

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Review Petition No. 43/RP/2022**

in

**Petition 282/GT/2020**

**Coram:**

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

**Date of Order: 13<sup>th</sup> October, 2023**

**In the matter of**

Petition for review of order dated 14.8.2022 in Petition No. 282/GT/2020 pertaining to truing up of tariff for the period 2014-19 and for determination of tariff for the period 2019-24 for Nimoo Bazgo Hydroelectric Power Station, under Section 94(1)(f) of the Electricity Act, 2003 read with Regulation 103(1) of the CERC (Conduct of Business), Regulations, 1999.

**And**

**In the matter of**

NHPC Limited,  
NHPC Office Complex, Sector-33,  
Faridabad (Haryana) - 121 003

**...Petitioner**

**Vs**

Power Development Department,  
New Secretariat,  
Jammu -180 001 (J&K)

**...Respondent**

**Parties present:**

Shri Ved Jain, Advocate, NHPC  
Shri Ankit Gupta, Advocate, NHPC  
Shri Ravi Kant Singh, Advocate, NHPC  
Shri Mohd. Faruque, NHPC  
Shri Piyush Kumar, NHPC  
Shri Deepak K. Dey, NHPC



## ORDER

Petition No. 282/GT/2020 was filed by the Review Petitioner, NHPC Limited, for truing up of tariff of Nimoo Bazgo Hydroelectric Power Station (3 x 15 MW) (in short “the generating station”) for the period 2014-19, in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (in short 'the 2014 Tariff Regulations') and for determination of the tariff for the generating station for the period 2019-24, in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short 'the 2019 Tariff Regulations') and the Commission vide order dated 14.8.2022 (in short the 'impugned order') approved the annual fixed charges, as under:

*(Rs. in lakh)*

	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	5249.88	5256.80	5275.36	5303.37	5317.14
Interest on loan	2142.99	1862.83	1604.21	1333.42	1061.58
Return on Equity	6345.24	6352.93	6374.57	6397.47	6401.94
Interest on Working capital	377.17	356.33	336.81	341.70	345.87
O&M Expenses	3588.54	3759.60	3938.80	4126.55	4323.24
Security Expenses	325.71	341.24	357.52	374.57	392.44
<b>Total</b>	<b>18029.53</b>	<b>17929.73</b>	<b>17887.26</b>	<b>17877.09</b>	<b>17842.22</b>

2. Aggrieved by the impugned order dated 14.8.2022, the Review Petitioner has filed this Review Petition on the ground that there is error apparent on the face of the record on the following issues:

*A) Error in deduction of assumed deletion while allowing the additional capitalization on account of installation of Large Display unit in 2017-18;*

*B) Error in grossing up of Return on Equity with Minimum Alternate Tax (MAT) Rate in place of Effective Tax Rate; and*

*C) Error in non-consideration of the prayer made regarding auxiliary power consumption for the period 2019-24.*



### **Hearing dated 24.1.2023**

3. The Review Petition was heard on 'admission' on 24.1.2023 and the Commission, after hearing the parties, admitted the Review Petition on the issues (a) and (b) raised in paragraph 2 above vide interim order dated 14.2.2023. The issue (c) in paragraph 2 above was however disposed of vide interim order dated 14.2.2023 on the ground that the same has been rendered infructuous. Accordingly, notice was issued on the Respondent. No reply has been filed by the Respondent.

### **Hearing dated 31.5.2023**

4. The Review Petition was thereafter heard on 31.5.2023. The Commission, after hearing the representative of the Review Petitioner reserved its order in the matter. None was present on behalf of the Respondent.

5. Based on the submissions of the Review Petitioner and the documents available on record, we proceed to examine the issues (A) and (B) raised by the Review Petitioner in para 2 above, in the subsequent paragraphs.

