

Jharkhand State Electricity Regulatory Commission



Order on
True-up for FY 2021-22 and FY 2022-23,
for
Tenughat Vidyut Nigam Limited
(A Govt of Jharkhand Undertaking)
Hinoo, Doranda, Ranchi-834002

Ranchi
March 24, 2026



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List of Abbreviations

Abbreviation	Description
AAD	Advance Against Depreciation
A&G	Administrative and General
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
BOQ	Bill of Quantity
CCL	Central Coal Fields
CEA	Central Electricity Authority
COD	Date of Commercial operation
DPR	Detailed Project Report
EA	Electricity Act
ECR	Energy Charge Rate
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GOI	Government of India
JSEB	Jharkhand State Electricity Board
JSERC	Jharkhand State Electricity Regulatory Commission
IDC	Interest During Construction
Kcal	Kilocalorie
Kg	Kilogram
kWh	Kilowatt-Hour
MAT	Minimum Alternative Tax
ml	Milliliter
MT	Metric Tonnes
MU	Million Units
MW	Megawatt
MYT	Multi Year Tariff
NAPAF	Normative Annual Plant Availability Factor
O&M	Operation and Maintenance
PAF	Plant Availability Factor
PLF	Plant Load Factor
PLR	Prime Lending Rate



Abbreviation	Description
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
RoE	Return on Equity
Rs	Rupees
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SFC	Secondary Fuel Consumption
SLDC	State Load Dispatch Centre
SLM	Straight Line Method
TTPS	Tenughat Thermal Power Station



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BEFORE

**Jharkhand State Electricity Regulatory Commission,
Ranchi**

Case (Tariff) No.: 05 of 2025

In the matter of:

Petition for

True-up of FY 2021-22 & FY 2022-23
of the Third Control Period (FY 2021-22 to FY 2025-26)

In the matter:

Tenughat Vidyut Nigam Limited

Hinoo, Doranda,

Ranchi-834002..... **Petitioner**

PRESENT

Hon'ble Justice Navneet Kumar

Chairperson

Hon'ble Mahendra Prasad

Member (Law)

Order dated

March 24, 2026

Tenughat Vidyut Nigam Limited (hereinafter referred to as 'TVNL' or 'the Petitioner') has filed the Petition dated August 08, 2025 for approval of Trueing-up for the FY 2021-22 and FY 2022-23.



Chapter 1: INTRODUCTION

Jharkhand State Electricity Regulatory Commission

- 1.1 The Jharkhand State Electricity Regulatory Commission (hereinafter referred to as the 'JSERC' or 'the Commission') was established by the Government of Jharkhand under Section 17 of the Electricity Regulatory Commission Act, 1998 on August 22, 2002. The Commission became operational with effect from April 24, 2003.
- 1.2 The Government of Jharkhand vide its notification dated August 22, 2002 had defined the functions of JSERC as per Section 22 of the Electricity Regulatory Commission Act, 1998 to be the following, namely:
- a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in section 29;
 - b) to determine the tariff payable for the use of the transmission facilities in the manner provided in section 29;
 - c) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
 - d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.
- 1.3 After the Electricity Act, 2003 (hereinafter referred to as the 'Act') came into force, the earlier Electricity Regulatory Commission's Act, 1998 stands repealed and the functions of SERCs are now defined under Section 86 of the Act.
- 1.4 In accordance with Section 86 (1) of the Act, the JSERC discharges the following functions:
- a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State;
 - b) Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
 - c) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;



- d) facilitate intra-State transmission and wheeling of electricity;
 - e) issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
 - f) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
 - g) adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
 - h) levy fee for the purposes of this Act;
 - i) specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;
 - j) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
 - k) fix the trading margin in the intra-state trading of electricity, if considered, necessary;
 - l) discharge such other functions as may be assigned to it under this Act.
- 1.5 The Commission has to also advise the State Government as per sub section 2 of Section 86 of the Act, on all or any of the following matters, namely:
- a) promotion of competition, efficiency and economy in activities of the electricity industry;
 - b) promotion of investment in electricity industry;
 - c) reorganization and restructuring of electricity industry in the State;
 - d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.
- 1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.
- 1.7 In discharge of its functions, the State Commission is also guided by the Tariff Policy notified by the Government of India under Section 3 of the Act. The objectives of the Tariff Policy are to:
- a) ensure availability of electricity to consumers at reasonable and competitive rates;



- b) ensure financial viability of the sector and attract investments;
- c) promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;
- d) promote competition, efficiency in operations and improvement in quality of supply.

