



2.12.3 Because of the efficient operations of the Project, AHPCL has been able to reduce auxiliary consumption lower than the norms provided for auxiliary consumption in terms of the UPERC Tariff Regulations 2014 as under:

Actual generation details during the period FY 2015-16 to FY 2018-19

<i>Particular</i>	2015-16	2016-17	2017-18	2018-19
Scheduled Generation (MU)	953.07	1274.89	1375.87	1370.7
Free Power (MU)	115.73	152.83	165.48	164.18
No. of Units Sold (MU)	837.34	1122.06	1210.39	1206.52
PAF Actual	44.79%	55.26%	55.36%	55.75%
Auxiliary Consumption Actual	0.9	0.86	0.79	0.97

3 Commission's analysis and decision:

The Petitioner in its reply dated 31.12.2021 has submitted that as per Regulation 6(5) of 2014 Tariff Regulations, the Commission shall carry out Truing-Up of Tariff on account of uncontrollable parameters which include Change in Law. The Petitioner, on 17.10.2022, has made submission further to the Commission's Order dated 02.08.2022 in Petition No. 1740/21 regarding Change in Law. UPPCL and Sh. Awasthi, the intervener has not responded to the Petitioner's submission within ten days as allowed by the Commission during the hearing on 18.10.2022. The Commission has considered the submissions on record as made by the parties and dealt with in the following paragraphs:

3.1 Capital Cost:

3.1.1 The Commission, after scrutinizing the supporting documents and Auditor Certificate submitted during the proceedings of Petition no. 1628 of 2020, had approved the capital cost of Rs. 3893.30 Crore and additional expenditure of Rs. 102.48 Crore vide Order dated 08.02.2021 and had upheld the same vide order dated 17.05.2021 in Review Petition No. 1694 of 2021.

3.1.2 **The Commission is of the view that the Project Cost considered by the Petitioner for the purpose of Truing-Up of Tariff for Control Period FY 2015-16 to FY 2018-19 is line with the project cost as approved by the Commission vide Order dated 08.02.2021 and 17.05.2021. The details are given below:**

Table 1: Capital Cost approved for the Control Period (Rs. Crore)



S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Opening Capital Cost	3893.90	3978.72	3989.25	3994.33
2	Add: Undischarged Liability being discharged during the Year	84.82	10.53	5.08	2.05
3	Closing Capital Cost	3978.72	3989.25	3994.33	3996.38
4	Average Capital Cost	3936.31	3983.99	3991.79	3995.35

3.2 Debt Equity Ratio:

3.2.1 The Petitioner for the purpose of Truing Up of Tariff for Control Period FY 2015-16 to FY 2018-19 has considered the Debt Equity Ratio as determined by the Commission vide order dated 08.02.2021 in bunch Petitions 1628 of 2020 and 1401 of 2019. The details of Debt Equity Ratio considered by the Petitioner is in line with order dated 08.02.2021 is as under:

Table 2: Debt Equity approved for the Control Period (Rs. Crore)

S. No.	Particulars	Percentage (%)
1	Debt	79.45
2	Equity	20.55
3	Total	100.00

3.2.2 Since the Debt Equity Ratio considered by the Petitioner is in line with the Debt Equity Ratio approved by the Commission vide order dated 08.02.2021. **Accordingly, the Commission approves the Debt Equity Ratio as claimed by the Petitioner for the purpose of Truing-Up of Tariff.**

3.3 Return on Equity

3.3.1 The Commission has already deliberated that the equity considered is 20.55%. Further, the Annual Fixed Charges shall be determined for the Generation station as a Project. **Accordingly, taking into consideration the equity @20.55% and RoE approved vide Order dated 08.02.2021 and 17.05.2021, the equity and RoE Trued-Up for the Control Period are as under:**

Table 3: Return on Equity approved for the Control Period (Rs. Crore)

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Opening Equity	800.11	817.54	819.70	820.74



S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
2	Add: Increase due to addition during the period	-	-	-	-
3	Less: Decrease due to de-capitalisation during the period	-	-	-	-
4	Less: Decrease due to reversal during the period	-	-	-	-
5	Add: Increase due to discharges during the period	17.43	2.16	1.04	0.42
6	Closing Equity	817.54	819.70	820.74	821.17
7	Average Equity	808.82	818.62	820.22	820.96
8	Rate of ROE	15.50%	15.50%	15.50%	15.50%
9	Return on Equity	97.62	126.89	127.13	127.25

3.4 Interest on Loan

3.4.1 The Commission has observed that while approving the Interest on Loan computations during the proceedings of Review Petition No. 1694 of 2021, the Petitioner has submitted relevant details regarding opening and closing loan balances along with actual interest details and rate of interest. The Petitioner has further confirmed that there has been neither refinancing nor hedging of loans.

