

**IN THE JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION AT
RANCHI**

Case No. 13 of 2024

Jharkhand Urja Utpadan Nigam Limited (JUUNL) Petitioner

**CORAM: HON'BLE JUSTICE MR. AMITAV KUMAR GUPTA, CHAIRPERSON
HON'BLE MR. MAHENDRA PRASAD, MEMBER (LAW)
HON'BLE MR. ATUL KUMAR, MEMBER (TECH)**

For the Petitioner : Mr.Rakesh Raushan(Executive Director)&Mr.K.R.Sinha,(G.M.
Technical)-JUUNL

Date – 30th May, 2024

1. The Petitioner-Jharkhand Urja Utpadan Nigam Limited (hereinafter referred to as 'JUUNL' or 'Petitioner') has filed the petition under section 94 of the Electricity Act 2003 read with clause A41 of JSERC (Conduct of Business)Regulation, 2016, for review of order dated February 26, 2024 for True-Up for FY 2016-17 to FY 2020-21, Business Plan, MYT& Tariff for FY 2021-22 to FY 2025-26.
2. Considering the submissions of the Petitioner and on the basis of the material available on record, the issues as raised by the Petitioner are being discussed and dealt with separately as hereunder.

A. Disallowance of A&G expenses (True Up of FY 2016-17 to FY 2020-21)

Submission of the Petitioner

3. The petitioner has submitted that it has claimed O&M expenses based on audited annual accounts as stated in para 2.9 of the main petition. Furthermore, it was appraised that the Hon'ble Commission in its previous tariff orders for true-up of 2013-14, 2014-15 and 2015-16 dated September 25, 2018 had allowed O&M expenses based on actuals.
4. The petitioner has referred to clause 6.11, 6.12 and 6.14(a) of JSERC Generation Tariff Regulations, 2015 and submitted that it has incurred Bank Charges, TDS on Flexi, Interest on Government Loan, Penal Interest as per actuals.
5. It was highlighted that yearly bank charges incurred by petitioner pertains to Bank Guarantee Modification Charge and subsequent extension of existing Bank Guarantee of respective financial years of FY 2017- FY 2021 as annexed in Annexure A of review petition.
6. The Petitioner has also stated that it has received Rs. 50 Cr loan from State Government of Jharkhand for Banhardih Coal Block. The interest rate for the loan incurred was 13%. The yearly interest of Rs.6.50 Cr for FY 2018-19, FY 2019-20 respectively is on account of interest charges @ 13% paid against Rs. 50 Cr loan received from Government of Jharkhand. Further, Patratu Energy Limited (PEL) (100% subsidiary of JUUNL) has received a loan amount of Rs. 19.845 Cr as SPV for construction of new plant, the liability of which was later transferred to the petitioner via book transfer in April 2020. Thus, for FY 2020-21 interest charges of Rs.9.08 Cr is on account of interest charges @ 13% paid against Rs. 69.845 Cr loan (Rs. 50 Cr+ Rs. 19.845 Cr). The details of Loan amount received, and its calculation as annexed in Annexure B of review

petition.

7. It was pointed out that the Hon'ble Commissions in its order has not allowed Bank Charges, TDS on Flexi, Interest on Government Loan, Penal Interest as reproduced below:

“The Hon'ble Commission, after scrutinizing the information's submitted by the Petitioner, found that the Petitioner has claimed employee expense, repair & maintenance expense and administrative and general expense as per the audited accounts for FY 2016-17 to FY 2020-21.

The Commission has reviewed the A&G expense in particular and has found that the Petitioner has considered bank charges, interest on govt. loan and penal interest on loan for the period in A&G expense as highlighted in the table below:

Table 30 Particulars in A&G expense (Rs. Cr) for the period FY 2016-17 to FY 2020-21

A&G Expenses	FY 17	FY 18	FY 19	FY 20	FY 21
Bank Charges	2.25	1.54	1.54	0.00	-
TDS on flexi	-	-	0.47	-	-
Int on Govt loan	-	-	6.50	6.50	9.08
Penal Interest	-	-	-	-	0.96
Total	2.25	1.54	8.51	6.50	10.04

Further, the Commission has mentioned that the Petitioner, in the instant tariff petition, has submitted that it has no outstanding loan for the period FY 2016-17 to FY 2020-21 and has claimed normative loan in lieu of actual loan, hence claiming the above particulars highlighted in the table is not justified. Hence the Commission under A& G expense has disallowed Rs. 28.85 Cr.”