Tenughat Vidyut Nigam Limited

1.8 Tenughat Vidyut Nigam Limited is a power generating company incorporated on 26th November 1987 under Indian Company's Act, 1956. With the creation of Jharkhand State on 15th November 2000 from the erstwhile Bihar State, TVNL became an undertaking of the Government of Jharkhand. TVNL owns and operates an installed power generation capacity of 420 MW with two units of 210 MW each at Tenughat Thermal Power Station located at Lalpania at the banks of Tenughat reservoir in Bokaro district with its head office at Ranchi. The units are under commercial operation from below timelines:

- a) Unit I - September 1996
- b) Unit II - September 1997

1.9 Tenughat Thermal Power Station (TTPS) is located at village Lalpania in the District of Bokaro (Jharkhand). It is situated on the left bank of Tenughat reservoir. The nearest railway station is Gomia which is at a distance of 20 km (approx.) by road. The project site is developed with all modern infrastructure like school, hospital, bank, post office, market complex etc.

1.10 TTPS has an acquired land of 1800 acres (approx.) TVNL has planned its future expansion of existing site/plant by addition of 2x660 MW super critical units. The consultant for extension project has been appointed and the consultancy work is under progress. The DPR has been prepared and global tender for selection of EPC contractor shall be floated shortly for installation of 2x660 MW units. The needed fuel requirement will be met from its allocated coal block Rajbhar E & D located in the district of Latehar. Activity for commencement of coal mining is under progress. Water requirement will be met from Tenu Reservoir of Water Resources Department of the Govt. of Jharkhand. With grey field expansion the total installed capacity of 1740 (2x210 + 2x660 MW) MW of TTPS shall be dedicated to the service of the State/Nation.

Petitioner's Prayer

1.11 The Petitioner in the Filing of Petition for True up of the third control



period i.e. FY 2021-22 to FY 2022-23 has prayed before the Commission:

- (a) To admit this true-up Petition for FY 2021-22 and FY 2022-23 of Third Control Period.
- (b) To approve Revenue Requirement and Capital Expenditure for FY 2021-22 and FY 2022-23 of Third Control Period.
- (c) To approve the operational and financial parameters as proposed by TVNL considering the constraints of the old machines and consider the same for recovery of full fixed cost.
- (d) To approve the Station's operating parameters viz. PAF, Auxiliary Consumption, Station Heat Rate, Transit Loss, Specific Oil Consumption and actual fuel rate for recovery of variable cost considering the constraints of the old machines as well as site specific constraints.
- (e) To condone the delay in filing this Petition.
- (f) To grant any other relief as the Hon'ble Commission may consider appropriate.
- (g) To approve the ARR based on the operating parameters as per the norms provided in the Regulation and allow the Petitioner to retain the gains on account of the efficiency improvement in the Operating Parameters.
- (h) The Petitioner craves leave of the Hon'ble Commission to allow further submissions, addition and alteration to this Petition as may be necessary from time to time.
- (i) Pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.