3.4.2 in view of the Generation Tariff Regulations, 2014 and review Order dated 17.05.2021, the Commission is of the view that the Petitioner has correctly worked out the weighted average rate of interest considering the actual loan details. The interest rates considered and interest on loan Trued-Up for the Control Period is as under:

Table 4: Interest on Loan for FY 2015-16 to FY 2018-19 approved by the Commission (Rs. Crore)

S.No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Gross Normative loan – Opening	3093.79	3161.18	3169.55	3173.58
2	Cumulative repayment of Normative loan up to previous year	0.00	115.25	265.06	415.16
3	Net Normative loan – Opening	3093.79	3045.93	2904.49	2758.43
4	Add: Increase due to addition during the year / period	0.00	0.00	0.00	0.00
5	Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00
6	Add: Increase due to discharges during the year / period	67.39	8.36	4.04	1.63
7	Net addition during the period	67.39	8.36	4.04	1.63
8	Addition in Loan due to Net add cap				
9	Repayment of Loan	115.25	149.81	150.10	150.23
10	Net Normative loan - Closing	3045.93	2904.49	2908.23	2759.92
11	Average Normative loan	3069.86	2975.21	2981.26	2834.22
12	Weighted average rate of interest	10.4673%	12.5060%	12.5036%	12.5022%
13	Interest on Loan	250.22	372.08	372.77	354.34



3.5 Depreciation

3.5.1 The Commission vide order dated 08.02.2021 has approved the weighted average depreciation rate of 3.77%. **Accordingly, the depreciation for MYT control period FY 2015-16 to FY 2018-19 Trued-Up is as under:**

Table 5: Depreciation for FY 2015-16 to FY 2018-19 approved by the Commission (Rs. Crore)

S. No.	From	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
	To	31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Opening Capital Cost	3893.90	3978.72	3989.25	3994.33
2	Closing Capital Cost	3978.72	3989.25	3994.33	3996.38
3	Average Capital Cost	3936.31	3983.98	3991.79	3995.35
4	Freehold land	14.29	14.29	14.29	14.29
5	Depreciable value @ 90%	3529.82	3572.72	3579.75	3582.95
6	Rate of depreciation	3.7737%	3.7737%	3.7737%	3.7737%
7	Balance useful life at the beginning of the period	35.00	34.00	33.00	32.00
8	Balance depreciable value	3529.82	3457.47	3314.69	3167.80
9	Depreciation for the period	115.25	149.81	150.10	150.23
10	Depreciation annualised	148.01	149.81	150.10	150.23
11	Cumulative depreciation at the end of the period	115.25	265.06	415.16	565.39

3.6 Undischarged Liability

3.6.1 The Commission observes that the Petitioner has deducted the undischarged liabilities from the approved capital cost and have claimed the same as Additional Capital Expenditure in the year the liabilities are being discharged as considered by the Commission in its order dated 08.02.2021 and Review Petition Order dated 17.05.21.

3.6.2 The Commission approves the treatment of undischarged liabilities as additional capital exp., during the year of discharge, for Truing-up of Tariff for Control Period FY 2014-15 to FY 2018-19.

3.7 Operation and Maintenance Expenses (O&M Expenses)

3.7.1 The Commission observes that vide order dated 08.02.2021, the Commission has considered the 'original project cost' of Rs.3996.38 Crore as on 31.03.2019 while approving the O&M Expenses.

3.7.2 In terms of the UPERC Generation Tariff Regulation, 2014

"In case of the hydro generating stations declared under commercial operation on or after the date of commencement of these regulations, the base operation and maintenance expenses shall be fixed at 4.00% 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 years."



Further,

'Original Project Cost' means the capital expenditure incurred by the generating company within the original scope of the project up to the cut-off date as admitted by the Commission;

...