8. Furthermore, the petitioner has prayed to the Hon'ble Commission that since normative loan allowed by Commission is based on norms and is prospective in nature, the Hon'ble Commission may disallow interest on normative loan amounting to Rs. 12.67 Cr and allow the actual expenses incurred of Rs. 28.85 Cr as per annual audited accounts under interest and finance charges.
9. The petitioner has stated that it is operating under immense financial distress and disallowance of Rs. 28.85 Cr will add further financial burden of Rs. 16.18 Cr (28.85 Cr-12.67 Cr) which will hamper operational activities of the petitioner to a great extent. In lieu of the above, the petitioner has requested the Hon'ble Commission to allow actual expenses incurred of Rs. 28.85 Cr as per annual audited accounts under interest and finance charges.
10. Based on above submission, the petitioner has submitted the revised Annual Fixed Cost for the FY 2016-17 to FY 2020-21 as tabulated hereunder:

Table 1 Revised AFC(Rs.Cr) submitted by the Petitioner for FY 2016-17 to FY 2020-21

Particulars	FY 2016-17		FY 2017-18		FY 2018-19		FY 2019-20		FY 2020-21	
	Order	Revised	Order	Revised	Order	Revised	Order	Revised	Order	Revised

Particulars	FY 2016-17		FY 2017-18		FY 2018-19		FY 2019-20		FY 2020-21	
	Order	Revised	Order	Revised	Order	Revised	Order	Revised	Order	Revised
Employee expense	8.63	8.63	14.28	14.28	15.27	15.27	13.31	13.31	13.22	13.22
R&M expense	1.68	1.67	2.66	2.66	2.47	2.47	1.96	1.96	1.87	1.87
A&G expense	2.11	2.11	8.74	8.74	1.88	1.89	1.75	1.75	1.87	1.87
*Other Misc expenses	0.08	0.08	0.08	0.08	0.45	0.45	0.09	0.09	0.09	0.09
O&M Expenses	12.50	12.50	25.76	25.78	20.07	20.08	17.11	17.12	17.05	17.05
Depreciation	1.63	1.63	1.44	1.44	1.07	1.07	0.85	0.85	0.06	0.06
Interest & Finance Charges	2.90	2.25	2.68	1.54	2.46	8.51	2.44	6.50	2.19	10.04
Interest on loans	2.90	-	2.68	-	2.46	6.50	2.44	6.50	2.19	10.04
Bank Charges	-	2.25	-	1.54	-	1.54	-	-	-	-
TDS on Flexi	-	-	-	-	-	0.47	-	-	-	-
Interest on working capital (IoWC)	2.13	2.13	2.14	2.14	2.14	2.14	2.15	2.15	2.15	2.15
Return on Equity (RoE)	0.76	0.74	1.32	1.30	1.01	1.14	0.86	0.95	0.80	0.96
(Less) Non-Tariff Income (NTI)	1.98	1.98	6.57	6.57	5.13	5.13	6.14	6.14	4.86	4.86
Annual Fixed Charges (AFC)	17.94	17.28	26.77	25.63	21.62	27.81	17.27	21.42	17.39	25.40

Commission's Observation and Finding

11. Ongoing through the impugned order, it is evident that the said issue has been deliberated and discussed in Commission's order dated February 26th, 2024 in para 5.57 to 5.59 which reads as under:

"5.57 The Commission has reviewed the A&G expense in particular and has found that the Petitioner has considered bank charges, interest on govt loan and penal interest on loan for the period in A&G expense as highlighted in the table below:

Table 30 Particulars in A&G expense (Rs.Cr) for the period FY 2016-17 to FY 2020-21

A&G Expenses	FY 17	FY 18	FY 19	FY 20	FY 21
Bank Charges	2.25	1.54	1.54	0.00	-
TDS on flexi	-	-	0.47	-	-
Int on Govt. loan	-	-	6.50	6.50	9.08
Penal Interest	-	-	-	-	0.96
Total	2.25	1.54	8.51	6.50	10.04

5.58 The Petitioner, in the instant tariff petition, has submitted that it has no outstanding loan for the period FY 2016-17 to FY 2020-21 and has claimed normative loan in lieu of actual loan, hence claiming the above particulars highlighted in the table is not justified.

5.59 The Commission has also referred to JSERC Generation Tariff Regulations 2015 and has found no provision for claiming such expense under A&G accounts. Hence the Commission does not find any rationale in considering the above expense under A&G heads and thus disapproves the amount as mentioned in the above table no 30.”

12. The Commission has taken note of the submission made by the petitioner in the review petition concerning the interest on government loan, mentioned under A&G expense, as referred in table 30 above. In the review petition the Petitioner has highlighted the fact that the said interest pertains to loans obtained from the Government of Jharkhand for Banhardih coal block and Patratu Energy Limited (PEL) for new projects initiated by the Petitioner aimed at establishing a power plant. However, due to unforeseen circumstances, these projects were not executed, resulting in the transfer of liabilities to the Petitioner via the books of accounts by Government of Jharkhand. Consequently, the Petitioner incurred the obligation of paying interest on the government loan. In this context the Commission is of the view that since the expense pertains to a different project hence the cost of such expense should not be factored in the ARR of SRHP as it would impose an undue burden on the beneficiaries of the SRHP project. The Commission is of the view that such expense should be dealt with under a separate book of accounts.
13. The Commission has assessed the prayer submitted by the petitioner, requesting the consideration of actual loan in lieu of normative loan as per the impugned order dated February 26, 2024. Upon careful examination, the Commission notes that the petitioner's original submission was based on normative loan calculations. The petitioner's subsequent request in the review petition to alter the methodology and advocate for consideration of actual loan lacks justification in the Commission's view. It is imperative to uphold consistency and integrity in the legal process, and permitting such alterations at this juncture could undermine the fairness and reliability of the proceedings.
14. However, the Commission after giving due diligence, has considered the bank charges pertaining to FY-17, FY-18 & FY-19 as summarized in the table below. Furthermore, the Commission has not considered bank charges in the projection of the third MYT control period i.e. FY 2021-22 to FY 2025-26. The Commission shall consider the bank charges as per actuals supported by proper audited documents during true up exercise for the relevant year of the third control period.