Chapter 2: PROCEDURAL HISTORY

Background

- 2.1 The Commission had issued Tariff Order of TVNL for FY 2004-05 on 23.08.2004.
- 2.2 On March 30, 2006, the Commission had approved Tariff Order for Tenughat Vidyut Nigam Limited(TVNL) for FY 2005-06.
- 2.3 The Commission had passed Tariff Order for TVNL for FY 2007-08 on 03.01.2008.
- 2.4 On March 05, 2010, the Commission had issued the Tariff Order on ARR and Determination of Generation Tariff for FY 2008-09 & FY 2009-10 for Tenughat Vidyut Nigam Limited (TVNL)
- 2.5 The Commission had passed the Tariff Order on Annual Revenue Requirement and Determination of Generation Tariff for FY 2009-10 & FY 2010-11 for Tenughat Vidyut Nigam Limited (TVNL) on 22.11.2010.
- 2.6 The Commission had passed the Tariff Order on Annual Revenue Requirement and Determination of Generation Tariff for FY 2010-11 & FY 2011-12 for Tenughat Vidyut Nigam Limited (TVNL) on 31.05.2011.
- 2.7 The Commission had passed the MYT Order on Business Plan and Annual Revenue Requirement and Determination of Generation Tariff for First Control Period of FY 2012-13 to FY2015-16 for Tenughat Vidyut Nigam Limited (TVNL) on 30.05.2012.
- 2.8 The Commission had passed the Order on Petition for Annual Performance Review for FY 2012-13 (including true-up for FY 2011-12) for Tenughat Vidyut Nigam Limited (TVNL) on 02.07.2014.
- 2.9 The Commission had passed the Order on Petition for Annual Performance Review for FY 2014-15 (Including true-up for FY 2012-13 & FY 2013-14) for Tenughat Vidyut Nigam Limited (TVNL) on 30.09.2016.
- 2.10 The Commission had passed Order on Petition for Multi Year Tariff for the period FY 2017-21 (Including true-up For FY 2014-15 & provisional true-up of FY 2015-16) For Tenughat Vidyut Nigam Limited (TVNL) on 28.02.2020.
- 2.11 The Commission had passed order on Petition for True up for FY 2012-13 to FY 2015-16 on 14.12.2023.
- 2.12 The Commission had also passed order on Multi Year Tariff for the third control period i.e. FY 2021-22 to FY 2025-26 on 14.12.2023.
- 2.13 The Commission had passed the Order on Petition for True-up for FY 2016-17 to FY 2020-21, for Tenughat Vidyut Nigam Limited (TVNL) on 30.09.2024.
- 2.14 In the instant petition, the Petitioner has sought Truing-up for FY 2021-



22 to FY 2022-23 based on audited accounts as submitted by the Petitioner.

Information Gaps in the Petition

- 2.15 In exercise of Tariff determination process, several deficiencies/information gaps were found in the Petition submitted by the Petitioner and the same was communicated to the Petitioner vide letter no. JSERC/Case (Tariff) no: 05 of 2025/340 dated 09.09.2025.
- 2.16 In response, the Petitioner furnished additional data/information to the Commission vide letter no: Ref 1003/25-26 dated 17.10.2025.
- 2.17 Based on the information received by the Petitioner in the furnished additional data/information, few discrepancies/information gaps are still remaining, the same is communicated to the Petitioner via email dated 17.11.2025.
- 2.18 In response, the Petitioner furnished the remaining data/information to the Commission vide letter no: Ref 1188/25-26 dated 28.11.2025.
- 2.19 The Commission has scrutinized the Petition and the additional data/information furnished by the Petitioner with respect to its discrepancies identified and has considered the same while passing this Order.
- 2.20 In order to provide adequate opportunities to all stakeholders and general public, as mandated under Section 64 (3) of the Electricity Act 2003 and in relevant provisions of Regulations framed by the Commission and in order to ensure transparency in the process of tariff determination, the Commission decided to hold Public Hearing on November 21st, 2025.

Inviting Public Comments/Suggestions

- 2.21 On scrutiny of the Petition, the Commission had directed the Petitioner to publish a Public Notice inviting comments/suggestions from public and to make available copies of the Petition to the members of general public on request.
- 2.22 Accordingly, Public Notice was published by the Petitioner in the newspapers and a period of twenty-one (21) days was given for submitting the comments/suggestions by the general public:

Table 1 List of newspapers and dates of publication of public notice by the Petitioner

Newspaper	Language	Date of Publication
Prabhat Khabar	Hindi	07.10.2025 & 08.10.2025
Dainik Bhaskar	Hindi	07.10.2025 & 08.10.2025
Hindustan Times	English	07.10.2025 & 08.10.2025

- 2.23 The Commission also published a Public Notice on its website



www.jserc.org and various newspapers giving time till July 13th, 2025 to various Stakeholders to submit their comments/suggestions. Further in order to provide adequate opportunities to all stakeholders and general public, as mandated under Section 64 (3) of the Electricity Act 2003 and in relevant provisions of Regulations framed by the Commission, the Commission also held a public hearing on 21st of November 2025.