'Cut-off Date' means the date of first financial year closing after two years of the date of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation;

3.7.3 However, the O&M expenses should be worked out based on the project cost as on cut-off date of 31.03.2018, as Per UPERC Tariff Regulations, 2014, which is Rs. 3994.33 Crore. Accordingly, the O&M expenses trued-up for the Control Period are as under:

Table 6: Operation and Maintenance Expenses approved by the Commission (Rs. Crore)

O & M Expenses	21-Jun-15	1-Apr-16	1-Apr-17	1-Apr-18
	31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
Capital Cost up to Cut-off date (A)	3,994.33			
R&R Cost (B)	262.94			
A-B	3731.39			
Base Rate and Annual Escalation rate	2.50%	6.64%	6.64%	6.64%
1 st year O&M @2.50%	93.28			
Pro-rata for the year	72.64	99.48	106.08	113.13

3.8 Interest on Working Capital

3.8.1 In terms of Regulation 44(v) of the UPERC Regulations, read with the definition of Banking Rate, the rate on interest on working capital has been considered as 13.20%, (SBI Base Rate on COD 9.70% plus 350 basis points) as determined by the Commission vide order dated 08.02.2021. The working capital worked out for the period FY 2015-16 to FY 2018-19 for the purpose of Truing-Up has been considered as follows:

Table 7: Interest on Working Capital as approved by the Commission (Rs. Crore)

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	O & M Expenses	7.78	8.29	8.84	9.43
2	Maintenance Spares	13.99	14.92	15.91	16.97
3	Receivables	128.41	128.04	126.21	124.35
4	Total Working Capital	150.17	151.25	150.97	150.74
5	Rate of Interest	13.20%	13.20%	13.20%	13.20%
6	Interest on Working Capital	15.44	19.96	19.93	19.90



3.9 Annual Fixed charges (AFC)

3.9.1 The Petitioner has submitted the trued-up AFC for the 1st Control Period FY 2015-16 to FY 2018-19 as below:

Table 8: Annual Fixed Charges as submitted by the Petitioner (Rs. Crore)

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1.1	Depreciation	115.25	149.81	150.10	150.23
1.2	Interest on Loan	298.98	372.08	354.03	335.57
1.3	Return on Equity	97.62	126.89	127.13	127.25
1.4	Interest on Working Capital	15.44	19.97	19.93	19.90
1.5	O & M Expenses	72.68	99.53	106.14	113.19
	Total Annual Fixed Charges	599.97	768.27	757.34	746.15

3.9.2 Based on above discussion and approval of capital cost and various components, the trued-up AFC approved for the Control Period FY 2015-16 to FY 2018-19 has been tabulated below:

Table 9: Annual Fixed Charges as approved by the Commission for FY 2015-16 to FY 2018-19 (Rs. Crore)

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1.1	Depreciation	115.25	149.81	150.10	150.23
1.2	Interest on Loan	298.98	372.08	354.04	335.57
1.3	Return on Equity	97.62	126.89	127.13	127.25
1.4	Interest on Working Capital	15.44	19.96	19.93	19.90
1.5	O & M Expenses	72.68	99.48	106.08	113.13
	Total Annual Fixed Charges	599.93	768.21	757.28	746.08

3.10 NAPAF

3.10.1 As deliberated in order dated 08.02.2021 and 07.05.2021, the design energy for the Control period FY 2015-16 to FY 2018-19 had been considered as 1550 MU. Since NAPAF for run-of-river plants is to be determined plant wise based on the 10-day design energy data as per Regulation 36 of UPERC Generation Tariff Regulations 2014, proportionate flow based on CEA approved design energy of 1251.94 MUs had been considered for calculating NAPAF. **Accordingly, NAPAF for FY 2015-16 (285 days) as 56.63% and for FY 2016-17 to FY 2018-19 is 53.62% was approved.**

3.10.2 Subsequently, the Commission vide order dated 02.08.2022 in Petition No. 1740/2021 the Commission has held that Hon'ble NGT order dated 09.08.2017 and Hon'ble High Court Order dated 11.06.2018, each, is a change in law in terms of Regulation 35(8)(b) of UPERC Generation Tariff Regulations, 2014. **Accordingly, design energy of 1251.94 MU, as**



determined by CEA shall be applicable from the date of Hon'ble NGT order dated 09.08.2017 for the purpose of determination energy charges (ECR) and recovery of fixed charges, each, to the extent of 50% of the Annual fixed charges. Further, based on the design energy of 1251.94 MU, the NAPAF of 43.31%, as decided by the Commission vide order dated 08.05.2019 in Petition No. 1428/2019 shall be applicable.