### **A. Error in deduction of assumed deletion while allowing the additional capitalization on account of installation of Large Display unit in 2017-18**

6. The Commission in paragraph 33 of the impugned order dated 14.8.2022 (item no. 12 of the table) had considered an assumed deletion of Rs. 26.90 lakh in respect of the additional capital expenditure towards Large Display Unit as under:

*"12. The Petitioner has submitted that the units and auxiliaries were controlled and monitored through small size monitors which hampers simultaneous display of Units and auxiliaries as well as monitoring various online station parameters within a single frame which is essential for efficient operation of the power station. No Large Display Units were installed in the*



*project. So, a LDU with a rear projector unit with display screen was required to be installed at control room. Considering the fact that the assets/works are necessary for the successful and efficient plant operation, the expenditure is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The Petitioner has not furnished the decapitalised value of the old asset. As such, the value of Rs. 26.90 lakh has been worked out and adjusted under 'Assumed deletions.'*

7. Also, the Commission in para 50 of the impugned order observed the following:

*"50. ... It is also noticed that the Petitioner, in this petition, has not provided the decapitalization value of the old asset, in case of 'Large display unit' asset/work which is being replaced. Accordingly, based on above methodology, the assumed deletion considered and allowed for these assets/works worked out during the year of claim are as under: ..."*

### **Submissions of the Review Petitioner**

8. The Review Petitioner has submitted that the additional capital expenditure claimed towards Large Display Unit under Regulation 14(3)(viii) of the 2019 Tariff Regulations, is an addition to the existing system, and not against replacement of existing system and therefore, no replacement value was provided in the petition. It has pointed out that the Commission while allowing the above expenditure on the said asset, had committed an error by treating the expenditure against replacement and deducted the 'Assumed deletion' value amounting to Rs. 26.90 lakh. Accordingly, the Review Petitioner has submitted that the net expenditure of Rs. 4.97 lakh (Rs. 31.87 lakh – Rs. 26.90 lakh) only was allowed after adjusting the assumed deletion value. The Review Petitioner has therefore prayed that the Commission may rectify the above mentioned error and allow the additional capitalization of Rs. 31.70 lakh for the purchase of Large Display Unit.



## **Analysis and Decision**

9. The matter has been considered. As stated in para 6 and 7 above, the Commission while passing the impugned order had considered the additional capital expenditure claim of the Review Petitioner for Large Display Unit in 2017-18 as replacement of existing infrastructure and accordingly considered an assumed deletion of Rs.26.90 lakh. However, we notice from records that the Review Petitioner had provided sufficient justification, in the original petition/forms stating that the claim for the said asset was an addition and not as replacement of the existing system. This aspect was overlooked by the Commission while passing the impugned order. Thus, the non-consideration of the same, in our view, is an error apparent on the face of the order and the same is to be rectified. Accordingly, the review on this ground is allowed and the additional capital expenditure of Rs.31.87 lakh, claimed by the Review Petitioner for the said asset in 2017-18, is considered and allowed (in item 12 para 33) without any assumed deletions.

10. Consequently, the table under para 50 of the impugned order dated 14.8.2022 with regard to the assumed deletions considered for the period 2014-19 stands revised as under:

<i>(Rs. in lakh)</i>				
<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
3.89	0.00	0.00	0.00	0.00

11. Accordingly, the net additional capital expenditure allowed in the table under para 53 of the impugned order dated 14.8.2022 is revised as under:



*(Rs. in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Total additional capital expenditure allowed (excluding liabilities pertaining to Additional Capitalization incurred as per site specific requirement)	3962.73	1529.68	1387.11	489.57	231.10	<b>7600.19</b>
Less: De- capitalization allowed	0.51	0.81	30.59	6.80	0.00	<b>38.71</b>
Less: Assumed deletion	3.89	0.00	0.00	0.00	0.00	<b>3.89</b>
Add: Discharge of Liabilities (pertaining to Additional Capitalization incurred as per site specific requirement)	0.00	29.72	35.14	9.35	6.40	<b>80.61</b>
<b>Additional capital expenditure allowed (Net)</b>	<b>3958.33</b>	<b>1558.59</b>	<b>1391.66</b>	<b>492.12</b>	<b>237.50</b>	<b>7638.20</b>

*Issue (A) is disposed of accordingly.*

12. Based on the above, the annual fixed charges for the periods 2014-19 and 2019-24 respectively, shall be revised after examining the issue (B) raised in the review Petition.