Table 2: Bank Charges(Rs.Cr) approved by the Commission for FY17-FY 19

Particulars	FY 17	FY 18	FY 19
Bank Charges	2.25	1.54	1.54
Total	2.25	1.54	1.54

15. The revised Annual fixed cost (Rs.Cr) for FY 2016-17 to FY 2020-21 is now approved and summarized as below:

Table 3 Revised Annual Fixed Charges(Rs.Cr) as approved by the Commission for FY 17 to FY 21

Particulars	FY17	FY18	FY19	FY20	FY21
	Approved	Approved	Approved	Approved	Approved
Employee Expense including Terminal Liability	8.63	14.28	15.27	13.31	13.22
A&G Exp	4.37	10.28	3.42	1.75	1.87

Particulars	FY17	FY18	FY19	FY20	FY21
	Approved	Approved	Approved	Approved	Approved
R&M Exp	1.68	2.66	2.47	1.96	1.86
Other Exp(Water Charges)	0.08	0.08	0.45	0.09	0.09
O&M Expense	14.76	27.32	21.62	17.12	17.05
Depreciation	1.63	1.44	1.07	0.85	0.06
Interest on loans	2.90	2.68	2.46	2.44	2.19
Bank Charges	2.25	1.54	1.54	0.00	0.00
Return on Equity	2.13	2.14	2.14	2.15	2.15
Interest on working capital	0.87	1.40	1.09	0.86	0.80
Total Fixed Cost	22.22	34.93	28.33	23.41	22.25
Non-Tariff Income	1.98	6.57	5.13	6.14	4.86
Annual Fixed Charge	20.24	28.37	23.20	17.27	17.39

16. Taking into consideration of aforesaid observation **Issue No-A**, as raised by the petitioner is partially allowed (only bank charges). However, the remaining aspects is sans merit and it refers no interference on review, accordingly the prayer for review of the issue is hereby rejected.

B. Consideration of NAPAF during calculation of Capacity Charges for FY 2016-17 to FY 2020-21

Submission of the Petitioner

17. The petitioner has stated in para 2.45 of the petition, that it has followed the methodology adopted by the Hon'ble Commission as per review order Case No. 24 of 2018 dated 8th March 2019 for computing energy charge rate and subsequent energy charges.

18. It was referred to clause 9.9 to 9.16 of the JSERC Generation Tariff Regulations 2015 which provides the methodology for computation and payment of capacity and energy charges for hydro generating station.

19. To determine the capacity charges, the petitioner has adopted the following methodology:

“9.9 The Annual fixed cost of a Hydro generating station shall be computed, based on norms specified under these Regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and Energy Charge, which shall be payable by the Beneficiaries in proportion to their respective allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State:

Provided that during the period between the Date of Commercial Operation of the first unit of the generating station and the Date of Commercial Operation of the generating station, the annual fixed cost shall provisionally be worked out based on the latest estimate of the completion cost for the generating station, for the purpose of determining the Capacity Charge and Energy Charge payable during such period.

“9.10 The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be

$$= AFC \times 0.5 \times NDM / NDY \times (PAFM / NAPAF) \text{ (in Rupees)}$$

Where,

AFC - Annual Fixed Cost specified for the Year, in Rupees;

NAPAF - Normative Plant Availability Factor in percentage;

NDM - Number of Days in the month;

NDY - Number of Days in the Year;

PAFM - Plant Availability Factor achieved during the month, in Percentage.

9.11 The PAFM shall be computed in accordance with the following formula:

$$PAFM = 10000 \times \frac{\sum_{i=1}^N DNC_i}{\{N \times IC \times (100 - AUX)\}} \%$$

Where,

AUX - Normative auxiliary energy consumption in percentage;

*DC_i - Declared Capacity (in ex-bus MW) for the *i*th Day of the month which the station can deliver for at least three (3) hours, as certified by the nodal load dispatch*

centre after the Day is over;

IC - Installed Capacity (in MW) of the complete generating station;

N - Number of Days in the month

9.12 The energy charge shall be payable by every Beneficiary for the total energy scheduled to be supplied to the Beneficiary, excluding free energy, if any, during the calendar month, on ex power plant basis, at the computed energy charge rate. Total Energy Charge payable to the Generating Company for a month shall be :

$$= (\text{Energy Charge Rate in Rs. / kWh}) \times \{\text{Scheduled Energy (ex-bus) for the month in kWh}\} \times (100 - FEHS) / 100.$$

