

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 329/GT/2019**

**Coram:**

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

**Date of Order: 10<sup>th</sup> March, 2021**

**IN THE MATTER OF**

Petition for revision of tariff of Tuirial Hydro Electric Power Plant (60 MW) based on the truing-up exercise for the period from 1.4.2014 to 31.3.2019

**AND**

**IN THE MATTER OF**

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

**...Petitioner**

Vs

1. Power & Electricity Department  
Government of Mizoram, New Secretariat Complex,  
Kawlphetha, Aizawl-796006, Mizoram

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

3. North Eastern Regional Load Despatch Centre  
Dongtieh, Lower Nongrah, Lapalang  
Shillong-793006, Meghalaya

**...Respondents**

**Parties Present:**

Shri Prabal Mukhopadhaya, NEEPCO  
Shri Devapriya Choudhury, NEEPCO  
Ms. Elizabeth Pyrbot, NEEPCO



## ORDER

This Petition has been filed by the Petitioner, NEEPCO for revision of tariff of 60 MW (2x30 MW) Tuirial Hydro Electric Plant (hereinafter referred to as “the project” or “the generating station”) for the period from the date of commercial operation (‘COD’) of Unit-I (30.10.2017) to 31.3.2019 in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014(hereinafter referred to as 'the 2014 Tariff Regulations').

2. The Petitioner, NEEPCO has set up the project in the Kolasib District of Mizoram to harness power from Tuirial river. DPR (Detailed Project Report) for the project was prepared by Central Water Commission in 1991 and Techno-Economic Clearance (TEC) was granted for execution of the project. The Government of Mizoram initiated discussion with the then Japan Bank for International Cooperation (JBIC) (earlier Overseas Economic Cooperation Fund - OECF) for availing the debt component in order to execute the Project under State sector. JBIC expressed its inability to fund the Project under the State sector. Subsequently, the Ministry of Power, Government of India, in consultation with the Government of Mizoram, invited the Petitioner to undertake the Project under Central sector in the early part of 1996 and accordingly an MOU (Memorandum of Understanding) was signed between the Government of Mizoram and the Petitioner in May 1996. The Petitioner took up the work of pre-construction survey and development of infrastructure after taking over the Project in 1996. The original CCEA clearance of the Project was accorded on 16<sup>th</sup> July 1998 at an estimated cost of ₹368.72 crore with a completion schedule of 8 years.

3. The Project works commenced in 2001 as per drawn up plan and was progressing. However, it works came to a halt from June 2004 due to the law & order



problem on account of an agitation launched by Tuirial Crop Compensation Claimant Association, claiming payment of crop compensation for the standing crops in the Riverine Reserve Forest. Prior to the suspension of work, about 30% of the Project work and 95% of design & engineering work of the Project were completed.

4. With support of the Government of Mizoram, the Project was revived and the Public Investment Board (PIB) accorded approval for the Revised Cost Estimate (RCE) of ₹913.63 crore (including IDC of ₹36.57 crore) at March 2010 Price Level on 4.6.2010. The revised CCEA clearance for the project was accorded on 14.1.2011 with RCE of ₹913.63 crore and with a completion period of 36 months. It was discussed in the PIB meeting that with normal funding pattern of debt-equity ratio of 70:30, tariff of the project would be high. However, with the debt equity ratio of 85:15 and with 2% depreciation applied for the first 15 years, the tariff would become affordable. The Joint Adviser, Project Appraisal and Management Division (PAMD), Planning Commission, GOI suggested that tariff as determined by the Central Commission may be acceptable to the Government of Mizoram. However, it was observed by PIB that the tariff for the project is to be worked out on the basis of funding of the project as approved by PIB. Accordingly, the Government of Mizoram signed Power Purchase Agreement (PPA) with the Petitioner on 2.7.2010 for the purchase of entire power from the project.

5. The following are the stipulations of the revised Investment Approval accorded by CCEA on 14.1.2011:

- (a) Revised cost estimate at ₹913.63 crore at March 2010 PL (Hard cost: ₹877.06 crore; IDC & FC: ₹36.57 crore)
- (b) Debt equity ratio at 85:15
- (c) Financial pattern:

Equity	-	₹137.04 crore
Loan from Financial Institution	-	₹184.63 crore



Subordinate loan from Govt. of India	-	₹291.96 crore
Grant from DoNER Ministry	-	₹300.00 crore
<b>Total</b>	-	<b>₹913.63 crore</b>

(d) Subordinate loan from GOI will be charged @1% per annum from COD and repayment of principal to start from 16<sup>th</sup> year after commissioning and will continue till 30<sup>th</sup> year.

(e) Any further increase over the cost as approved above, except on account of indexation would be borne by the Petitioner. Further, the Government of Mizoram will sort out crop compensation issues, if any, separately without having any financial implication on the Project cost.

(f) The Project will be commissioned in 36 months from the date of investment approval.

6. RCE of the Project was again updated by the Petitioner at December 2015 price level for ₹1441.52 crore (including IDC & FC of ₹110.99 crore) with revised COD as June 2017, wherein the 1<sup>st</sup> year tariff of the project was projected as ₹10.44 per unit and the levelled tariff as ₹10.54 per unit. Central Electricity Authority (CEA) on 20.1.2017 had vetted RCE of the generating station at ₹1263.32 crore (hard cost) at December 2015 price level, while recommending IDC & FC up to December 2015 price level at actuals, and from January 2016 to September 2017, on estimation basis.

7. The Secretary, Power & Electricity Department, Government of Mizoram, vide letter dated 20.1.2017 informed MOP, GOI regarding intention of Government of Mizoram to surrender the power of the generating station, other than the 12% free power.

8. CEA vide letter dated 8.3.2017 addressed to MOP, GOI observed that an amount of ₹203.64 crore (price escalation ₹196.34 crore + taxes on escalated price ₹7.30 crore) due to indexation may only be added in the approved cost of the project for calculating the energy tariff and the balance increased amount of ₹182.62 crore



(₹1263.32 crore – ₹877.06 crore – ₹203.64 crore) may be met by the Petitioner from its own resources as agreed by them at the time of the revival of the project. However, the same was subject to approval of MOP, GOI, which is awaited. Thereafter, CEA vide its letter dated 18.4.2017 mentioned two scenarios as under:

- (i) With fixed grant and subordinate loan as per Investment approval: ₹66.10 crore
- (ii) With financing pattern in terms of percentage (%) as per Investment approval: ₹58.20 crore

Thus, RCE with the stipulation (i) will be ₹1263.32 crore + ₹66.10 crore = ₹1329.42 crore and RCE with the stipulation (ii) will be ₹1263.32 crore + ₹58.20 crore = ₹1321.52 crore.

### **Petition No. 15/GT/2018**

9. The Petitioner filed the Petition No. 15/GT/2018 for approval of tariff of the generating station for the period from COD to 31.3.2019 in accordance with the 2014 Tariff Regulations. In the absence of approved RCE and based on the mutual agreement between the parties, the Commission vide its order dated 9.10.2018 in Petition No.15/GT/2018 considered the ceiling cost of ₹111727.32 lakh (investment approval as per CCEA approval ₹91363.32 lakh + ₹20364 lakh) as recommended by CEA for the purpose of determination of tariff of the generating station for the period from 30.10.2017 to 31.3.2019. The relevant portion of the order dated 9.10.2018 is extracted hereunder:

*14. The representative for the petitioner submitted the following:*

*(i) The project cost has been worked out as Rs. 913.63 crore plus indexation cost of Rs. 203.64 crore which has been mutually accepted by the parties towards recovery of tariff;*

*(ii) Based on the CERC norms, considering O&M charges @ 4% and with 12% free power the tariff for the first year worked out as Rs. 6.60/unit and levelised tariff at Rs.8.05/ unit based on the CCEA sanction wherein project cost includes the grant of Rs.300 crore. On further insistence for more reduction of tariff, the petitioner agreed to consider O&M charges @ 2.5% instead of the allowed*



*normative O&M charges of 4%. Other parameters remaining the same, with reduced O&M charges @ 2.5% the tariff for the first year worked out to Rs. 5.79/unit and levelised tariff at Rs. 6.60/unit.*

*(iii) With the additional grant of Rs.133.99 crore by Ministry of Development of North Eastern Region, the tariff was worked as Rs. 5.18/unit (with 12 % free power). The petitioner is in no position at this stage to further reduce the tariff as claimed by the respondents.*

*15. Further, it was submitted by both the parties that there has been no dispute with regard to the project cost of ₹913.63 crore plus indexation cost amounting to ₹203.64 crore. However, the representative of the respondent submitted that the State of Mizoram does not have the capacity to pay the tariff based on the agreed capital cost as above.*

10. Thus, the ceiling cost of ₹111727.32 lakh along with reduction in the permissible Operation and Maintenance (O&M) norms @2.5% (instead of 4% in terms of the 2014 Tariff Regulations) which was adopted in the order dated 9.10.2018), was based on mutual agreement between the parties for the purpose of reduction of tariff.