3.10.3 The design energy of the Project, for FY 2015-16 and FY 2016-17 would remain unchanged as 1278.30 MU and 1550 MU respectively. For the FY 2018-19, the design energy would be 1251.94 MU.

3.10.4 The design energy for FY 2017-18 would be computed based on

- flows as considered by CEA in approved design energy of 1251.94 MUs, proportioned to 1550 Mu, till 10th August 2017 = 724.14 MU
- flows as considered by CEA in approved design energy of 1251.94 MU for the period 11th August 2017 to 31.03.2018 = 667.05 MU

Thus, the design energy for FY 2017-18 shall be 1391.19 MU.

3.10.5 Accordingly, the NAPAF for FY 2015-16 and 2016-17 shall be 56.63% and 53.62% respectively. The NAPAF for FY 2017-18 and 2018-19 shall be 48.12% and 43.31% respectively.

3.10.6 Summarizing the above, the scheduled energy, design energy, NAPAF and PAF achieved would be as follows:

Table 10: NAPAF

FY	2015-16	2016-17	2017-18	2018-19
Design (MU) Energy	1278.30	1550.0	1391.19	1251.94
Scheduled energy (MU)	953.07	1274.89	1375.87	1370.70
NAPAF	56.63%	53.62%	48.12%	43.31%
PAF achieved	44.79%	55.26%	55.36%	55.75%

Further, the Petitioner shall be entitled to proportionate fixed monthly charges based on NAPAF values as above and such fixed charges recovered cumulatively shall not exceed the 50% of the AFC as Trued-up in the instant Order at para 4.7. Also, the shortfall in energy shall be computed based on above values of design energy.



3.11 Energy Charge Rate (ECR)

3.11.1 Based on the AFC and Design Energy approved and taking into consideration the Auxiliary consumption @1% and 12% free power to be provided to the state of Uttarakhand, the trued-up energy charges are as under:

Table 11: Energy Charge Rate (ECR) as approved by the Commission for FY 2015-16 to FY 2018-19

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Annual Fixed Charges-Rs. / Crs	599.93	768.21	757.28	746.08
	AFC to be recovered (Rs. / Crs)-X	299.96	384.11	378.64	373.04
2	Design Energy (DE)-A	1278.30	1550	1391.19	1251.94
3	Aux Consumption -B	1%	1%	1%	1%
4	Free Power -C	12%	12%	12%	12%
	Net exportable Energy (MUs) D=A*(1-B) *(1-C)	1113.66	1350.36	1212.00	1090.69
5	Energy Charges (Rs/unit) = X*10 / D	2.694	2.844	3.124	3.420

3.12 Sharing of Financial Gains on account of Controllable Parameters

3.12.1 The Petitioner submitted the details of financial gains achieved on account of Controllable Parameters in terms of Regulation 6(6) of the UPERC Regulations, 2014, as under:

Table 12: Sharing of Financial Gains as submitted by the Petitioner for FY 2015-16 to FY 2018-19

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Aug-17	01-Sep-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-July-17	31-Aug-17	31-Mar-18	31-Mar-19
1	Scheduled Generation (MU)	953.07	1274.89	570.50	250.87	554.50	1370.70
2	ECR Approved (N)	2.694	2.844	2.804	3.300	3.472	2.763
3	Normative Aux	1%	1%	1%	1%	1%	1%
4	Actual Aux Consumption	0.90%	0.86%	0.79%	0.79%	0.79%	0.97%
5	ECR (A)	2.691	2.840	2.798	3.292	3.464	2.762
6	Differential (ECRN – ECRA)	0.003	0.004	0.006	0.008	0.008	0.001
7	GAIN (Rs. Crore)	0.251	0.449	0.302	0.177	0.389	0.121
8	AHPCL Share	0.201	0.359	0.242	0.141	0.311	0.097
9	UPPCL Share	0.05	0.09	0.06	0.035	0.078	0.024