9.13 Energy Charge Rate (ECR) in Rupees per kWh on ex-power plant basis, for a hydro generating station, shall be determined up to three decimal places based on the following formula, subject to the clause 9.15 of these Regulations:

$$ECR = AFC \times 0.5 \times 10 / \{DE \times (100 - AUX) \times (100 - FEHS)\}$$

Where,

DE - Annual Design Energy specified for the Hydro generating station, in MWh, subject to the provision in clause 9.14 of these Regulations;

FEHS - Free Energy for home State, in per cent, as defined in clause 10.5 of these Regulation;

9.14 In case actual total energy generated by a hydro generating station during a Year is less than the Design Energy for reasons beyond the control of the Generating Company, the following treatment shall be applied on a rolling basis;

(i) in case the energy shortfall occurs within 10 years from the Date of Commercial Operation of a generating station, the ECR for the Year following the Year of energy shortfall shall be computed based on the formula specified in clause 9.13 of these Regulations with the modification that the DE for the Year shall be considered as equal to the actual energy generated during the Year of the shortfall, till the energy charge shortfall of the previous Year has been made up, after which normal ECR shall be applicable;

(ii) in case the energy shortfall occurs after ten years from the Date of Commercial Operation of a generating station, the following shall apply. Suppose the specified annual Design Energy for the station is DE MWh, and the actual energy generated during the concerned (first) and the following (second) financial year is A1 and A2 MWh respectively, A1 being less than DE. Then, the Design Energy to be considered in the formula as specified in clause of these Regulation for calculating the ECR for the third financial year shall be moderated as (A1 + A2 - DE) MWh, subject to a maximum of DE MWh and a minimum of A1 MWh;

(iii) Actual energy generated (e.g. A1, A2) shall be arrived at by multiplying the netmetered energy sent out from the station by 100 / (100 - AUX).

9.15 In case the Energy Charge Rate (ECR) for a Hydro generating station, as computed in clause 9.13 of these Regulations, exceeds eighty paise per kWh, and the actual saleable energy in a Year exceeds {DE x (100 - AUX) x (100 -

FEHS) / 10000} MWh, the Energy charge for the energy in excess of the above shall be billed at eighty paise per kWh only.

Provided that in a Year following a Year in which total energy generated was less than the Design Energy for reasons beyond the control of the Generating Company, the Energy Charge Rate shall be reduced to eighty paise per kWh after the energy charge shortfall of the previous Year has been made up.

20. Accordingly, the petitioner calculated the energy charge rate and arrived at the Energy Charges as summarized in the tables below:

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
Design Energy (DE)	-	-	159.43	159.43	159.43	159.43	159.43
Total Gross Generation	33.71	51.29	30.12	190.28	102.49	36.12	49.98
A1	-	-	33.71	51.29	30.12	190.28	102.49
A2	-	-	51.29	30.12	190.28	102.49	36.12
Formula (A1+A2-DE)	-	-	(74.43)	159.43	60.97	133.34	(20.82)
Moderated DE (subject to minimum of A1 and maximum of DE)	-	-	33.71	159.43	60.97	159.43	102.49

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
Annual Fixed Charges Rs.Cr	21.21	29.32	31.51	24.93	28.93
NAPAF in %	50%	50%	50%	50%	50%
PAFM in %	18%	80%	83%	47%	49%
Capacity Charges Rs. Cr	3.75	23.56	26.27	11.81	14.30
DE to be considered after moderation in MUs	33.71	159.43	60.97	159.43	102.49
Normative Aux Consumption in %	0.70%	0.70%	0.70%	0.70%	0.70%
Net Generation in MUs	33.47	158.31	60.55	158.31	101.77
Energy Charge Rate (ECR) in Rs./KWh	3.169	0.926	2.603	0.787	1.421

SNo.	Particulars	UoM	FY 17	FY 18	FY 19	FY 20	FY 21
A	ECR for Shortfall MUs	Rs./Kwh	3.169	0.926	2.603	0.787	1.421
B	ECR for MUs after Shortfall	Rs./Kwh	0.800	0.800	0.800	0.787	0.800
C	Design Energy (DE)	MUs	159.43	159.43	159.43	159.43	159.43
D	Aux Consumption	%	0.70%	0.70%	0.70%	0.70%	0.70%
E	(DE x(100-Aux) x (100-FEHS) / 1000) Condition 1 [C*(1-D)]	MUs	158.31	158.31	158.31	158.31	158.31
F	Schedule Energy Ex-bus for the year	MUs	29.88	190.04	102.30	35.96	49.84
G	Excess Energy [F-E]	MUs	NA	31.73	NA	NA	NA
H	Remaining Energy	MUs	-	158.31	-	-	-
I	Energy Charge for Excess energy [(G*B)/ 10]	Rs.Cr	-	2.54	-	-	-
J	Energy Charge for Remaining energy [(H*A)/ 10]	Rs.Cr	-	14.66	-	-	-
K	Moderated DE (subject to minimum of A1 and maximum of DE)	MUs	33.71	159.43	60.97	159.43	102.49
L	Shortfall MUs [C-K]	MUs	125.72	-	98.46	-	56.94
M	Energy Charge for shortfall units [(L*A)/ 10]	Rs. Cr	39.84	-	25.62	-	8.09
N	Scheduled energy after adjusting for shortfall [(F-L)]	MUs	NA	NA	3.84	35.96	NA
O	Energy Charge for scheduled energy after adjusting for shortfall [(N*B)/ 10]	Rs. Cr	-	-	0.31	2.83	-
P	Total Energy Charge [I+J+M+O]	Rs. Cr	39.84	17.20	25.93	2.83	8.09