**B. Error in grossing up of Return on Equity with Minimum Alternate Tax (MAT) Rate in place of Effective Tax Rate**

13. The Commission vide para 59 of the impugned order dated 14.8.2022 had grossed up the base rate of ROE, based on the actual tax paid for the period and worked out the ROE in terms of Regulation 24 and 25 of the 2014 Tariff Regulations, as under:

*(Rs. in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Notional Equity (A)	29430.62	30618.12	31085.70	31503.20	31642.77
Addition due to additional capitalization (B)	1187.50	467.58	417.50	139.57	71.25
Closing Notional Equity (C) = (A + B)	30618.12	31085.70	31503.20	31642.77	31714.02
Average Equity (D) = (A+C)/2	30024.37	30851.91	31294.45	31572.98	31678.39
Return on Equity (Base Rate) (E)	16.500%	16.500%	16.500%	16.500%	16.500%
Tax rate for the year (F)	20.961%	21.342%	21.342%	21.342%	21.549%



	2014-15	2015-16	2016-17	2017-18	2018-19
Rate of Return on Equity (G)	20.876%	20.977%	20.977%	20.977%	21.032%
Return on Equity (H) = (D x G)	6267.89	6471.80	6564.64	6623.06	6662.60

### **Submissions of the Review Petitioner**

14. The Review Petitioner, in the Review petition, has submitted the following:

(a) The Commission has grossed up Return on Equity (ROE) with MAT rate (which was applicable tax rate for the Petitioner's company during 2014-19) and not with effective tax rate, and the same is not in accordance with Regulation 25 (3) of the 2014 Tariff Regulations.

(b) The concept of effective tax rate was introduced by the Commission to allow the pre-tax ROE of 15.5%/16.5% for the period 2014-19 and considering the applicable tax rate, instead of the effective tax rate, is not in line with the provisions of the 2014 Tariff Regulations. By using the applicable tax rate for grossing up of base rate of ROE, the Commission has moved back to the 2009 Tariff Regulations.

(c) The Review Petitioner has grossed up the ROE with effective tax rate as per Regulation 25(3) of the 2014 Tariff Regulations, which is 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 period 2014-15 to 2018-19 on actual gross income of any financial year.

(d) The actual tax paid is excluding the tax on other income stream and penalty, if any, arising on account of delay in deposit or short deposit of tax amount by the generating company, which is as per Regulation 25(3) of the 2014 Tariff Regulations. Although the Review Petitioner's company fall under the MAT regime, but since effective Tax Rate is calculated as per provisions of Regulation 25 (3) for grossing up of ROE for truing up purpose, the effective Tax may be higher or lower as compared to MAT rate.

(e) By claiming the effective tax rate in place of the MAT rate, the Review Petitioner is adopting the tax neutral approach, which is the basic intention of the Tariff Regulations.

(f) In view of above, it is clear that the Commission, while grossing up the ROE, has considered the MAT rate, in place of the effective tax rate, which is a gross error.



15. Accordingly, the Review Petitioner has submitted that there has been an under recovery of Rs. 208.51 lakh in the ROE (pre- tax) for the period 2014-19 on account of the error, while grossing up of ROE in paragraph 59 of the impugned order dated 14.8.2022 and the same may be reviewed.

### **Analysis and Decision**

16. The matter has been considered. The generating company is under the MAT regime, and hence the Commission in the impugned order dated 14.8.2022 had considered the same, while working out ROE and had grossed up the ROE based on MAT rate. In the Statement of Objects and Reason (SOR) to the 2014 Tariff Regulations, on this issue, the Commission has observed as follows:

*“25.6 The Commission observed that various stakeholders have suggested to retain the existing pre-tax return on equity approach. On the other hand, beneficiaries have suggested that utilities should recover income tax from their profit and not separately from the beneficiaries. The Commission has analysed the suggestions and observations received from various stakeholders and observed that both the approaches have their own merits and demerits. However, the major disadvantage, which the Commission envisages in implementation of post-tax approach is the incremental effect of income tax liability, which will arise as the reimbursement of income tax shall again be considered as income in the hands of the generator/licensee and the same will defeat the entire purpose of adopting this approach. Thus, with due regard to the suggestions of the stakeholders and the complexities involved in computing income tax liability, it will be appropriate to retain the existing pre-tax rate of return approach. **In order to pass on the benefits and concessions available in income tax, the income tax rate to be considered for grossing up purpose shall be Minimum Alternate Tax (MAT) rate, if the generating company, generating station or the transmission licensee is paying MAT, or the effective Tax Rate, if the generating company or the transmission licensee is paying income tax at corporate tax rate. Accordingly, the Commission has decided to allow pre-tax rate of return on equity which shall be grossed up with the effective tax rate of the financial year or MAT rate and the tax on other income stream will not be considered for the calculation of the effective tax rate.**”*