#### **Date of Commercial Operation (COD) of the Units**

11. As regards COD of the units of the generating station, the Petitioner vide its affidavit dated 13.6.2018 in Petition No.15/GT/2018 had submitted that Units-I and II of the generating station were ready for commercial operation on 30.10.2017 and 30.1.2018 respectively after successful completion of trial run and accordingly COD of the generating station may be considered as 30.1.2018. The Respondent No.1, Power & Electricity Department, Government of Mizoram had submitted that until complete communication system was put in place, COD of the generating station may be deferred. It had submitted that COD of the generating station may be considered as 27.4.2018 since the units were not reliable and had not complied with the established commercial practices till 26.4.2018 as the Data Telemetry System (DMS) was not commissioned till then. After considering submissions of the parties, the Commission vide its order dated 9.10.2018 decided COD of Unit-I as 30.10.2017 and that of Unit-II as 30.1.2018, but reduced ROE (Return on Equity) by 1% till



26.4.2018 i.e., till such time the DMS was not commissioned. The relevant portion of the order dated 9.10.2018 is extracted below:

*“31. Based on the documents and information available on records and submission of both the parties, we find merit in the submission of the petitioner that the unit I and II of the generating station achieved COD on 30.10.2017 and 30.1.2018 respectively in terms of Regulation 4(2) of 2014 Tariff Regulations. As regards the submission made by the respondent that there was no DMS till 26.4.2018 and thus, COD could be declared on 27.04.2018, we find no reason to deny the tariff from 30.10.2017 and 30.1.2018 for Unit-I and Unit-II respectively, though with 1% reduction in ROE in terms of 24(iv) and (v) of 2014 Tariff Regulations quoted above.*

*32. Accordingly, in line with the above discussion and Regulations quoted above, the COD (without DMS) of the 1st unit of the station was achieved on 30.10.2017 and that of the 2nd unit on 30.1.2018. We decide accordingly. The RoE in this case shall be reduced by 1% for such period during which the DMS was not commissioned, i.e. till 26.4.2018 in terms of 24(iv) of 2014 Tariff Regulations.”*

### **Time over-run and Cost over-run considered in Petition No.15/GT/2018**

12. As stated in earlier part of this order, the Project was revived in 2010. The revised CCEA clearance for the project was accorded on 14.1.2011 with Revised Cost Estimate (RCE) of ₹913.63 crore and with a revised completion period of 36 months. Though the scheduled COD as per revised CCEA approval was 13.1.2014, Unit-I had achieved COD on 30.10.2017. The Petitioner had furnished reasons for time overrun of 46 months (1380 days) in COD of the units of the generating station and the Commission vide its order dated 9.10.2018 had condoned the time overrun of 490 days, while rejecting the condonation of delay for the balance period of 890 days. The relevant portion of the order dated 9.10.2018 is extracted hereunder:

*“39. The petitioner has submitted that various events such as lack of proper working atmosphere at project site, dewatering of accumulated water, removal of slush, deteriorated condition of roads, ban imposed on crossing of heavy vehicles over Barak bridge at Silchar, retaining wall collapse at Saiphai leading to stoppage of heavy vehicles, blockade of approach by local villagers, restriction of heavy vehicular movement, interruption of the diesel supply, closure of RawitulKhawhthia quarry has claimed the time overrun of 490 days and claimed that the reasons attributed to the delay are beyond the control of the petitioner. Owing to the remote geographical conditions of the site, the law and order situation in the North-East region leading to the delay and restrictions in construction of the project as claimed by the petitioner are reasonable and justified. As such, the delay of 490 days has been condoned.*

*40. In respect of other works such as Slope Failure at Power House (671 days), load restriction of 10 T at Bhagabazar-Natacherra Road (73 days) and time required for execution of increased quantity (146 days), the petitioner has not furnished the details*



of time over-run suffered against each activity, amount of re-work done by slope failure, and the scope of increased work. In the absence of these details, it is not possible to examine the delay in completion of work and allow/disallow the time overrun. Accordingly, the time overrun of 890 days on this account is not condoned.”

13. It is pertinent to mention that in terms of the aforesaid order, the issue of time and cost overrun was subject to review based on the report of the Standing Committee to be placed by the Petitioner before the Commission.

### **Capital Cost allowed in Petition No.15/GT/2018**

14. The capital cost as approved by CCEA for ₹111727.32 lakh and agreed by the parties was allowed as on COD of the generating station for the purpose of tariff vide order dated 9.10.2018 in Petition No.15/GT/2018. Accordingly, the capital cost allowed as on COD of the units/generating station vide order dated 9.10.2018 is extracted hereunder:

Capital cost without IDC, FC, FERV & Hedging Cost	(₹ in lakh)	
	30.10.2017	30.1.2018
Capital Cost allowed (restricted up to CCEA approved cost)		
Capital cost without IDC, FC, FERV & Hedging cost	92670.58	108070.22
Add: IDC	3135.98	3657.10
<b>Capital cost including IDC</b>	<b>95806.56</b>	<b>111727.32</b>
Less: DoNER grant	30000.00	30000.00
<b>Capital cost for tariff</b>	<b>65806.56</b>	<b>81727.32</b>

### **Annual Fixed Charges allowed in Petition No.15/GT/2018**

15. The annual fixed charges allowed vide order dated 9.10.2018 in Petition No.15/GT/2018 are as under:

	(₹ in lakh)			
	29.10.2017 to 28.1.2018	29.1.2018 to 31.3.2018	1.4.2018 to 26.4.2018	27.4.2018 to 31.3.2019
Return on Equity	487.92	408.36	171.25	2376.88
Interest on Loan	701.45	584.84	282.29	3636.90
Depreciation	331.74	277.65	116.43	1518.11
Interest on Working Capital	68.87	51.69	22.47	295.12
O & M Expenses	704.04	474.46	198.97	2594.22
<b>Total</b>	<b>2294.01</b>	<b>1796.99</b>	<b>791.41</b>	<b>10421.23</b>





## **Present Petition**

16. In the above background, the Petitioner, NEEPCO has filed the present petition for revision of tariff of the generating station for the period from 30.10.2017 to 31.3.2019, after truing up exercise, in terms of the 2014 Tariff Regulations. The capital cost and the annual fixed charges claimed by the Petitioner in the present petition are summarized as under:

### **Capital Cost**

	(₹ in lakh)			
	<b>COD (Unit-I) 30.10.2017</b>	<b>COD (Unit-II) 30.1.2018</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Capital Cost	65806.56	81727.32	81727.32	81941.92
Add: Addition during the year/period	-	-	163.50	1705.38
Less: De-capitalisation during the year/period	-	-	4.06	1.36
Less: Reversal during the year/period	-	-	1.30	0.00
Add: Discharges during the year/period	-	-	56.47	3349.84
<b>Closing Capital Cost</b>	<b>65806.56</b>	<b>81727.32</b>	<b>81941.92</b>	<b>86995.78</b>

### **Annual Fixed Charges**

	2017-18		(₹ in lakh)
	<b>29.10.2017 to 28.1.2018</b>	<b>29.1.2018 to 31.3.2018</b>	<b>2018 – 19</b>
Depreciation	335.34	264.21	1569.04
Interest on Loan	718.98	564.36	3729.30
Return on Equity	904.63	436.09	2475.00
Interest on Working Capital	286.51	299.76	309.63
O & M Expenses	711.69	451.50	2594.22
<b>Total</b>	<b>2957.15</b>	<b>2015.93</b>	<b>10677.18</b>

17. The Petition was heard on 13.8.2020 and the Commission after directing the Petitioner to file certain additional information, reserved its order. None appeared on behalf of the Respondents. In compliance with the directions of the Commission, the Petitioner has filed the additional information vide affidavit dated 11.9.2020 and has served the same on the Respondents. Only the Respondent No.1, Power and Electricity Department, Government of Mizoram has filed reply vide its affidavit dated



24.9.2020. The Petitioner vide affidavit dated 5.10.2020 has filed its rejoinder to the said reply. Based on the submissions of the parties and the documents available on record, we proceed to determine the tariff of the generating station, based on true-up exercise for the period 2017-19, as stated in the subsequent paragraphs.