3.12.2 The variation of scheduled/saleable energy is covered by Regulation 51(viii) and 51(ix) of the UPERC Generation Tariff Regulations 2014, in terms of recovery of shortfall in energy and secondary energy @90 paise per unit respectively. This variation is as under:



Table 13: Variation of scheduled/saleable energy for FY 2015-16 to FY 2018-19

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Total Generation	962.70	1287.77	1389.77	1384.55
2	Normative Aux	1%	1%	1%	1%
3	Scheduled Generation (MU)	953.07	1274.89	1375.87	1370.70
4	Free power	12%	12%	12%	12%
5	Saleable energy (MU) Actual	838.70	1121.90	1210.76	1206.22
6	Design Energy; DE (MU)	1278.30	1550.0	1391.19	1251.94
7	Saleable energy (MU) as per DE	1113.65	1350.36	1101.82	991.54
8	Comparison of (1) and (6)	Shortfall	Shortfall	Nil	
9	Comparison of (5) and (7) MU				214.68
10	Secondary energy @90 paise/kWh				214.68 MU

3.12.3 The shortfall in energy for 2015-16 and 16-17 has already been approved by the Commission vide order dated 20.07.2018 in Petition No. 1303/2018 There is no shortfall of energy in 2017-18 and there is excess energy of 214.68 MU to be paid at 90 paise per unit.

4 Summary of Tariff Design and Trued-up Tariff (in Rs. Crore) for MYT Period from FY 2014-15 to FY 2018-19 approved by the Commission.

4.1 Capital Cost approved-Rs./Crore

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Opening Capital Cost	3893.90	3978.72	3989.25	3994.33
2	Add: Addition during the period				
3	Less: Decapitalisation during the period				
4	Less: Reversal during the period				
5	Add: Discharges during the period	84.82	10.53	5.08	2.05
6	Closing Capital Cost	3978.72	3989.25	3994.33	3996.38

4.2 Return on Equity (RoE)- Rs./Crs

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Opening Equity	800.11	817.54	819.70	820.74
2	Add: Increase due to addition during the period	0	0	0	0
3	Less: Decrease due to de-capitalisation during the period	0	0	0	0
4	Less: Decrease due to reversal during the period	0	0	0	0
5	Add: Increase due to discharges during the period	17.43	2.16	1.04	0.42
6	Closing Equity	817.54	819.70	820.74	821.17



S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
7	Average Equity	808.82	818.62	820.22	820.96
8	Rate of ROE	15.50%	15.50%	15.50%	15.50%
9	Return on Equity	97.62	126.89	127.13	127.25

4.3 Interest on Loan (IOL) -Rs./Crs

S.No	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Gross Normative loan – Opening	3093.79	3161.18	3169.55	3173.58
2	Cumulative repayment of Normative loan up to previous year	0.00	115.25	265.06	415.16
3	Net Normative loan – Opening	3093.79	3045.93	2904.49	2758.43
4	Add: Increase due to addition during the year / period	0.00	0.00	0.00	0.00
5	Less: Decrease due to de-capitalisation during the year / period	0.00	0.00	0.00	0.00
6	Add: Increase due to discharges during the year / period	67.39	8.36	4.04	1.63
7	Net addition during the period	67.39	8.36	4.04	1.63
8	Addition in Loan due to Net add cap				
9	Repayment of Loan	115.25	149.81	150.10	150.23
10	Net Normative loan - Closing	3045.93	2904.49	2908.23	2759.92
11	Average Normative loan	3069.86	2975.21	2981.26	2834.22
12	Weighted average rate of interest	10.4673%	12.5060%	12.5036%	12.5022%
13	Interest on Loan	250.22	372.08	372.77	354.34

4.4 Depreciation-Rs./ Crs

S. No.	From To	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Opening Capital Cost	3893.90	3978.72	3989.25	3994.33
2	Closing Capital Cost	3978.72	3989.25	3994.33	3996.38
3	Average Capital Cost	3936.31	3983.98	3991.79	3995.35
4	Freehold land	14.29	14.29	14.29	14.29
5	Depreciable value @ 90%	3529.82	3572.72	3579.75	3582.95
6	Rate of depreciation	3.7737%	3.7737%	3.7737%	3.7737%
7	Balance useful life at the beginning of the period	35.00	34.00	33.00	32.00
8	Balance depreciable value	3529.82	3457.47	3314.69	3167.80
9	Depreciation for the period	115.25	149.81	150.10	150.23
10	Depreciation annualised	148.01	149.81	150.10	150.23
11	Cumulative depreciation at the end of the period	115.25	265.06	415.16	565.39