- 2.24 The details of newspapers wherein the Notice was published by the Commission are as under:

Table 2 List of newspapers and dates of publication of Public Notice by the Commission

Newspaper	Language	Date of Publication
Prabhat Khabar	Hindi	07.11.2025
Dainik Bhaskar	Hindi	07.11.2025
The Times of India	English	07.11.2025 & 20.11.2025
The Pioneer	English	07.11.2025
Dainik Jagran	Hindi	20.11.2025
Hindustan Dainik	Hindi	20.11.2025
The Hindustan Times	English	20.11.2025

Submission of Comments/Suggestions and Conduct of Public Hearing

- 2.25 No comments/Suggestions on the Petition has been received upon publication of public notice, however comments were raised during public hearing of the petition which has been discussed in details in **Chapter 4** of this Order.



Chapter 3: BRIEF FACTS OF THE PETITION

3.1 The following chapter summarizes the Petition for true-up of FY 2021-22 to FY 2022-23 as filed by the Petitioner for Commission's approval.

True-up for FY 2021-22 to FY 2022-23:

Plant Availability Factor

3.1 The Plant Availability Factor as submitted by the Petitioner is given below:

Table 3 Plant Availability Factor (%) submitted by Petitioner for FY 2021-22 & FY 2022-23 of the Third Control Period

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Plant Availability Factor	%	85.00%	59.58%	85.00%	81.85%

Gross Generation and Plant Load Factor

3.2 The gross generation and Plant Load Factor as submitted by the Petitioner for the third control period is given below:

Table 4 Gross Generation (MUs) and Plant Load Factor (%) submitted by Petitioner for FY 2021-22 & FY 2022-23 of the Third Control Period

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Gross generation	MU	3,127.32	1,768.80	3,127.32	2,587.53
Plant Load Factor	%	85.00%	48.08%	85.00%	70.33%

Auxiliary Consumption & Net Generation

3.3 The auxiliary consumption and net generation for the third control period as submitted by the Petitioner is given below:

Table 5 Auxiliary Consumption (%) & Net Generation (MUs) submitted by the Petitioner for FY 2021-22 & FY 2022-23 of the Third Control Period

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Auxiliary Consumption	%	9.50%	9.85%	9.50%	10.05%
Net Generation	MU	2,830.22	1,594.51	2,830.22	2,327.47

Station Heat Rate & Specific Oil Consumption

3.4 The station heat rate and specific oil consumption of the plant as submitted by the Petitioner FY 2021-22 & FY 2022-23 is given below:

Table 6 Station Heat Rate (kCal/kWh) & Specific Oil Consumption(ml/kWh) submitted by the Petitioner for FY 2021-22 & FY 2022-23 of the Third Control



Period

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Station Heat Rate	kcal/kWh	2,547.00	2,590.29	2,547.00	2,547.24
Secondary Fuel Oil Consumption	ml/kWh	1.00	0.88	1.00	0.53

Gross Calorific value of Primary fuel & Secondary Fuel

3.5 The gross calorific value of primary fuel and secondary fuel as submitted by the Petitioner for the FY 2021-22 to FY 2022-23 is given below:

Table 7 Gross Calorific value of Primary fuel (kCal/kg) and Secondary Fuel (kCal/L) as submitted by the Petitioner for FY 2021-22 & FY 2022-23 of the Third Control Period

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
GCV of Primary Fuel	kcal/kg	3583.15	3592.34	3,583.15	3,476.17
GCV of Secondary Fuel	kcal/kL	9,359.00	9,359.00	9,359.00	9,359.00

Cost of Primary Fuel

3.6 The cost of primary fuel as submitted by the Petitioner by the Petitioner for the FY 2021-22 to FY 2022-23 is given below:

Table 8 Cost of Primary fuel(Rs./MT) as submitted by the Petitioner for FY 2021-22 & FY 2022-23 of the Third Control Period

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Cost of coal per MT	Rs./MT	3349.81	3416.88	3,349.81	3,952.10

Energy Charge Rate

3.7 The Energy Charge rate of the plant as submitted by the Petitioner by the Petitioner for the FY 2021-22 to FY 2022-23 is given below:

Table 9 Energy Charge Rate as submitted by the Petitioner for FY 2021-22 & FY 2022-23 of the Third Control Period