17. It is noticed that tax on ROE, has been defined in Regulation 25 of the 2014 Tariff Regulations. It is also noticed that in case the generating station is paying MAT, the rate of ROE is required to be grossed up with the MAT rate only and the MAT rate does include





surcharge and cess. Further, as per observations of the Commission in the SOR to the 2014 Tariff Regulations (as quoted above), it is evident that in order to pass on the benefits and concessions available in income tax, the income tax rate to be considered for the purpose of grossing up shall be the MAT rate, if the generating company, generating station or the transmission licensee is paying MAT. On perusal of the documents furnished by the Review Petitioner, it was observed that the Review Petitioner is covered under MAT regime and since the Review Petitioner was paying MAT, the grossing up of ROE is required to be done based on the MAT rate. Since the provisions of the aforesaid regulations, mandates the grossing up ROE with the MAT rate, if the generating company is paying MAT, the Commission in the impugned order dated 18.8.2022 had considered the same, while working out ROE and grossing up the ROE based on MAT rate. As the ROE had been worked out and allowed in terms of the aforesaid regulations read with the SOR to the said regulations, we find no force in the submissions of the Review Petitioner, to review the impugned order, on this ground. Accordingly, we hold that there is no error apparent on the face of the impugned order dated 14.8.2022 and review on this ground is not maintainable. It is pertinent to mention that similar issue raised by the Review Petitioner in Petition No.19/RP/2022, Petition No 42/RP/2022 and Petition No.44/RP/2022 were rejected by the Commission vide its orders dated 5.1.2023, 16.7.2023 and 18.8.2023 respectively. In this background, the prayer of the Review Petitioner for review of the impugned order dated 14.8.2022, on this issue is rejected. *Issue (B) is disposed of as above.*

### **Revision of annual fixed charges**

18. As stated in para 12 above, the annual fixed charges for the periods 2014-19 and 2019-24 are revised as stated below:



## Period 2014-19

### Capital Cost

19. The capital cost approved for the period 2014-19, in the table under para 54 of the impugned order dated 14.8.2022 stands revised as under:

	<i>(Rs. in lakh)</i>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Capital Cost	98102.08	102060.41	103618.99	105010.66	105502.78
Additional capital expenditure (Net)	3958.33	1558.59	1391.66	492.12	237.50
<b>Closing Capital Cost</b>	<b>102060.41</b>	<b>103618.99</b>	<b>105010.66</b>	<b>105502.78</b>	<b>105740.28</b>
Average Capital cost	100081.24	102839.70	104314.83	105256.72	105621.53

### Debt-Equity ratio

20. The debt-equity ratio approved in the table under para 56 of the impugned order dated 14.8.2022 is revised as under:

	<b>As on 1.4.2014</b>		<b>Net Additional Capitalization during 2014-19</b>		<b>As on 31.3.2019</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	68671.46	70%	5346.74	70%	74018.20	70%
Equity	29430.62	30%	2291.46	30%	31722.08	30%
<b>Total</b>	<b>98102.08</b>	<b>100%</b>	<b>7638.20</b>	<b>100%</b>	<b>105740.28</b>	<b>100%</b>

### Return on Equity

21. The Return on Equity (ROE) worked out and allowed in the table under para 59 of the impugned order dated 14.8.2022 is rectified and allowed as under:

	<i>(Rs. in lakh)</i>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Notional Equity (A)	29430.62	30618.12	31085.70	31503.20	31650.83
Addition due to additional capitalization (B)	1187.50	467.58	417.50	147.64	71.25
Closing Notional Equity (C) = (A + B)	30618.12	31085.70	31503.20	31650.83	31722.08
Average Equity (D) = (A+C)/2	30024.37	30851.91	31294.45	31577.01	31686.45
Return on Equity (Base Rate) (E)	16.500%	16.500%	16.500%	16.500%	16.500%
Tax rate for the year (F)	20.961%	21.342%	21.342%	21.342%	21.549%
Rate of Return on Equity (G)	20.876%	20.977%	20.977%	20.977%	21.032%
<b>Return on Equity (H) = (D x G)</b>	<b>6267.89</b>	<b>6471.80</b>	<b>6564.64</b>	<b>6623.91</b>	<b>6664.30</b>