### **Capital Cost**

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

*“9 (1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects;*

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

*(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*

*(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*

*(c) Increase in cost in contract packages as approved by the Commission;*

*(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;*

*(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;*

*(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;*

*(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and*

*(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.*

*xxxx..”*

19. As stated in paragraph 14 above, the Commission vide its order dated 9.10.2018 in Petition No. 15/GT/2018 had allowed the CCEA approved capital cost of ₹111727.32 lakh as on COD of the units/ generating station for the purpose of tariff, as agreed by the parties. The Petitioner vide its affidavit dated 11.9.2020 has furnished the actual capital expenditure of ₹141738.72 lakh incurred as on the



relevant dates in Form 5B, as on the COD of the generating station (i.e.30.1.2018), as shown below:

(₹in lakh)

<b>Actual Capital Expenditure</b>	<b>As on 30.10.2017</b>	<b>As on 30.1.2018</b>	<b>As on 31.3.2018</b>	<b>As on 31.3.2019</b>
Capital cost without IDC, FC, FERV & Hedging Cost	124717.23	134807.19	135339.12	137043.14
Interest During Construction (IDC)	6255.58	6931.53	6931.53	6931.53
Financing Charges (FC)	0.00	0.00	0.00	0.00
Foreign Exchange Rate Variation (FERV)	0.00	0.00	0.00	0.00
Hedging Cost	0.00	0.00	0.00	0.00
<b>Total of IDC, FC, FERV &amp; Hedging Cost</b>	<b>6255.58</b>	<b>6931.53</b>	<b>6931.53</b>	<b>6931.53</b>
<b>Capital cost including IDC, FC, FERV &amp; Hedging Cost</b>	<b>130972.81</b>	<b>141738.72</b>	<b>142270.65</b>	<b>143974.67</b>

20. The Petitioner vide Form-1i of the petition has claimed capital cost from COD of the units/generating station till 31.3.2019 asunder:

(₹in lakh)

	<b>COD (Unit-I) 30.10.2017</b>	<b>COD (Unit-II) 30.1.2018</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Capital Cost	65806.56	81727.32	81727.32	81941.92
Add: Addition during the year/period	-	-	163.50	1705.38
Less: De-capitalisation during the year/period	-	-	4.06	1.36
Less: Reversal during the year/period	-	-	1.30	0.00
Add: Discharges during the year/period	-	-	56.47	3349.84
<b>Closing Capital Cost</b>	<b>65806.56</b>	<b>81727.32</b>	<b>81941.92</b>	<b>86995.78</b>

21. The claim of the Petitioner for ₹65806.56 lakh as on COD of Unit-I (30.10.2017) and ₹81727.32 lakh as on COD of Unit-II/generating station (30.1.2018) is lesser than the actual audited capital cost of ₹130972.81 lakh and ₹141738.72 lakh incurred as on 30.10.2017 and 30.1.2018 respectively and is also in line with the capital cost allowed vide order dated 9.10.2018 in Petition No 15/GT/2018.



## **Approval of Revised Cost Estimate**

22. In response to the direction of the Commission vide ROP of the hearing dated 13.8.2020, the Petitioner vide affidavit dated 11.9.2020 has submitted that RCE-II at a completion cost of ₹1388.42 crore (excluding IDC&FC) at November 2017 price level was submitted to CEA on 11.5.2018. It has also submitted that CEA on 5.4.2019 had vetted the total cost of the project for ₹1422.47 crore (including IDC &FC of ₹69.37crore) and indexation capital cost of ₹1244.15 crore (including IDC &FC ₹68.80 crore). The Petitioner has further submitted that the Revised Cost Committee (RCC) under the Ministry of Power, GOI, in its meeting held on 8.4.2019 has recommended the above said CEA vetted cost, as the total completion cost of the Project. The Petitioner has added that RCC has recommended the aforesaid capital cost to PIB and the approval of PIB/CCEA is awaited. The Petitioner is directed to bring the approved RCE to the notice of the Commission on approval of the same by CCEA, GoI. Further, the Petitioner is granted liberty to file a separate petition for the revision of the capital cost based on such approved RCE and with the concurrence of the sole beneficiary of this project.

23. As stated earlier, the Commission in its order dated 9.10.2018 had observed that the time overrun allowed for the Project was subject to review, based on the report of the Standing Committee to be furnished by the Petitioner. As regards time and cost overrun involved in the project, RCC in its final report dated 18.9.2019 has noted the submissions of the Petitioner with regard to the delay of 46 months in the commissioning of the project and has observed the following:

### ***“3.0 OBSERVATIONS OF THE REVISED COST COMMITTEE:***

*a) The two units of the Project were commissioned and declared under commercial operation since 30.10.17 & 30.01.2018 respectively. RCC noted that the RCE of Tuirial HEP amounting to Rs1388.42 Cr has been approved by the Board of Directors of NEEPCO in its meeting held on 12.06.2018 (240<sup>th</sup> BM) (Annexure-5)*



b) The RCC observed that the Project has experienced a time overrun of 46 months. NEEPCO submitted the project diary/construction log book indicating hindrances leading to delay in completion of works including supporting documents, photographs et., substantiated with letter of correspondences between contractors and concerned state governments on 22.04.2019, 03.07.2019 & 16.07.2019 which were found convincing by the RCC.

c) The RCC observed that actual total completion cost of the project for Rs. 1422.47 Cr including IDC&FC of Rs. 69.37 Cr as vetted by CEA should be considered for calculation of energy tariff and to be submitted to RIB. However, for release of equity by GOI, 15% of indexed capital cost of Rs. 1244.15 Cr (i.e Rs. 186.62 Cr) should be considered in line with CCEA stipulation and the equity beyond Rs. 186.62 Cr is to be borne by NEEPCO

d) On examination the reasons of cost and time overrun, RCC is of the opinion that reasons for cost and time overrun were beyond the control of any agency or person, hence no individual/agency can be held responsible for the same.”

24. Accordingly, RCC in its report dated 18.9.2019 recommended the following:

**“4.0 RECOMMENDATIONS OF THE REVISED COST COMMITTEE:**

*After detailed deliberations, RCC recommended the following:*

- a) Total completion cost of the Project amounting to Rs. 1422.47 Cr including IDC & FC of Rs. 69.37 Cr for calculation of energy tariff.
- b) Indexed capital cost of the Project amounting to Rs. 1244.15 Cr including IDC & FC of Rs. 68.80 Cr for release of equity by Government of India as per the decision of CCEA.”

25. From the above, we note that RCC has recommended the completion cost of ₹1422.47 crore including IDC & FC of ₹69.37 crore for the purpose of tariff, while observing that the reasons for cost and time overrun were beyond the control of any agency or person and no individual/ agency can be held responsible for the same. We have gone through recommendations of the RCC and are in agreement with the recommendations. Accordingly, we condone the time over-run of the project.

26. The Commission notes that the Petitioner, despite incurring the audited actual expenditure of ₹141738.72 lakh as on COD of the generating station, has claimed the ceiling capital cost of ₹111727.32 lakh as on the COD of the generating station, based on mutual agreement with the Respondent. The Commission vide its order dated 9.10.2018 in Petition No. 15/GT/2018 had approved the said capital cost, while determining the tariff of the generating station. Considering these facts, the ceiling



capital cost of ₹111727.32 lakh as on the COD of the generating station has been considered for the purpose of truing-up of tariff of the generating station.