21. The Petitioner has stated that the Hon'ble Commission, while determining the capacity charge has adopted the methodology mentioned in the regulation as

cited in the above para. The Commission has also referred to MYT order dated 25.09.2018 wherein the Commission has specifically highlighted that the Petitioner would be entitled for incentive only when the PAFM is more than 75%. Thus the Commission has considered the PAFM of 75% while computing and approving the capacity charges (inclusive of incentive) as per clause 9.10 of the JSERC Generation Tariff Regulations, 2015. The Capacity charges as approved by the Commission for the plant for FY 2016-17 to FY 2020-21 is given in the table below:

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
Annual Fixed Charges Rs.Cr	17.94	26.79	21.62	17.27	17.39
NAPAF(as approved)	50%	50%	50%	50%	50%
NAPAFM(computing capacity charges inclusive of incentive)	75%	75%	75%	75%	75%
Capacity Charges Rs. Cr	2.13	14.37	12.01	5.46	5.73

22. The Petitioner has stated that it would like to appraise the Hon'ble Commission that the tariff order dated 25.09.2018 as stated below:

“6.30 In view of the circumstances highlighted above, the Commission hereby approves the normative availability at 50% for the MYT control period.

6.31 The Commission has approved a relaxed availability considering the issues highlighted. It may also happen that due to good rainfall and higher water availability in reservoir, the Petitioner may be available for more than 75%. Hence the Commission would like to highlight that the Petitioner would be eligible for incentive in the MYT control period only when the PAFM goes above 75%.”

23. Thus, the petitioner is of the view-point that when water availability is high, and the actual plant availability is more than 50%, at that point of time for calculation of capacity charge NAPAF may be considered as 75% and for the years where due to shortage of water actual plant availability of the plant is less than 50% at that point of time for calculation of capacity charge NAPAF should be considered as 50% as approved by the Hon'ble Commission in its order dated 25.09.2018.

24. Accordingly, the petitioner humbly prayed to the Hon'ble Commission to consider NAPAF of 75% for FY 18 & FY 19 where the actual PAF of the plant was 80% and 83% respectively and consider NAPAF of 50% for FY 17, FY 20 & FY 21 where the actual PAF of the plant was 18%, 47% and 49% respectively for computation of capacity charges.

25. The petitioner, in view of the above mentioned facts, has submitted the revised capacity charge and energy charge calculation as follows:

Table 4: Capacity Charges Calculation (in Rs.Cr)

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
Annual Fixed Charges Rs.Cr	17.28	25.63	27.81	21.42	25.40
NAPAF(as approved)	50%	50%	50%	50%	50%
NAPAFM(computing capacity charges inclusive of incentive)	50%	75%	75%	50%	50%
Actual Plant Availability Factor	18%	80%	83%	47%	49%
Capacity Charges Rs. Cr	3.08	13.74	15.45	10.19	12.55

Month	PAFM	NAPF	NDM	NDY	50% of AFC	CC
01-04-2016	30%	50%	30	365	8.64	0.43
01-05-2016	0%	50%	31	365	8.64	-
01-06-2016	0%	50%	30	365	8.64	-
01-07-2016	50%	50%	31	365	8.64	0.73
01-08-2016	47%	50%	31	365	8.64	0.69

Month	PAFM	NAPF	NDM	NDY	50% of AFC	CC
01-09-2016	50%	50%	30	365	8.64	0.71
01-10-2016	35%	50%	31	365	8.64	0.52
01-11-2016	0%	50%	30	365	8.64	-
01-12-2016	0%	50%	31	365	8.64	-
01-01-2017	0%	50%	31	365	8.64	-
01-02-2017	0%	50%	28	365	8.64	-
01-03-2017	0%	50%	31	365	8.64	-
						3.08

Month	PAFM	NAPF	NDM	NDY	50% of AFC	CC
01-04-2017	15%	75%	30	365	12.81	0.21
01-05-2017	50%	75%	31	365	12.81	0.73
01-06-2017	30%	75%	30	365	12.81	0.42
01-07-2017	73%	75%	31	365	12.81	1.06
01-08-2017	100%	75%	31	365	12.81	1.45
01-09-2017	97%	75%	30	365	12.81	1.36
01-10-2017	100%	75%	31	365	12.81	1.45
01-11-2017	100%	75%	30	365	12.81	1.40
01-12-2017	100%	75%	31	365	12.81	1.45
01-01-2018	100%	75%	31	365	12.81	1.45
01-02-2018	100%	75%	28	365	12.81	1.31
01-03-2018	100%	75%	31	365	12.81	1.45
						13.74