## Interest on Loan

22. The interest on loan allowed in the table under para 61 of the impugned order dated 14.8.2022 is revised as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross opening loan (A)	68671.46	71442.29	72533.30	73507.46	73851.95
Cumulative repayment of loan upto previous year (B)	2272.49	7277.17	12378.37	17551.98	22777.14
Net Loan Opening (C)=(A)-(B)	66398.97	64165.12	60154.93	55955.48	51074.81
Repayment during the year (D)	5004.89	5101.28	5176.61	5226.50	5243.25
Cumulative repayment adjustment on a/c of de-capitalization (E)	0.21	0.08	3.00	1.34	0.00
Net Repayment (F)=(D)-(E)	5004.68	5101.20	5173.61	5225.16	5243.25
Addition due to additional capital expenditure (G)	2770.83	1091.01	974.16	344.48	166.25
Net Loan Closing (H)= (C+G-F)	64165.12	60154.93	55955.48	51074.81	45997.81
Average Loan(I)=(C+H)/2	65282.04	62160.03	58055.21	53515.15	48536.31
Weighted Average Rate of Interest of loan (J)	6.08%	6.03%	5.91%	4.81%	4.54%
<b>Interest on Loan (K=I*J)</b>	<b>3969.02</b>	<b>3745.66</b>	<b>3432.84</b>	<b>2573.30</b>	<b>2202.88</b>

## Depreciation

23. Depreciation worked out and allowed in the table under para 65 of the impugned order dated 14.8.2022 is also revised as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block (A)	98102.08	102060.41	103618.99	105010.66	105502.78
Net Additional capital expenditure during 2014-19 (B)	3958.33	1558.59	1391.66	492.12	237.50
Closing gross block (C=A+B)	102060.41	103618.99	105010.66	105502.78	105740.28
Average gross block (D)=(A+C)/2	100081.24	102839.70	104314.83	105256.72	105621.53
Depreciable Value (E=D*90%)	90073.12	92555.73	93883.34	94731.05	95059.38
Remaining Depreciable Value at the beginning of the year (F=E-Cum Dep at 'L' at the end of previous year)	87800.63	85278.56	81504.97	77179.07	72282.24
Rate of Depreciation (G)	5.001%	4.960%	4.962%	4.965%	4.964%
Balance useful Life (H)	34.53	33.53	32.53	31.53	30.53
<b>Depreciation (I=D*G)</b>	<b>5004.89</b>	<b>5101.28</b>	<b>5176.61</b>	<b>5226.50</b>	<b>5243.25</b>



	2014-15	2015-16	2016-17	2017-18	2018-19
Cumulative Depreciation at the end of the year (J=I+ Cum Dep at 'L' at the end of previous year)	7277.38	12378.45	17554.98	22778.48	28020.39
Less: Depreciation adjustment on account of de-capitalization (K)	0.21	0.08	3.00	1.34	0.00
Cumulative Depreciation at the end of the year (L)	7277.17	12378.37	17551.98	22777.14	28020.39

\*The cumulative depreciation at the end of 2013-14 is Rs. 2272.49 lakh.

### O&M Expenses

24. The O&M expenses (pro rata) worked out and allowed in the table under para 67 of the impugned order dated 14.8.2022 stands revised as under:

	<b>(Rs. in lakh)</b> <b>10.10.2013 to 31.1.2014 (59 days)</b> <b>3 Units</b>
Allowed capital cost as on cut-off date	105502.78
Less: R&R cost	1144.00
Capital cost for the purpose of O&M	104358.78
Annualized O&M expenses @ 2% of capital cost	2087.18
<b>O&amp;M expenses (Pro-rata for number of days)</b>	<b>989.26</b>

25. Also, the annualized O&M expenses worked out and allowed in the table under para 68 of the impugned order dated 14.8.2022 is corrected as under:

*“68. The generating station has not completed 3 years of operation as on 1.4.2014, Accordingly, in terms of Regulation 29(3)(c) of the 2014 Tariff Regulations and considering the capital cost of Rs. 105502.78 lakh, allowed as on the cut-off date (31.3.2018) of the generating station, the O&M expenses for the 2014-19 tariff period, is revised and allowed as under:*

	<b>(Rs. in lakh)</b>
	<b>Amount</b>
Capital cost allowed on cut-off date (31.3.2018)	105502.78
Less: R&R cost submitted by the Petitioner	1144.00
<b>Capital cost for the purpose of O&amp;M</b>	<b>104358.78</b>
<b>2013-14</b>	
<b>Annualized O&amp;M expenses (@ 2% of Rs. 104358.78 lakh)</b>	<b>2087.18*</b>

*\*O&M expenses allowed at 2013-14 price level is further escalated @ 6.64% per annum to arrive at operation and maintenance expenses in respective year of the tariff period*