27. As per the financing plan for the project, an amount of ₹300.00 crore was received as grant from the DoNER Ministry and the same was deducted from the capital cost in the order dated 9.10.2018 in Petition No. 15/GT/2018. The Respondent No.1, Power and Electricity Department, Govt. of Mizoram in its reply dated 24.9.2020 has stated that the Petitioner was expected to receive an additional grant of ₹133.99 crore or 32.80% of the RCE, whichever is less, from the DoNER Ministry and if the said additional grant has been received during the year 2018-19, the same may be deducted from the capital cost of the generating station. We notice that an additional grant of ₹133.99 crore has been sanctioned by the DoNER Ministry vide its letter dated 30.2.2018. However, the Petitioner in its rejoinder dated 5.10.2020 has clarified that the Petitioner has not received any additional grant of ₹133.99 crore and on receipt of the same, the Petitioner shall approach the Commission for revision of tariff. In view of this clarification, the grant of ₹300 crore by the DoNER Ministry which was received by the Petitioner has only been adjusted from the capital cost as on COD of the generating station. It is, however, clarified that the additional grant of ₹133.99 crore, if received by the Petitioner, shall be adjusted with effect from the date of receipt of the said amount. Therefore, the capital cost allowed as on the COD of units/generating station in terms of the Commission's order dated 9.10.2018 in Petition No. 15/GT/2018 (as referred in paragraph 14 above) has only been considered for the purpose of revision of tariff in this order.

### **Interest During Construction (IDC)**

28. The Commission vide its order dated 9.10.2018 in Petition No. 15/GT/2018, has allowed IDC, as on COD of the units as under:



*(₹ in lakh)*

<b>30.10.2017 (Unit-I)</b>	<b>30.1.2018 (Unit-II/Station)</b>
3135.98	3657.10

29. It is observed that IDC allowed as above was based on CCEA approval and after prudence check of the loan agreements, details of IDC calculation, details of draws and repayment and the rate of interests etc. Accordingly, the same has been allowed for the purpose of tariff.

### **Capital Cost allowed**

30. In view of the aforesaid discussion, the capital cost allowed for the purpose of tariff as on the COD of Unit / generating station is as under:

*(₹ in lakh)*

	<b>Capital Cost allowed (Restricted up to the cost as agreed by the petitioner and the beneficiary)</b>	
	<b>30.10.2017(Unit-I)</b>	<b>30.1.2018 (Station COD)</b>
Capital cost without IDC, FC, FERV & Hedging Cost	92670.58	108070.22
Add: IDC	3135.98	3657.10
<b>Capital cost including IDC</b>	<b>95806.56</b>	<b>111727.32</b>
less: DoNER Grant	30000.00	30000.00
<b>Capital cost allowed for tariff</b>	<b>65806.56</b>	<b>81727.32</b>

### **Un-discharged Liabilities**

31. The un-discharged liabilities furnished by the Petitioner vide Form 5B, Form 9E and Form 16, as on COD of the units is as under:

*(₹ in lakh)*

<b>30.10.2017</b>	<b>30.1.2018</b>	<b>31.3.2018</b>	<b>31.3.2019</b>
5930.19	5930.20	5873.73	2523.89

32. Considering the capital expenditure as per Form 5B and un-discharged liabilities as above, the actual cash expenditure is as under:

*(₹ in lakh)*

	<b>30.10.2017</b>	<b>30.1.2018</b>	<b>31.3.2018</b>	<b>31.3.2019</b>
Capital expenditure as per Form 5B	130972.81	141738.72	142270.65	143974.67
Less: Un-discharged liabilities	5930.19	5930.2	5873.73	2523.89
<b>Actual cash expenditure</b>	<b>125042.62</b>	<b>135808.52</b>	<b>136396.92</b>	<b>141450.78</b>



33. The actual cash expenditure worked out after deduction of un-discharged liabilities from the capital expenditure, is higher than the ceiling capital cost of ₹111727.32 lakh mutually agreed by the parties. Accordingly, we find no reason to deduct the un-discharged liabilities from the capital cost allowed for the generating station. Since capital cost is being allowed without deduction of un-discharged liabilities, no discharge of liabilities has been allowed in the subsequent periods.

### **Initial Spares**

34. Regulation 13(c) of the 2014 Tariff Regulations provides as under:

*“13. Initial spares shall be capitalised as a percentage of the Plant and Machinery cost up to cut-off date, subject to following ceiling norms:*

*xxx*

*(c) Hydro generating stations including pumped storage hydro generating station - 4.0%”*

35. The Commission vide ROP of the hearing dated 13.8.2020 had directed the Petitioner to furnish the details of initial spares capitalized along with the details of Plant and Machinery cost, as on the cut-off date of the project. In response, the Petitioner vide its affidavit dated 11.9.2020 has submitted that an amount of ₹627.09 lakh of initial spares has been capitalized as on the COD of the generating station (30.1.2018) and initial spares amounting to ₹56.01 lakh has been capitalized during 2018-19.

36. The Plant and Machinery cost up to the cut-off date of the generating station (31.3.2021) is not available. As such, considering the Plant and Machinery cost of ₹19098.62 lakh as on 31.3.2019 as per Form 5B, the permissible limit of initial spares works out to ₹763.94 lakh. Since initial spares claimed by the Petitioner up to 31.3.2019 is ₹683.10 lakh (₹627.09 lakh as on COD of the generating station +





₹56.01 lakh during year 2018-19), the same is within the ceiling limit of 4% in terms of the aforesaid regulation and the same is allowed.

### **Additional Capital Expenditure from COD till 31.3.2019**

37. The Petitioner has claimed additional capital expenditure vide Form 9A as under:

(₹ in lakh)	
2017-18	2018-19
<b>(30.1.2018 to 31.3.2018)</b>	
163.50	1705.38

38. As stated in the earlier part of this order, the ceiling capital cost of ₹111727 lakh which was mutually agreed by the parties and allowed vide order dated 9.10.2018 in Petition No. 15/GT/2018, has been considered in this order. As this reflects the maximum permissible cost within the original scope of work of the project/RCE, there is no scope for any further additional capital expenditure to be incurred on any balance items within the original scope of work of the Project/RCE, including discharge of liability. In view of this, the additional capital expenditure of ₹1868.88 lakh pertaining to items within the original scope of work of the Project/RCE as claimed by the Petitioner up to 31.3.2019 has not been allowed. No additional capital expenditure has been claimed by the Petitioner in respect of items which are beyond the original scope of work of the Project. However, the de-capitalization of assets from COD of generating station till 31.3.2019 is dealt with in the next few paragraphs.

### **De-capitalization**

39. 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.”*



40. The Petitioner has claimed de-capitalization for written-off unserviceable/ unusable assets, due to normal wear and tear, for the period from COD of the generating station (30.1.2018) till 31.3.2019 as under:

<i>(₹ in lakh)</i>		
<b>2017-18</b>	<b>2018-19</b>	<b>Total</b>
<b>30.1.2018 to 31.3.2018</b>	<b>1.4.2018 to 31.3.2019</b>	
5.36	1.36	6.72

41. It is observed from Form 9B(i) that the Petitioner, during the year 2017-18, had de-capitalized an amount of ₹922.72 lakh, which includes an amount of ₹4.06 lakh towards written-off of unserviceable/ unusable assets due to normal wear and tear, ₹1.30 lakh towards assets transferred to Pare HEP (another project of Petitioner) and ₹917.36 lakh as 'rectification entry'. As regards the de-capitalization of ₹917.36 lakh, as 'rectification entry', it is noticed that the negative entry is for shifting the amount from one head to another head. As such, considering the fact that the corresponding positive entry has become the part of the actual expenditure incurred and forms a part of the ceiling cost of ₹111727.32 lakh allowed, this de-capitalized amount has not been considered for the purpose of reduction of the capital cost of the project. With regard to de-capitalization of ₹1.30 lakh towards assets transferred to Pare HEP, the Petitioner has booked this amount under the head 'Reversal during the year'. However, considering the fact that the capital cost has been reduced substantially based on ceiling cost mutually agreed between the parties, the said amount of ₹1.30 lakh has not been considered towards the reduction of capital cost of the generating station.