Month	PAFM	NAPF	NDM	NDY	50% of AFC	CC
01-04-2018	100%	75%	30	365	13.91	1.52
01-05-2018	8%	75%	31	365	13.91	0.13
01-06-2018	7%	75%	30	365	13.91	0.10
01-07-2018	85%	75%	31	365	13.91	1.35
01-08-2018	100%	75%	31	365	13.91	1.57
01-09-2018	100%	75%	30	365	13.91	1.52
01-10-2018	100%	75%	31	365	13.91	1.57
01-11-2018	100%	75%	30	365	13.91	1.52
01-12-2018	100%	75%	31	365	13.91	1.57
01-01-2019	100%	75%	31	365	13.91	1.57
01-02-2019	100%	75%	28	365	13.91	1.42
01-03-2019	100%	75%	31	365	13.91	1.57
						15.45

Month	PAFM	NAPF	NDM	NDY	50% of AFC	CC
01-04-2019	100%	50%	30	365	10.71	1.76
01-05-2019	74%	50%	31	365	10.71	1.35
01-06-2019	0%	50%	30	365	10.71	-
01-07-2019	50%	50%	31	365	10.71	0.91
01-08-2019	50%	50%	31	365	10.71	0.91
01-09-2019	50%	50%	30	365	10.71	0.88
01-10-2019	50%	50%	31	365	10.71	0.91
01-11-2019	1%	50%	30	365	10.71	0.02
01-12-2019	43%	50%	31	365	10.71	0.78
01-01-2020	50%	50%	31	365	10.71	0.91
01-02-2020	50%	50%	29	365	10.71	0.85
01-03-2020	50%	50%	31	365	10.71	0.91
						10.19

Month	PAFM	NAPF	NDM	NDY	50% of AFC	CC
01-04-2020	50%	50%	30	365	12.70	1.04
01-05-2020	50%	50%	31	365	12.70	1.08
01-06-2020	50%	50%	30	365	12.70	1.04
01-07-2020	46%	50%	31	365	12.70	1.00
01-08-2020	49%	50%	31	365	12.70	1.05
01-09-2020	48%	50%	30	365	12.70	1.00
01-10-2020	50%	50%	31	365	12.70	1.08

Month	PAFM	NAPF	NDM	NDY	50% of AFC	CC
01-11-2020	50%	50%	30	365	12.70	1.04
01-12-2020	50%	50%	31	365	12.70	1.08
01-01-2021	50%	50%	31	365	12.70	1.08
01-02-2021	50%	50%	28	365	12.70	0.97
01-03-2021	50%	50%	31	365	12.70	1.08
						12.55

Table 5: Moderated Design Energy (DE) in MUs

Particulars	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	FY 21
Design Energy (DE)	-	-	159.43	159.43	159.43	159.43	159.43
Total Gross Generation	33.71	51.29	30.12	190.28	102.49	36.12	49.98
A1	-	-	33.71	51.29	30.12	190.28	102.49
A2	-	-	51.29	30.12	190.28	102.49	36.12
Formula (A1+A2-DE)	-	-	(74.43)	159.43	60.97	133.34	(20.82)
Moderated DE (subject to minimum of A1 and maximum of DE)	-	-	33.71	159.43	60.97	133.34	102.49

Table 6: Energy Charge Rate (ECR) in Rs./Kwh

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
DE to be considered after moderation in MUs	33.71	159.43	60.97	133.34	102.49
Normative Aux Consumption in %	0.70%	0.70%	0.70%	0.70%	0.70%
Net Generation in MUs	33.47	158.31	60.55	132.41	101.77
Energy Charge Rate (ECR) in Rs./KWh	2.580	0.809	2.297	0.809	1.248