4.5 O&M Expenses-Rs./ Crs

O & M Expenses	21-Jun-15	1-Apr-16	1-Apr-17	1-Apr-18
	31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
*Capital Cost up to Cut off date (A)	3,994.33			
R&R Cost (B)	262.94			
Base O&M Rate (%)	2.50%			
Annual O&M Expenses for 1st year (A-B)* C	93.28			
Annual Escalation		6.64%	6.64%	6.64%
Pro-rata for the year	72.64	99.48	106.08	113.13

4.6 Interest on Working Capital (IoWC)-Rs./Crs

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	O & M Expenses	7.77	8.29	8.84	9.43
2	Maintenance Spares	13.99	14.92	15.91	16.97
3	Receivables	128.41	128.04	126.21	124.35
4	Total Working Capital	150.17	151.25	150.97	150.74
5	Rate of Interest	13.20%	13.20%	13.20%	13.20%
6	Interest on Working Capital	15.44	19.96	19.93	19.90

4.7 Annual Fixed charges (AFC) as Trued-up for FY 2015-16 to FY 2018-19 in Rs. Crs.

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1.1	Depreciation	115.25	149.81	150.10	150.23
1.2	Interest on Loan	298.98	372.08	354.04	335.57
1.3	Return on Equity	97.62	126.89	127.13	127.25
1.4	Interest on Working Capital	15.44	19.96	19.93	19.90
1.5	O & M Expenses	72.64	99.48	106.08	113.13
	Total Annual Fixed Charges	599.93	768.21	757.28	746.08
1.6	Design energy (MU)	1278.30	1550	1391.19	1251.94
1.7	Scheduled energy (MU)	953.07	1274.89	1375.87	1370.70
1.8	PAF %	44.79%	55.26%	55.36%	55.75%
1.9	NAPAF %	56.63%	53.62%	48.12%	43.31%
1.10	AFC to be recovered (Rs. / Crs)	237.25	384.11	378.64	373.04

4.8 Energy Charges rate (ECR) approved for FY 2015-16 to FY 2018-19:

S. No.	Particulars	21-Jun-15	01-Apr-16	01-Apr-17	01-Apr-18
		31-Mar-16	31-Mar-17	31-Mar-18	31-Mar-19
1	Annual Fixed Charges-Rs. /Crs	599.93	768.21	757.28	746.08
	AFC to be recovered (Rs. / Crs)-X	299.96	384.11	378.64	373.04
2	Design Energy (DE)-A	1278.30	1550	1391.19	1251.94
3	Aux Consumption -B	1%	1%	1%	1%
4	Free Power -C	12%	12%	12%	12%
	Net exportable Energy (MUs) D=A*(1-B) *(1-C)	1113.66	1350.36	1212.00	1090.69
5	Energy Charges (Rs/unit) = X*10 / D	2.694	2.844	3.124	3.420



4.9 Excess recovery, if any, made by the Petitioner, over the above values of AFC at 1.10 of Table 4.7 of the respective year shall be recoverable by UPPCL in six equal monthly instalments within three months of this order along with carrying cost in terms of UPERC Tariff Regulations, 2014.

4.10. The shortfall in energy for 2015-16 and 16-17 has already been approved by the Commission vide order dated 20.07.2018 in Petition No. 1303/2018 There is no shortfall of energy in 2017-18. The secondary energy of 214.68 Mu shall be payable @90 paise per unit for FY 2018-19. Therefore, shortfall in energy for FY 2017-18 and FY 2018-19 shall be adjusted accordingly.

4.11 The benefit of sale of CDM for an amount of Rs. 21.75 lakhs during the FY 2015-16 to FY 2018-19 shall be payable by the Petitioner to UPPCL in terms of Regulation 2(3) of Generation Tariff Regulations 2014.

The Petition No. 1752/2021 is disposed of accordingly.

**(Vinod Kumar Srivastava)
Member(Law)**

**(Raj Pratap Singh)
Chairman**

Place: Lucknow

Dated: 16.11.2022

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