42. Since the assets are not in use, the de-capitalization of assets amounting to ₹4.06 lakh in 2017-18 and ₹1.36 lakh during the year 2018-19 is allowed in terms



of the aforesaid Regulation. Accordingly, year-wise details of de-capitalization allowed for the purpose of tariff is as under:

(₹ in lakh)		
2017-18	2018-19	Total
30.1.2018 to 31.3.2018	1.4.2018 to 31.3.2019	
4.06	1.36	5.42

### **Net Additional Capital Expenditure allowed**

43. In view of above, the net additional capital expenditure allowed for the purpose of tariff is as under:

(₹ in lakh)		
	2017-18	2018-19
Additional capital expenditure allowed	0.00	0.00
Add: Discharge of liabilities allowed	0.00	0.00
Less: De-capitalization allowed	(-) 4.06	(-) 1.36
<b>Net Additional capital expenditure allowed</b>	<b>(-) 4.06</b>	<b>(-) 1.36</b>

### **Recovery of Liquidated Damages (LD)**

44. The Petitioner was directed to furnish the details of LD recovery, if any, at the time of true-up vide Commission's order dated 9.10.2018 in Petition No.15/GT/2018. The Petitioner vide affidavit dated 23.9.2019 has submitted that there was no recovery of LD during this period.

### **Capital Cost allowed for the purpose of the tariff**

45. Based on the above, the capital cost allowed for the purpose of tariff from COD of Unit-I (30.10.2017) to 31.3.2019 is as under:

(₹ in lakh)				
	30.10.2017 to 29.1.2018	30.1.2018 to 31.3.2018	1.4.2018 to 26.4.2018	27.4.2018 to 31.3.2019
<b>Opening Capital Cost</b>	<b>65806.56</b>	<b>81727.32</b>	<b>81723.26</b>	<b>81721.90</b>
Add: Additional capital expenditure allowed	0.00	0.00	0.00	0.00
Less: De-capitalisation considered	0.00	4.06	1.36	0.00
<b>Closing Capital Cost</b>	<b>65806.56</b>	<b>81723.26</b>	<b>81721.90</b>	<b>81721.90</b>

### **Debt-Equity Ratio**

46. Regulation 19 of the 2014 Tariff Regulations provides as under:



*“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*

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

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

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

47. In the present case, the actual debt-equity ratio as per Form 14 as on COD is as under:

<i>(₹ in lakh)</i>		
Loans	71905.91	83.99%
Equity	13704.00	16.01%
<b>Total</b>	<b>85609.91</b>	<b>100.00%</b>

48. However, as per CCEA approval dated 14.1.2011, the stipulated debt-equity ratio is 85:15. The same has been considered for the purpose of tariff.

### **Return on Equity**

49. Regulation 24 of the 2014 Tariff Regulation 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 the 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 of 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 requirements 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 kilometer.”

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

*“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*

*(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.”*

51. The Commission vide its order dated 9.10.2018 in Petition No. 15/GT/2018 while deciding the COD of Unit-I as 30.10.2017 and Unit-II as 30.1.2018, had reduced ROE by 1% till 26.4.2018 i.e. till such time the Data Telemetering System was not commissioned.



52. The Petitioner has claimed the tax rate of 29.5690% for 2017-18 and 21.5488% for 2018-19, for the purpose of grossing up of ROE. Since effective tax rate is considered on the basis of actual tax paid in respect of financial year in line with the provisions of the relevant Finance Acts by the concerned generating company, the tax rate of 27.3764% for 2017-18 and 21.5488% for 2018-19 has been considered for the computation of ROE for this generating station. Accordingly, Return on Equity has been computed as under:

	(₹ in lakh)			
	<b>30.10.2017 to 29.1.2018</b>	<b>30.1.2018 to 31.3.2018</b>	<b>1.4.2018 to 26.4.2018</b>	<b>27.4.2018 to 31.3.2019</b>
Gross Notional Equity	9870.98	12259.10	12258.49	12258.29
Addition due to additional capitalization	0.00	(-) 0.61	(-) 0.20	0.00
Closing Equity	9870.98	12258.49	12258.29	12258.29
Average Equity	9870.98	12258.79	12258.39	12258.29
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	16.500%
Tax rate for the year	27.3764%	27.3764%	21.5488%	21.5488%
Rate of Return on Equity	21.343%	21.343%	19.758%	21.032%
<b>Return on Equity (Pro-rata)</b>	<b>531.02</b>	<b>430.09</b>	<b>172.52</b>	<b>2394.53</b>

### **Interest on Loan**

53. 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 Decapitalization 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 up to 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 refinancing 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.”*

54. The Commission vide ROP of the hearing dated 13.8.2020 had directed the Petitioner to furnish explanation for considering the rate of interest in case of PSU Bonds XVIII<sup>th</sup> Series for the year 2017-18 as 7.83% as against 7.68% considered for the year 2018-19. In response to the direction of the Commission, the Petitioner vide affidavit dated 11.9.2020 has submitted that the rate of 7.83% for the year 2017-18 has been arrived by adding the one-time finance charges in percentage to the coupon of 7.68%. However, it is observed that in terms of Regulation 26 of the 2014 Tariff Regulations, there is no provision for adding financing charges for calculation of the weighted average rate of interest. Accordingly, the rate of interest in case of PSU Bonds XVIII<sup>th</sup> Series for the year 2017-18 has been considered i.e. 7.68% after exclusion of the financing charges.

55. The salient features of computation of interest on loan are as under:

- i. The opening gross normative loan as on COD has been arrived at in accordance with Regulation 26 of the 2014 Tariff Regulations;
- ii. The weighted average rate of interest has been worked out on the basis of the actual loan portfolio of respective year applicable to the project;



- iii. The repayment for the year of the 2014-19 tariff period has been considered equal to the depreciation allowed for that year.
- iv. The interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.

56. Accordingly, interest on loan has been worked out as under:

	(₹ in lakh)			
	<b>30.10.2017 to 29.1.2018</b>	<b>30.1.2018 to 31.3.2018</b>	<b>1.4.2018 to 26.4.2018</b>	<b>27.4.2018 to 31.3.2019</b>
Gross Normative Loan	55935.58	69468.22	69464.77	69463.62
Cumulative Repayment upto Previous Year	0.00	331.74	600.42	716.85
Net Loan-Opening	55935.58	69136.48	68864.35	68746.77
Repayment during the year	331.74	268.69	116.43	1518.01
Addition due to Additional Capitalization	0.00	(-)3.45	(-)1.16	0.00
Net Loan-Closing	55603.84	68864.35	68746.77	67228.75
Average Loan	55769.71	69000.42	68805.56	67987.76
Weighted Average Rate of Interest on Loan	5.02%	5.02%	5.76%	5.76%
<b>Interest (Pro-rata)</b>	<b>705.66</b>	<b>569.40</b>	<b>282.31</b>	<b>3637.14</b>

## Depreciation

57. 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) alongwith 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 de-capitalized asset during its useful services.”*

58. As discussed in the PIB meeting and mutually agreed between the parties, the Petitioner has claimed depreciation at the rate of 2% per annum. This has been considered for the purpose of tariff.

59. It is observed that in Petition No. 15/GT/2018, the Petitioner had indicated that the freehold land amounting to ₹972.00 lakh and the same was considered by the Commission vide order dated 9.10.2018 while allowing depreciation. However, the Petitioner vide Form 12, has submitted the value of freehold land included in the gross block as 'Nil'. Further, vide note (2) to Form 12 of the petition, it has been submitted that the land being leasehold land, has not been excluded from the capital cost, while computing depreciable value of the asset. The Petitioner has neither furnished any explanation for revision in the value of freehold land from ₹972.00 lakh



(as submitted in Petition No. 15/GT/2018) to 'zero' in the present petition nor has furnished any documentary evidence to substantiate the submission made vide note (2) to Form 12. It is pertinent to mention that such conversion from freehold land to leasehold land is not plausible in the normal course. As such, in the absence of any explanation or documentary evidence, the submission of the Petitioner is not acceptable. Accordingly, the value of freehold land, as considered in the order dated 9.10.2018 in Petition No. 15/GT/2018 i.e. ₹972.00 lakh has been considered for the purpose of tariff. Depreciation has been calculated as under:

	(₹ in lakh)			
	30.10.2017 to 29.1.2018	30.1.2018 to 31.3.2018	1.4.2018 to 26.4.2018	27.4.2018 to 31.3.2019
Opening Gross Block	65806.56	81727.32	81723.26	81721.90
Addition due to projected Additional Capitalisation	0.00	(-)4.06	(-)1.36	0.00
Closing Gross Block	65806.56	81723.26	81721.90	81721.90
Average Gross Block	65806.56	81725.29	81722.58	81721.90
Land Related Cost	972.00	972.00	972.00	972.00
Depreciable Value	58351.10	72677.96	72675.52	72674.91
Remaining Depreciable Value	58351.10	72346.22	72075.13	71958.10
No. of completed years	0.00	0.25	0.42	0.49
Balance useful life of the asset	35.00	34.75	34.58	34.51
Rate of Depreciation	2.00%	2.00%	2.00%	2.00%
<b>Depreciation(Pro-rata)</b>	<b>331.74</b>	<b>268.69</b>	<b>116.43</b>	<b>1518.01</b>
Cumulative Depreciation (before adjustment for de-capitalization)	331.74	600.42	716.85	2234.86
Less: Depreciation adjustment on account of de-capitalization	0.00	(-)0.03	(-)0.01	0.00
Cumulative depreciation	331.74	600.39	716.81	2234.82

## **O&M Expenses**

60. Regulation 29(3)(d) of the 2014 Tariff Regulations provides as under:

*"29. Operation and Maintenance Expenses:*

*(3) Hydro Generating Station*

*(d) In case of the hydro generating stations declared under commercial operation on or after 1.4.2014, operation and maintenance expenses shall be fixed at 4% and 2.50% of the original project cost (excluding cost of rehabilitation & resettlement works) for first year of commercial operation for stations less than 200 MW projects and for stations more than 200 MW respectively and shall be subject to annual escalation of 6.64% per annum for the subsequent year"*



61. The Commission vide order dated 9.10.2018 in Petition No. 15/GT/2018 had allowed O&M expenses as under:

*“16. We have considered the submissions of both the parties. It is noted that based on the CERC norms, considering O&M charges @ 4% and with 12% free power, the first year tariff and the lowest tariff worked out as ₹6.60/unit and ₹8.05/ unit, respectively, based on the CCEA sanction wherein project cost includes the grant of ₹300 crore. However, on further insistence by the respondent for more reduction of tariff, the petitioner agreed to consider O&M charges @ 2.5% instead of the allowed normative O&M charges of 4%. In this regard, Regulation 47 of the 2014 Tariff Regulation provides as below:-*

*47. Norms to be ceiling norms:*

*Norms specified in these regulations are the ceiling norms and shall not preclude the generating company or the transmission licensee, as the case may be, and the beneficiaries and the long-term transmission customers /DICs from agreeing to the improved norms and in case the improved norms are agreed to, such improved norms shall be applicable for determination of tariff.*

*17. As per the Regulation quoted above, the norms specified in these regulations are ceiling norms and, therefore, the petitioner and respondent are free to adopt any other norms as mutually agreed upon. Accordingly, in line with the regulation quoted above and upon agreement between petitioner and respondent, the depreciation and O&M Expenses are calculated at the rate of 2% and 2.5% respectively.”*

62. The Petitioner has considered O&M expenses @2.5% and has claimed following O&M expenses for the period 2017-19, based on the capital cost of ₹111727.32 lakh (excluding the DoNER grant) as on COD of the generating station:

(₹ in lakh)				
30.10.2017 to 29.1.2018	30.1.2018 to 31.3.2018	2017-18	1.4.2018 to 26.4.2018	27.4.2018 to 31.3.2019
<b>711.69</b>	<b>451.50</b>	<b>1163.19</b>	<b>198.97</b>	<b>2594.22</b>

63. In terms of Regulation 29(3)(d) of the 2014 Tariff Regulations, O&M expenses are required to be calculated @4% of the original project cost as on cut-off date. However, the Petitioner has claimed O&M expenses @2.5% and the same was allowed by the Commission vide order dated 9.10.2018 in Petition No. 15/GT/2018. The same has been considered in the present petition.

64. The project cost as on cut-off date of the generating station (31.3.2021) has not been made available. As such, O&M expenses have been worked out and allowed based on closing capital cost ₹111721.90 lakh as on 31.3.2019, including



the DoNER grant. The Petitioner has stated that the Rehabilitation & Resettlement (R&R) cost is 'nil'. Accordingly, the O&M expenses allowed are as under:

(₹ in lakh)	
Total capital expenditure up to 31.3.2019 in absence of cut-off date expenditure (a)	111721.90
R & R Expenditure (b)	0.00
Capital cost considered for O&M expenses (excluding R&R expenses) (c)= (a)-(b)	111721.90
Annualized O&M expenses @2.5% for 2 machines for 2017-18 (d)= 2.5% of (c)	2793.05
Second year annualized O&M expenses @6.64% of (d) for 2machines (e)=1.0664*(d) 2018-19	<b>2978.51</b>

65. The O&M expenses allowed for the relevant periods in accordance with Regulation 29(3)(d)of the 2014 Tariff Regulation are as under:

(₹ in lakh)				
30.10.2017to 29.1.2018(a) (92 days, unit-1 only)	30.1.2018 to 31.3.2018(b) (61 days for the station)	2017-18 C= (a) + (b)	1.4.2018 to26.4.2018 (26 days)(due to lack of DMS facility)	27.4.2018 to 31.3.2019 (339 days)
<b>603.71</b>	<b>466.78</b>	<b>1070.49</b>	<b>212.17</b>	<b>2766.34</b>

66. Further, the Petitioner has also claimed an amount of ₹8.10 crore as additional O&M expenses on account of wage revision of its employees and Meghalaya Home Guards for the period from 1.1.2017 to 31.3.2019. The Petitioner has prayed that the aforesaid additional O&M expenses may be permitted to be recovered from the Respondents, as a one-time payment, under Regulation 54 (Powers to Relax) and Regulation 55 (Powers to Remove Difficulties) of the 2014 Tariff Regulations. In this regard, the Petitioner has furnished the audited statements showing details of the impact of wage revision. The Commission vide ROP of the hearing dated 13.8.2020 directed the Petitioner to submitted 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 generating station versus the actual audited O&M expenses for the period from 2014-15 to 2018-19;*

*(iii) The detailed break-up of the actual O&M expenses incurred during the 2014-19 tariff period (including any arrear paid after 31.3.2019 towards wage revision) in the*



format which was issued by the Commission to all generating stations for furnishing the actual O&M expenditure data for the period 2008-09 to 2012-13;”

67. In response, the Petitioner vide affidavit dated 11.9.2020 has submitted that no PRP/Incentive has been included in the wage revision impact claimed. The Petitioner has, however, not furnished the details of PRP/Incentive. The Petitioner has provided the comparative statement of the normative O&M expenses allowed to the generating station vis-a-vis the actual audited O&M expenses for the period from 2016-17 to 2018-19. The audited statements indicating the details of the impact of wage revision as submitted by the Petitioner is as under:

(₹ in lakh)					
Sl. No.		2016-17	2017-18	2018-19	Total
<b>1</b>	<b>Impact of wage revision – NEEPCO Employees</b>				
	i) Employees cost before pay revision (with effect from 1.1.2017)	307.74	1233.44	1265.87	2807.05
	ii) Employees cost after pay revision (with effect from 1.1.2017)	391.44	1564.24	1647.14	3602.82
	<b>A. Impact of wage revision (ii-i)</b>	83.70	330.80	381.27	795.78
<b>2</b>	<b>Impact of wage revision – Meghalaya Home Guards (MLHG)</b>				
	i) Employees cost before pay revision (with effect from 1.1.2017)	4.67	20.76	21.81	47.23
	ii) Employees cost after pay revision (with effect from 1.1.2017)	5.60	25.64	30.66	61.91
	<b>B. Impact of wage revision (ii-i)</b>	0.94	4.88	8.85	14.67
<b>3</b>	<b>Total Impact of wage revision (A+B)</b>	84.64	335.68	390.13	810.45

68. The comparative statement of the normative O&M expenses allowed post the COD of the generating station i.e. for the period 2017-19 vis-à-vis the actual audited O&M expenses incurred for the said period, as submitted by the Petitioner vide its affidavit dated 11.9.2020 are as under:

(₹ in lakh)		
<b>Comparative statement of the normative O&amp;M expenses viz-a-viz the actual audited O&amp;M expenses for the period 2014-15 to 2018-19</b>		
Period	Normative O&M Expenses	Actual audited O&M Expenses
29.10.2017 to 28.1.2018	711.69	1525.30
29.1.2018 to 31.3.2018	451.5	
1.4.2018 to 26.4.2018	198.97	
27.4.2018 to 31.3.2019	2594.22	
<b>Total</b>	<b>3956.38</b>	<b>6478.58</b>



69. The Respondent No.1, Power and Electricity Department, Government of Mizoram in its reply dated 24.9.2020 has submitted that the impact of increase in employee cost as claimed by the Petitioner as additional O&M expenses due to revision of wages of employees and Meghalaya Home Guards is not maintainable. It has stated that the revision of employee wages, security forces etc. is a regular feature in the organization. The Respondent has stated that the employee costs, R&M expenses, administrative expenses etc. form part of the O&M expenses and is calculated @2.5% of the capital cost. It has pointed out that in terms of Regulation 29(3)(d) of the 2014 Tariff Regulations, an annual escalation of 6.64% is admissible per annum on the O&M expenses, which covers the yearly increase of the employee wages too. Accordingly, the Respondent has submitted that the issue of recovery of extra expenditure on account of revision of employee wages from the beneficiary is not admissible. The Petitioner in its rejoinder dated 5.10.2020 has clarified that the wage revision is undertaken at an interval of 10 years and the last wage revision was done on 1.1.2007. Accordingly, the Petitioner has submitted that it may be allowed the impact of wage revision as additional O&M expenses recoverable from the beneficiaries.