Table 7: Total Energy Charge in Rs. Cr

SL.No.	Particulars	UoM	FY 17	FY 18	FY 19	FY 20	FY 21
A	ECR for Shortfall MUs	Rs./Kwh	2.580	0.809	2.297	0.809	1.248
B	ECR for MUs after Shortfall	Rs./Kwh	0.800	0.800	0.800	0.800	0.800
C	Design Energy (DE)	MUs	159.43	159.43	159.43	159.43	159.43
D	Aux Consumption	%	0.70%	0.70%	0.70%	0.70%	0.70%
E	$(DE \times (100 - Aux) \times (100 - FEHS) / 1000)$ Condition 1 $[C \times (1 - D)]$	MUs	158.31	158.31	158.31	158.31	158.31
F	Schedule Energy Ex-bus for the year	MUs	29.88	190.04	102.30	35.96	49.84
G	Excess Energy $[F - E]$	MUs	-	31.73	-	-	-
H	Remaining Energy	MUs	-	158.31	-	-	-
I	Energy Charge for Excess energy $[(G \times B) / 10]$	Rs.Cr	-	2.54	-	-	-
J	Energy Charge for Remaining energy $[(H \times A) / 10]$	Rs.Cr	-	12.81	-	-	-
K	Moderated DE (subject to minimum of A1 and maximum of DE)	MUs	33.71	159.43	60.97	133.34	102.49
L	Shortfall MUs $[C - K]$	MUs	125.72	-	98.46	26.09	56.94
M	Energy Charge for shortfall units $[(L \times A) / 10]$	Rs. Cr	32.44	-	22.61	2.11	7.10
N	Scheduled energy after adjusting for shortfall $[(F - L)]$	MUs	-	-	3.84	9.87	-
O	Energy Charge for scheduled energy after adjusting for shortfall $[(N \times B) / 10]$	Rs. Cr	-	-	0.31	0.79	-
P	Total Energy Charge $[I + J + M + O]$	Rs. Cr	32.44	15.35	22.92	2.90	7.10

26. The Petitioner, in accordance with the above-mentioned revised capacity and energy charges, has computed the overall ARR for the respective financial years, as summarized in the table below:

Table 8: ARR for the True-up Period in Rs. Cr

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
Energy Charge in Rs.Cr	32.44	15.35	22.92	2.90	7.10

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
Capacity Charge in Rs. Cr	3.08	13.74	15.45	10.19	12.55
Annual Revenue Requirement (ARR) in Rs. Cr	35.52	29.09	38.37	13.09	19.65

27. Accordingly, the Petitioner has calculated the cumulative revenue surplus/gap as per the JSERC Generation Tariff Regulations, 2015 the clause 6.16, 6.17 and 6.18.

“Adjustment of Excess/Deficit Amount

6.16 Where after the truing up, the tariff recovered exceeds the tariff approved by the Commission under these regulations, the generating company shall refund to the beneficiaries as the case may be, the excess amount so recovered shall be as specified in the Clause 6.18 of this regulation.”

6.17 Where after the truing up, the tariff recovered is less than the tariff approved by the Commission under these regulations; the generating company licensee shall recover from the beneficiaries the under-recovered amount shall be as specified in the Clause 6.18 of this regulation.

6.18 The amount under-recovered or over-recovered, along with simple interest at the rate equal to the bank rate as on 1st April of the respective year, shall be recovered or refunded by the generating company in six equal monthly instalments starting within three months from the date of the tariff order issued by the Commission.

28. In line with the above provisions the petitioner has re-calculated the Gap/(Surplus) as summarized in the table below:

Table 9: Revenue Gap/(Surplus) of SHPS in Rs Cr inclusive of carrying cost

Particulars	UoM	FY 17	FY 18	FY 19	FY 20	FY 21
Annual Revenue Requirement (ARR)	Rs. Cr.	35.52	29.09	38.37	13.09	19.65
Total amount billed by JUUNL	Rs. Cr.	12.44	29.74	24.30	17.44	19.45
Opening Gap/ (Surplus)	Rs. Cr.	(8.93)	14.48	15.62	32.45	31.90
Gap/(Surplus) for the Year	Rs. Cr.	23.08	(0.65)	14.06	(4.35)	0.21
Closing Gap/ (Surplus)	Rs. Cr.	14.15	13.84	29.68	28.10	32.10
Rate of Interest	%	12.80%	12.60%	12.20%	12.55%	11.65%
Carrying cost	Rs. Cr.	0.33	1.78	2.76	3.80	3.73
Closing Gap/ (Surplus) including Carrying cost	Rs. Cr.	14.48	15.62	32.45	31.90	35.83

29. The petitioner has prayed the Hon’ble Commission to consider the above-mentioned submission and approve the gap of Rs. 35.83 Cr.

30. In line with JSERC Generation Tariff Regulations 2020 the Petitioner based on the above submissions has humbly requested the Hon’ble Commission to approve the revised projected Annual Fixed Charge for FY 2021-22 to FY 2025-26 as highlighted below:

Table 10: Summary of ARR (Rs Cr.) projected for control period FY 2021-22 to FY 2025-26

Particulars	FY 2021-22		FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26	
	Order	Revised	Order	Revised	Order	Revised	Order	Revised	Order	Revised
Employee expense	14.73	14.73	16.41	16.42	18.29	18.29	20.37	20.39	22.70	22.72
A&G expense	1.95	1.95	2.03	2.03	2.11	2.11	2.20	2.20	2.29	2.29
R&M expense	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22
Other Exp (Water Charges)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O&M Expenses	18.90	18.90	20.66	20.67	22.62	22.63	24.79	24.81	27.21	27.23
Depreciation	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Interest on loans	1.93	1.94	1.92	1.92	1.91	1.91	1.90	1.90	1.88	1.88
Return on Equity (RoE)	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Interest on working capital	0.70	0.70	0.77	0.77	0.84	0.84	0.92	0.92	1.01	1.01

Particulars	FY 2021-22		FY 2022-23		FY 2023-24		FY 2024-25		FY 2025-26	
	Order	Revised	Order	Revised	Order	Revised	Order	Revised	Order	Revised
(IoWC)										
(Less) Non-Tariff Income (NTI)	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38
Annual Fixed Charges (AFC)	18.24	18.25	20.06	20.07	22.08	22.09	24.32	24.34	26.82	26.84

31. Also, the Petitioner has prayed to the Hon'ble Commission to direct the recovery of capacity and energy charges as per regulations 19 of the JSERC Generation Tariff regulations, 2020.