26. Further, the total O&M expenses allowed in the table under para 76 of the impugned order dated 14.8.2022 is revised as under:

	<i>(Rs. in lakh)</i>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Normative O&M expenses	2225.76	2373.55	2531.16	2699.23	2878.46
Impact due to GST	0.00	0.00	0.00	19.43	46.19
<b>Total O&amp;M expenses</b>	<b>2225.76</b>	<b>2373.55</b>	<b>2531.16</b>	<b>2718.66</b>	<b>2924.64</b>

### **Interest on Working Capital**

#### ***Working capital for Receivables***

27. Accordingly, the Receivable component of working capital worked out and allowed in the table under para 78 of the impugned order dated 14.8.2022 is rectified as under:

<i>(Rs. in lakh)</i>				
<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
2990.23	3029.34	3032.39	2937.43	2920.24

#### ***Working capital for Maintenance spares***

28. Maintenance spares @15% of O&M expenses worked out and allowed in the table under para 79 of the impugned order dated 14.8.2022 is revised as under:

<i>(Rs. in lakh)</i>				
<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
333.86	356.03	379.67	407.80	438.70

#### ***Working capital for O&M expenses for 1 month***

29. The O&M expenses for 1 month for the purpose of working capital as allowed in the table under para 80 of the impugned order dated 14.8.2022 is revised as under:

<i>(Rs. in lakh)</i>				
<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
185.48	197.80	210.93	226.56	243.72

30. Also, the total interest on working capital as allowed in the table under para 82 of the impugned order dated 14.8.2022 is revised as under:



	<i>(Rs. in lakh)</i>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Working capital for O & M expenses	185.48	197.80	210.93	226.56	243.72
Working capital for Maintenance Spares	333.86	356.03	379.67	407.80	438.70
Working capital for Receivables	2990.23	3029.34	3032.39	2937.43	2920.24
<b>Total Working Capital</b>	<b>3509.57</b>	<b>3583.17</b>	<b>3622.99</b>	<b>3571.78</b>	<b>3602.65</b>
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
<b>Total Interest on Working capital</b>	<b>473.79</b>	<b>483.73</b>	<b>489.10</b>	<b>482.19</b>	<b>486.36</b>

### Annual Fixed charges

31. The annual fixed charges approved for the period from 29.11.2012 to 31.3.2014 in the table under para 83 of the impugned order dated 14.8.2022 is revised as under:

	<i>(Rs. in lakh)</i>
	<b>10.10.2013 to 31.3.2014 (3 Units)</b>
Depreciation	2272.49
Interest on Loan	2274.64
Return on Equity	2860.12
O&M Expenses	989.26
Interest on Working Capital	217.89
<b>Total</b>	<b>8614.40</b>

32. Consequently, the annual fixed charges allowed for the period 2014-19 as summarized in the table under para 84 of the impugned order dated 14.8.2022 is revised as under:

	<i>(Rs. in lakh)</i>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	5004.89	5101.28	5176.61	5226.50	5243.25
Interest on Loan	3969.02	3745.66	3432.84	2573.30	2202.88
Return on Equity	6267.89	6471.80	6564.64	6623.91	6664.30
Interest on Working Capital	473.79	483.73	489.10	482.19	486.36
O&M Expenses	2225.76	2373.55	2531.16	2718.66	2924.64
<b>Total Annual Fixed Charges</b>	<b>17941.35</b>	<b>18176.03</b>	<b>18194.34</b>	<b>17624.56</b>	<b>17521.42</b>



## Capital Cost

33. The para 95 of the impugned order dated 14.8.2022 is revised as under:

*“95. The Commission in this order had allowed the closing capital cost of Rs. 105740.28 lakh, as on 31.3.2019. Accordingly, in terms of Regulation 19(3) of the 2019 Tariff Regulations, the capital cost of Rs. 105740.28 lakh, as on 31.3.2019, has been considered as the opening capital cost as on 1.4.2019, for the purpose of determination of tariff for the 2019 tariff period.*

34. Accordingly, the capital cost allowed in the table under para 132 of the impugned order dated 14.8.2022 is revised as under:

	<i>(Rs. in lakh)</i>				
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Opening Capital Cost	105740.28	105895.57	106019.25	106643.35	107148.35
Total additional capital expenditure allowed (including liabilities)	164.46	129.25	624.10	505.00	50.00
Less: De- capitalization allowed	9.17	5.57	0.00	0.00	0.00
<b>Additional capital expenditure allowed (Net)</b>	<b>155.29</b>	<b>123.68</b>	<b>624.10</b>	<b>505.00</b>	<b>50.00</b>
<b>Closing Capital Cost</b>	<b>105895.57</b>	<b>106019.25</b>	<b>106643.35</b>	<b>107148.35</b>	<b>107198.35</b>
Average Capital Cost	105817.92	105957.41	106331.30	106895.85	107173.35

## Debt-Equity Ratio

35. The debt-equity ratio allowed in the table under para 134 of the impugned order dated 14.8.2022 is revised as under:

	<i>(Rs. in lakh)</i>					
	<b>As on 31.3.2019</b>	<b>in %</b>	<b>ACE in 2019-24</b>	<b>in %</b>	<b>As on 31.3.2024</b>	<b>in %</b>
Debt	74018.20	70.00%	1020.65	70.00%	75038.85	70.00%
Equity	31722.08	30.00%	437.42	30.00%	32159.50	30.00%
<b>Total</b>	<b>105740.28</b>	<b>100.00%</b>	<b>1458.07</b>	<b>100.00%</b>	<b>107198.35</b>	<b>100.00%</b>

## Return on Equity

36. The Return on Equity as allowed in the table under para 136 of the impugned order dated 14.8.2022 is rectified as under:



(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Notional Equity (A)	31722.08	31768.67	31796.17	31981.90	31981.90
Addition due to additional capitalization (B)	46.59	27.50	185.73	0.00	0.00
Closing Notional Equity (C) = (A + B)	31768.67	31796.17	31981.90	31981.90	31981.90
Average Equity (D) = (A+C)/2	31745.37	31782.42	31889.04	31981.90	31981.90
Return on Equity (Base Rate) (E)	16.500%	16.500%	16.500%	16.500%	16.500%
Tax rate for the year (F)	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (G)	19.993%	19.993%	19.993%	19.993%	19.993%
<b>Return on Equity (H) = (D x G)</b>	<b>6346.85</b>	<b>6354.26</b>	<b>6375.57</b>	<b>6394.14</b>	<b>6394.14</b>
<b>Addition due to additional capitalization beyond original scope of work</b>					
Opening Notional equity (A)	0.00	0.00	9.60	11.10	162.60
Addition due to Additional Capitalization (after cut of date) (B)	0.00	9.60	1.50	151.50	15.00
Repayment of Equity (balance of depreciation after repayment of loan) (C)	0.00	0.00	0.00	0.00	0.00
Closing Equity (D) = (A +B - C)	0.00	9.60	11.10	162.60	177.60
Average Equity (E) = (A+D)/2	0.00	4.80	10.35	86.85	170.10
Weighted average rate of interest on actual loan portfolio (F)	4.936%	4.868%	4.823%	4.701%	4.566%
Tax rate for the year (G)	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (H)	5.981%	5.899%	5.844%	5.696%	5.533%
<b>Return on Equity (I) = (E x H)</b>	<b>0.00</b>	<b>0.28</b>	<b>0.60</b>	<b>4.95</b>	<b>9.41</b>
<b>Total Return on Equity</b>	<b>6346.85</b>	<b>6354.54</b>	<b>6376.18</b>	<b>6399.09</b>	<b>6403.55</b>

### Interest on Loan

37. The Interest on loan as worked out and allowed in the table under para 139 of the impugned order dated 14.8.2022 is revised as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Gross opening loan (A)	74018.20	74126.90	74213.48	74650.35	75003.85
Cumulative repayment of loan upto previous year (B)	28020.39	33269.11	38525.73	43802.42	49107.13
Net Loan Opening (C)=(A)-(B)	45997.81	40857.79	35687.75	30847.93	25896.72
Repayment during the year (D)	5251.21	5258.14	5276.69	5304.71	5318.48
Cumulative repayment adjustment on a/c of de-capitalization (E)	2.49	1.51	0.00	0.00	0.00





	2019-20	2020-21	2021-22	2022-23	2023-24
Net Repayment (F)=(D)-(E)	5248.72	5256.62	5276.69	5304.71	5318.48
Addition due to additional capital expenditure (G)	108.70	86.58	436.87	353.50	35.00
Net Loan Closing (H)= (C+G-F)	40857.79	35687.75	30847.93	25896.72	20613.24
Average Loan(I)=(C+H)/2	43427.80	38272.77	33267.84	28372.32	23254.98
Weighted Average Rate of Interest of loan (J)	4.94%	4.87%	4.82%	4.70%	4.57%
<b>Interest on Loan (K=I*J)</b>	<b>2143.52</b>	<b>1863.29</b>	<b>1604.60</b>	<b>1333.74</b>	<b>1061.84</b>