70. We have examined the matter. The Commission in paragraph 29(4) of the draft 2014 Tariff Regulations had proposed the following, towards impact of wage revision in the O&M expenses:

*“29 (4) The impact of wage revision if any, during the tariff period shall be allowed in due consideration of Government of India, Department of Public Enterprise guidelines and considering following percentage of O&M as employee cost:*

*Coal/Lignite based Stations: 40%*  
*Gas/liquid fuel based stations: 32%*  
*Hydro Generating Stations: 46%*  
*Transmission system: 40%”*



71. However, in Sl. No. 33.2 of the Statement of Reasons to the 2014 Tariff Regulations notified by the Commission for the period 2014-19, it was clarified as under:

*"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."*

72. The impact of wage revision for ₹84.64 lakh for 2016-17, relate to the period prior to the COD of the generating station. As such, in the normal course, the aforesaid amount would form part of the capital cost booked as Incidental Expenditure During Construction (IEDC). However, considering the fact that the project cost has been restricted to a mutually agreed capital cost of ₹111727.32 lakh instead of the actual expenditure incurred, no further claim for the year prior to COD is allowable. Accordingly, the wage revision impact of ₹84.64 lakh for 2016-17 has not been allowed.

73. The Commission vide its order dated 9.10.2018 in Petition No. 15/GT/2018, had allowed O&M expenses of ₹1070.49 lakh in 2017-18 and ₹2978.51 lakh in 2018-19, while the actual O&M expenditure for the said period was ₹1525.30 lakh 2017-18 and ₹4953.28 lakh for 2018-19. As stated above, the Petitioner had mutually agreed to a ceiling capital cost and the allowable O&M expenses, is directly linked to the capital cost of the project. The Petitioner had also agreed for a relaxed O&M norm @2.5% (instead of @4%) and the same was allowed vide order dated 9.10.2018. Based on the above, the admissible O&M expenses (@4% and @2.5%) considering



the capital cost as on 31.3.2019 (i.e. ₹111721.90 lakh) including the impact of wage revision, is worked out as under:

(₹ in lakh)						
O&M Expenses	30.10.2017 to 29.1.2018 (92 days for one unit) (a)	30.1.2018 to 31.3.2018 (61 days for whole station) (b)	Total for 2017-18 (c)= (a)+(b)	1.4.2018 to 26.4.2018 (26 days due to lack of DMS facility) (d)	27.4.2018 to 31.3.2019 (339 days) (e)	Total for 2018-19 (f)=(d)+(e)
@4%	965.94	746.84	1712.78	339.46	4426.14	4765.60
@2.5%	603.71	466.78	1070.49	212.17	2766.34	2978.51
<b>Actual O&amp;M expenses</b>			<b>1525.30</b>			<b>4953.28</b>
<b>Allowable O&amp;M expenses, including wage revision impact of ₹335.68 lakh for 2017-18 and ₹390.13 lakh for 2018-19.</b>						
@2.5%	603.71	466.78	1406.17 (1070.49 + 335.68)	212.17	2766.34	3368.64 (2978.51 + 390.13)
<b>Actual O&amp;M expenses</b>			<b>1525.30</b>			<b>4953.28</b>

74. It is observed from the above table that, as a result of the Petitioner agreeing to O&M norm of 2.5%, the allowable O&M expenses are lower by ₹454.81 lakh (₹1525.30-₹1070.49) for 2017-18 and lower by ₹1974.77 lakh (₹4953.28-₹2978.51) for 2018-19. Thus, as a result of charging a lower O&M norm @2.5% by the Petitioner, the total allowable O&M expenses are much lower than the actual O&M expenses incurred by the Petitioner for these years. In view of these facts, it would be unfair not to allow the impact of wage revision, which is beyond the control of the Petitioner. Accordingly, the impact of wage revision for ₹335.68 lakh in 2017-18 and ₹390.13 lakh in 2018-19, as claimed by the Petitioner, is allowed in exercise of the power under Regulation 54 and 55 of the 2014 Tariff Regulations, over and above the O&M expenses allowed @2.5%.

75. In summary, the O&M expenses allowed for the relevant periods are as under:





(₹ in lakh)						
Period	30.10.2017 to 29.1.2018 (a) (92 days for Unit-I only)	30.1.2018 to 31.3.2018 (b) (61 days for the station)	2017-18 (c)=(a)+(b)	1.4.2018 to 26.4.2018 (26 days) (due to lack of DMS facility)	27.4.2018 to 31.3.2019 (339 days)	2018-19
Normative O&M on agreed terms	603.71	466.78	<b>1070.49</b>	212.17	2766.34	<b>2978.51</b>
Additional O&M expenses due to impact of Pay Revision allowed under Power to relax*	201.85	133.83	<b>335.68</b>	27.79	362.34	<b>390.13</b>

\*pro-rated based on number of days

### **Interest on working capital**

76. Sub-section (c) of clause (1) of Regulation 28 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”*

77. Accordingly, the receivables, considering two months of fixed cost is worked out and allowed as under:

(₹ in lakh)			
30.10.2017 to 29.1.2018 (92 days for one unit)	30.1.2018 to 31.3.2018 (61 days for whole station)	1.4.2018 to 26.4.2018 (26 days)	27.4.2018 to 31.3.2019 (339 days)
407.17	320.48	139.17	1831.75



78. Maintenance spares @15% of O&M expenses allowed on agreed terms against normative O&M allowable under Regulation 29 (3) (d) are worked out and allowed as under:

(₹ in lakh)

30.10.2017 to 29.1.2018 (92 days for one unit)	30.1.2018 to 31.3.2018 (61 days for whole station)	1.4.2018 to 26.4.2018 (26 days)	27.4.2018 to 31.3.2019 (339 days)
90.56	70.02	31.83	414.95

79. O&M expenses for one month are allowed as under:

(₹ in lakh)

30.10.2017 to 29.1.2018 (92 days for one unit)	30.1.2018 to 31.3.2018 (61 days for whole station)	1.4.2018 to 26.4.2018 (26 days)	27.4.2018 to 31.3.2019 (339 days)
50.31	38.90	17.68	230.53

### **Rate of interest on working capital**

80. Clause (3) of Regulation 28 of the 2014 Tariff Regulations provides as under:

*“Interest on working Capital:*

*Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.”*

81. In terms of the above regulation, the Bank Rate of 12.60% (Base Rate + 350 Basis Points) as on 1.4.2017 has been considered by the Petitioner. This has been considered in the calculations for the purpose of tariff. Break-up of interest on working capital is as under:

(₹ in lakh)

	30.10.2017 to 29.1.2018 (92 days for one unit)	30.1.2018 to 31.3.2018 (61 days for whole station)	1.4.2018 to 26.4.2018 (26 days)	27.4.2018 to 31.3.2019 (339 days)
Maintenance Spares @15% of O&M expenses	90.56	70.02	31.83	414.95
O & M expenses (one month)	50.31	38.90	17.68	230.53