Commission's Observation and Finding

32. The Commission has considered the submission of the petitioner regarding NAPAF and it is pertinent to note that in the impugned order dated February 26, 2024 the Commission has considered the fact that the availability of the hydel plant is not in accordance with JSERC Generation Tariff Regulations 2015 (i.e.75%) due to unforeseen circumstances which is beyond the control of the petitioner.

33. The Commission has also referred to the MYT order dated September 25, 2018 for FY 2016-17 to FY 2020-21 wherein it has revised and approved the availability of the hydel plant at 50% for the entire duration of the second control period. The Commission has also referred to para 6.31 of MYT order dated 25th September 2018 for FY 2016-17 to FY 2020-21 as below:

“6.31 The Commission has approved a relaxed availability considering the issues highlighted. It may also happen that due to good rainfall and higher water availability in reservoir, the Petitioner may be available for more than 75%. Hence the Commission would like to highlight that the Petitioner would be eligible for incentive in the MYT control period only when the PAFM goes above 75%.”

34. The Commission in the order dated February 26, 2024 has allowed availability of 50% considering the issues highlighted by the petitioner. However, in calculation of capacity charges for the respective years, the Commission has considered NAPAF as 75% as per JSERC Generation Tariff Regulation 2015.

35. The Commission does not deny the fact that the availability of the plant's water supply is dependent upon the reservoir level and accepts that the petitioner's utilization is limited due to the shared usage of reservoir for drinking and irrigation purposes. Therefore, during the period of less rainfall, the petitioner may be unable to fully utilize the water level for operating the plant, considering concurrent usage for other essential purposes from the same reservoir.

36. In view of the discussions made above the Commission hereby approves and allows the availability of the hydel plant, for calculation of capacity charges, for the period FY 2016-17 to FY 2020-21 as enumerated in the table below:

Table 11 Revised NAPAF(%) for Calculation of capacity charges as approved by the Commission for FY 2016-17 to FY 2020-21

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
Actual Plant Availability Factor	18%	80%	83%	47%	49%
NAPAF(as approved)	50%	50%	50%	50%	50%
NAPAF(for computing capacity charges inclusive of incentive)	50%	75%	75%	50%	50%

In view of the aforesaid observation and calculation, **Issue No-B** as raised by the petitioner is hereby allowed.

37. In the given facts and circumstances, the Commission has re-calculated the ARR considering the capacity charge and energy charge as highlighted in the table below for FY 2016-17 to FY 2020-21.

Table 12 Revised ARR(Rs.Cr) as approved by the Commission for FY 2016-17 to FY 2020-21

Particulars	FY 17	FY 18	FY 19	FY 20	FY 21
Energy Charge (Rs.Cr)	38.009	16.721	19.169	2.345	4.865
Capacity Charge (Rs. Cr)	3.605	15.212	12.884	8.193	8.594
Annual Revenue Requirement (ARR) in Rs. Cr	41.61	31.93	32.05	10.54	13.46

38. The revised Gap/(Surplus) for the period FY 2016-17 to FY 2020-21 as approved by the Commission is given in the table below:

Table 13 Revised Gap/(Surplus) for FY 2016-17 to FY 2020-21 as approved by the Commission

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
ARR	41.61	31.93	32.05	10.54	13.46
Revenue	12.44	29.74	24.30	17.44	19.45
Opening Gap/(Surplus)	(8.93)	20.96	25.93	37.32	34.67
Addition during the FY	29.17	2.19	7.75	(6.90)	(5.99)
Closing Gap/(Surplus)	20.24	23.16	33.68	30.42	28.68
Avg Gap/(Surplus)	5.65	22.06	29.81	33.87	31.68
Interest Rate	12.80%	12.60%	12.20%	12.55%	11.65%
Carrying Cost for respective Financial Year	0.72	2.78	3.64	4.25	3.69
Gap/(Surplus) inc Carrying Cost	20.96	25.93	37.32	34.67	32.37

39. Since the modifications made in this order do not affect/impact the projections pertaining to the third control period i.e. FY 2021-22 to FY 2025-26, accordingly the order dated February 26th, 2024, for the Multi-Year Tariff (MYT) third control period, spanning from FY2021-22 to FY2025-26, shall remain in effect.
40. Accordingly, it is ordered as under;

ORDER

41. In view of the discussions made above and the observation and findings of the Commission, this review petition stands disposed off.

Sd/-
Member (T)

Sd/-
Member (L)

Sd/-
Chairperson