### Depreciation

38. Depreciation worked out and allowed in the table under para 141 of the impugned order dated 14.8.2022 is rectified as under:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross block (A)	105740.28	105895.57	106019.25	106643.35	107148.35
Net Additional capital expenditure (B)	155.29	123.68	624.10	505.00	50.00
Closing gross block (C=A+B)	105895.57	106019.25	106643.35	107148.35	107198.35
Average gross block (D)=(A+C)/2	105817.92	105957.41	106331.30	106895.85	107173.35
Depreciable Value (E=D*90%)	95236.13	95361.67	95698.17	96206.26	96456.01
Remaining Depreciable Value at the beginning of the year (F=E-Cumulative Depreciation at 'L' at the end of previous year)	67215.74	62092.56	57172.44	52403.84	47348.89
Rate of Depreciation (G)	4.962%	4.962%	4.962%	4.962%	4.962%
Balance useful Life (H)	34.53	33.53	32.53	31.53	30.53
<b>Depreciation (I= D*G)</b>	<b>5251.21</b>	<b>5258.14</b>	<b>5276.69</b>	<b>5304.71</b>	<b>5318.48</b>
Cumulative Depreciation at the end of the year (J=I+ Cumulative Depreciation at 'L' at the end of previous year)	33271.60	38527.25	43802.42	49107.13	54425.61
Less: Depreciation adjustment on account of de-capitalization (K)	2.49	1.51	0.00	0.00	0.00
Cumulative Depreciation at the end of the year (L)	33269.11	38525.73	43802.42	49107.13	54425.61

\*Cumulative Depreciation as on 31.3.2019 is Rs. 28020.39 lakh

### Interest on Working Capital



### **Working capital for Receivables**

39. The Receivable component of working capital worked out and allowed on the basis of 45 days of fixed cost in the table under para 154 of the impugned order dated 14.8.2022 is rectified as under:

<i>(Rs. in lakh)</i>				
<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
2217.18	2210.94	2205.70	2204.43	2194.11

40. Accordingly, the Interest on working capital as worked out and allowed in the table under para 158 of the impugned order dated 14.8.2022 is revised as under:

<i>(Rs. in lakh)</i>					
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Working capital for O&M expenses (one month)	326.19	341.74	358.03	375.09	392.97
Working capital for Maintenance Spares	587.14	615.13	644.45	675.17	707.35
Working capital for Receivables	2217.18	2210.94	2205.70	2204.43	2194.11
<b>Total Working capital</b>	<b>3130.51</b>	<b>3167.80</b>	<b>3208.17</b>	<b>3254.69</b>	<b>3294.44</b>
Rate of interest (%)	12.05%	11.25%	10.50%	10.50%	10.50%
<b>Interest on Working capital for</b>	<b>377.23</b>	<b>356.38</b>	<b>336.86</b>	<b>341.74</b>	<b>345.92</b>

### **Annual Fixed Charges**

41. Based on the above, the annual fixed charges approved and summarized in the table under para 159 of the impugned order dated 14.8.2022 stands revised as under:

<i>(Rs. in lakh)</i>					
	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	5251.21	5258.14	5276.69	5304.71	5318.48
Interest on loan	2143.52	1863.29	1604.60	1333.74	1061.84
Return on Equity	6346.85	6354.54	6376.18	6399.09	6403.55
Interest on Working capital	377.23	356.38	336.86	341.74	345.92
O&M Expenses	3588.54	3759.60	3938.80	4126.55	4323.24
Security Expenses	325.71	341.24	357.52	374.57	392.44
<b>Total</b>	<b>18033.07</b>	<b>17933.19</b>	<b>17890.65</b>	<b>17880.40</b>	<b>17845.47</b>

\* Note: (1) All figures are on annualized basis. (2) All figures under each head have been rounded. The figure in total column in each year is also rounded. As such the sum of individual items may not be equal to the arithmetic total of the column.



42. Review Petition No. 43/RP/2022 (in Petition No. 282/GT/2020) is disposed of in terms of the above.

**Sd/-  
(Pravas Kumar Singh)  
Member**

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

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

