEPCO v APDCL & 9 ors), the Petitioner had prayed for recovery of Energy Charge shortfall during the period

of 2012-15, as well as the modification of DE for 2014-17 for calculation of ECR till the energy charge shortfall of the previous years has been made up for by the generating station, where actual energy generated by the station during a year is less than its approved design energy for reasons beyond the control of the generating company. The Commission, while disposing of the said petition by order dated 17.10.2017, had directed the Petitioner to approach CEA for revision of DE for the period 2014-15 onwards. In compliance with the said direction, the Petitioner has approached CEA. It is noticed that CEA vide its letter dated 14.3.2021 (Letter Ref No.CEA-HY-12-32/6/2020-HPA Division dated 14.3.2021) has approved DE of the generating station as 1293.73 MU and the same has been communicated by the Petitioner to the Commission vide its letter dated 15.3.2021. In this background and keeping in view that the present petition is for truing-up of tariff for the 2014-19 tariff period, we allow the Design Energy of 1293.73 MU as approved by CEA, for the generating station, as per month-wise details as under:

Month	Days	Design Energy (MU)
June	10	46.88
	10	92.34
	10	92.34
July	10	52.48
	10	48.00
	11	89.56
August	10	38.18
	10	31.12
	11	39.09
September	10	28.22
	10	92.34
	10	72.72
October	10	30.84
	10	25.61
	11	33.55
November	10	22.93
	10	22.19
	10	20.78
December	10	20.45
	10	21.19
	11	25.22
January	10	19.17
	10	18.64
	11	24.04
February	10	18.24
	10	17.77

	8	11.43
March	10	17.77
	10	20.92
	11	25.52
April	10	21.12
	10	23.80
	10	38.88
May	10	38.47
	10	29.70
	11	22.27
Total		1293.73

54. The difference between the annual fixed charges determined by this order and the annual fixed charges recovered by the Petitioner in terms of the Commission's order dated 5.1.2016 in Petition No. 40/GT/2015 shall be adjusted in terms of Regulation 8 of the 2014 Tariff Regulations.

55. Petition No. 273/GT/2019 is disposed of in terms of the above.

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S. Jha)
Member

Sd/-
(P.K. Pujari)
Chairperson