Receivables @ two-months of fixed cost	407.17	320.48	139.17	1831.75
Total	548.04	429.40	188.67	2477.23
<b>Interest on working capital @ 12.60%</b>	<b>69.05</b>	<b>54.10</b>	<b>23.77</b>	<b>312.13</b>

### **Fixed Charges**

82. Accordingly, the fixed charges approved for the period from COD (30.10.2017) of Unit-I to 31.3.2019 in respect of the generating station are as follows:

	(₹ in lakh)			
	<b>30.10.2017 to 29.1.2018</b>	<b>30.1.2018 to 31.3.2018</b>	<b>1.4.2018 to 26.4.2018</b>	<b>27.4.2018 to 31.3.2019</b>
Return on Equity	531.02	430.09	172.52	2394.53
Interest on Loan	705.66	569.40	282.31	3637.14
Depreciation	331.74	268.69	116.43	1518.01
Interest on Working Capital	69.05	54.10	23.77	312.13
O & M Expenses	805.56	600.61	239.96	3128.68
<b>Fixed Charges (pro-rata)</b>	<b>2443.03</b>	<b>1922.89</b>	<b>834.99</b>	<b>10990.50</b>

83. The summary of the fixed charges allowed in this order and those allowed vide Commission's order dated 9.10.2018 in Petition No. 15/GT/2018 is as under:

	(₹ in lakh)			
	<b>30.10.2017 to 29.1.2018</b>	<b>30.1.2018 to 31.3.2018</b>	<b>1.4.2018 to 26.4.2018</b>	<b>27.4.2018 to 31.3.2019</b>
Fixed Charges allowed vide Commission's order dated 9.10.2018 (pro-rata)	2294.01	1796.99	791.41	10421.23
Fixed Charges allowed in this order (pro-rata)	2443.03	1922.89	834.99	10990.50

### **Normative Annual Plant Availability Factor (NAPAF)**

84. The Commission in its order dated 9.10.2018 in Petition No.15/GT/2018 had allowed NAPAF of the generating station as under:

*"80. The petitioner vide Form-2 has claimed NAPAF of 85%. Subsequently vide affidavit dated 13.7.2018 the petitioner has claimed NAPAF as 82% based on the following justification.*



Calculation of Normative Annual Plant Availability Factor (NAPAF)

81. The Salient features for Tr HEP are as follows:

FRL:	90.5m
MDDL:	68.0m
Normal TWL at Full Load:	30.7m
TWL at 1unit running:	29.3m

82. From the above it has been observed that the Head Variation between FRL and MDDL is more than 8% for the instant case. Hence month wise peaking capability shall form the basis of fixation of NAPAF. However, as confirmed by the model studies carried out by the E&M Contractor, the load generation (MW) is reduced with lowering of reservoir level/ head. The aforesaid machine characteristic was not considered by CWC while carrying out the Power Potential Study for the DPR.

83. However, while determining monthly peaking capability, the net head calculated in the DPR has been considered. The net head has further been reduced by another 2.0m considering existing TWL. Tail water Level gets raised by approximately 2.0m due to raising of river bed level in downstream of the project which is beyond the control of NEEPCO. From the calculated Monthly Peaking Capability, the obtained NAPAF is 96%. Considering 10% allowance for outage & 5% for North- eastern region, the final NAPAF is  $0.85 \times 96\% = 82\%$

84. Regulation 37 (1) (b) of the 2014 Tariff Regulations provides that in case of storage and pondage type plants with head variation between full reservoir level and minimum draw down level is more than 8% and when plant availability is not affected by silt, the month wise peaking capability as provided by the project authorities in the DPR (approved by CEA or the State Government) shall form basis of fixation of NAPAF. The submission of petitioner for consideration of NAPAF of 82% cannot be accepted at this stage. The monthly peaking capability based on which NAPAF of 85% has been furnished in Form-2 of original tariff petition is based on the net head furnished in the DPR. If there is any reduction in the net head subsequently due to rise in water level in the tail raise then the petitioner should approach the authority / government body which has approved the DPR.

85. In view of the above, NAPAF of 85% is allowed for the year 2018-19. However the petitioner is granted liberty to approach the Commission at the time of truing up along with revision, if any, in the net head duly approved by the competent authority as the same will be in accordance with the law."

85. The Petitioner in this petition has submitted that an application has been filed before CEA seeking reduction of NAPAF to 82% and has claimed the same in this petition. It has also stated that the report of CEA on the proposal of the Petitioner is awaited and the same will be submitted on receipt. The Respondent, Power and Electricity Department, Government of Mizoram in its reply dated 24.9.2020 has stated that the generating station is not affected by siltation and that many other generators like NHDC, NTPC, SJVNL and other plants of NHPC, had demonstrated NAPAF more than 85% and up to 90%.Therefore, the claim of the Petitioner for



NAPAF of 82% is not justified. The Petitioner in its rejoinder dated 5.10.2020 has reiterated the submissions made in the petition. Considering the fact that the application for reduction of NAPAF to 82% is pending before CEA, we allow NAPAF of 85% as allowed in Commission's order dated 9.10.2018 in Petition No. 15/GT/2018. The Petitioner may file an appropriate petition once a decision is taken by CEA on pending request of the Petitioner and the same would be considered in accordance with law.

### **Auxiliary Energy Consumption**

86. Regulation 37(6)(a) of the 2014 Tariff Regulations provides as under:

*(6) "(6) Auxiliary Energy Consumption(AUX):*

*(a) Surface hydro generating stations*

*(i) with rotating exciters mounted on the generator shaft :0.7%  
with static excitation system: 1.00%"*

87. The Commission in its order dated 9.10.2018 in Petition No.15/GT/2018 had allowed Auxiliary Energy Consumption(AEC) as under:

*87. The Auxiliary Energy Consumption of 1% claimed by the petitioner is in order and same has been considered for tariff computation.*

88. The Petitioner in this petition has claimed AEC of 4%. However, the Commission in ROP of the hearing dated 13.8.2020 had granted liberty to the Petitioner to approach the Commission through a separate application. In view of this, AEC of 1% as allowed by order dated 9.10.2018 in terms of the aforesaid regulation, has been considered for the purpose of tariff.

### **Design Energy**

89. As regards Design Energy (DE), the Commission vide its order dated 9.10.2018 in Petition No.15/GT/2018 had observed as under:

*"88. As per the original DPR of the project, the annual Design Energy (DE) of the station is 240.89 MUs. However, the petitioner has claimed annual design Energy of 250.63 MUs for the generating station and has submitted that the same is yet to be approved by CEA. Considering the fact that this is beneficial to the beneficiary, we*



consider annual Design Energy of 250.63MUs. However, the petitioner is directed to submit the Design Energy of the station to the Commission as on when approved by CEA, the month-wise break-up the allowed Design Energy of 250.63Mus of the same is as under:

xxxx.”

90. The Petitioner has claimed DE of 250.63 MU and has furnished a copy of the CEA letter dated 3.11.2005, which has authenticated the Design Energy as 250.63 MU for the generating station. In view of this, DE of 250.63 MU as approved by CEA has been considered for the generating station. The month-wise details are as under:

Month	Design Energy (MU)
April	14.37
May	17.37
June	20.79
July	27.24
August	35.17
September	36.23
October	26.08
November	17.77
December	14.61
January	13.73
February	13.60
March	13.67
<b>Total</b>	<b>250.63</b>

91. In summary:

(a) The fixed charges (*pro rata*) allowed in this order is as below:

(₹ in lakh)			
30.10.2017 to 29.1.2018	30.1.2018 to 31.3.2018	1.4.2018 to 26.4.2018	27.4.2018 to 31.3.2019
2443.03	1922.89	834.99	10990.50

(b) The difference between the fixed charges already recovered by the Petitioner in terms of Commission's order dated 9.10.2018 in Petition No. 15/GT/2018 and the fixed charges determined by this order shall be adjusted in terms of Regulation 8 of the 2014 Tariff Regulations.



(c) The Petitioner is granted liberty to approach the Commission on the issue of revision of Capital Cost on approval of the RCE by CCEA, GoI and with the concurrence of the sole beneficiary of this project.

(d) The Petitioner is also granted liberty to approach the Commission on the issue of NAPAF, once a decision is taken by CEA on the pending request of the Petitioner.

92. Petition No. 329/GT/2019 is disposed of in terms of the above.

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

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

*Sd/-*  
**(P.K. Pujari)**  
**Chairperson**