Particulars	Uom	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Capacity	MW	420.00	420.00	420.00	420.00
Plant Availability Factor	%	85.00%	59.58%	85.00%	81.85%
PLF	%	85.00%	48.08%	85.00%	70.33%
Gross generation	MU	3,127.32	1,768.80	3,127.32	2,587.53
Auxiliary consumption	%	9.50%	9.85%	9.50%	10.05%



Particulars	Uom	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Net generation	MU	2,830.22	1,594.51	2,830.22	2,327.47
Station Heat Rate	kcal/kWh	2,547.00	2,590.29	2,547.00	2,547.24
Specific oil consumption	ml/kWh	1.00	0.88	1.00	0.53
Calorific value of oil	kcal/kL	9,359.00	9,359.00	9,359.00	9,359.00
Calorific value of coal	kcal/kg	3,583.15	3,592.34	3,583.15	3,476.17
Cost of coal per MT	Rs./MT	3,349.81	3,416.88	3,349.81	3,952.10
Cost of oil per kL	Rs./kL	40,083.17	61,754.29	40,083.17	89,346.02
Transit Loss	%	0.80%	0.80%	0.80%	0.80%
Total quantum of oil	kL	3,127.32	1,554.60	3,127.32	1,361.80
Total coal cost	Rs. Cr.	747.90	437.91	747.90	753.93
Total oil cost	Rs. Cr.	12.54	9.60	12.54	12.17
Energy Charge Rate	Rs./kWh	2.69	2.81	2.69	3.29

Non-Tariff Income

3.8 The non-tariff income as submitted by the Petitioner for the first control period of the plant is given below:

Table 10 Non-Tariff income (Rs. Cr.) as submitted by the Petitioner for FY 2021-22 & FY 2022-23 of the Third Control Period

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Non-Tariff Income	Rs. Cr.	18.00	28.89	18.86	23.49

Total Charge

3.9 The detailed fixed cost and Energy Charge of the Plant as submitted by the Petitioner for the FY 2021-22 & FY 2022-23 of the Third Control Period is summarized below:

Table 11 Aggregate Revenue Requirement (ARR) (Rs. Cr) as submitted by the Petitioner for FY 2021-22 & FY 2022-23 of the Third Control Period

S.No	Particulars	UoM	FY 2021-22		FY 2022-23	
			MYT	Petition	MYT	Petition
A	Employee Expense including Terminal Liability	Rs. Cr.	58.49*	138.71	62.05*	108.41
B	A&G Expense	Rs. Cr.	23.21	28.35	24.63	40.22



S.No	Particulars	UoM	FY 2021-22		FY 2022-23	
			MYT	Petition	MYT	Petition
C	R&M Expense	Rs. Cr.	62.05	53.48	65.83	60.88
1	O&M Expenses	Rs. Cr.	143.75	220.53	152.51	209.51
2a	Water Expense	Rs. Cr.	12.00	-	12.00	-
2b	Security Expense	Rs. Cr.	-	23.09	-	20.78
3	Depreciation	Rs. Cr.	18.31	18.36	18.31	16.33
4	Interest on loans	Rs. Cr.	13.45	103.27	11.80	108.84
5	Return on Equity	Rs. Cr.	27.70	34.49	27.70	34.72
6	Interest on working capital	Rs. Cr.	28.37	32.87	28.72	37.01
7	Total Fixed Cost	Rs. Cr.	225.58*	432.61	251.03*	427.20
8	Non-Tariff Income	Rs. Cr.	18.00	28.89	18.86	23.49
9	Annual Fixed Charge	Rs. Cr.	225.58*	403.73	232.17*	423.65
10	Total Energy Charges	Rs. Cr.		447.51		766.10
11	Special Allowance	Rs. Cr.	-	-	-	19.95
12	Annual Revenue Requirement	Rs. Cr.		851.24		1,189.75

**Excluding Terminal Liabilities*

Revenue Gap/Surplus

3.10 The Revenue Gap/Surplus as submitted by the Petitioner for the FY 2021-22 & FY 2022-23 of the Third Control Period after consideration of fixed charges and variable charge is summarized below:

Table 12 Total fixed and variable charges including gap/(surplus) (Rs. Cr.) as submitted by Petitioner

Particulars	FY 2021-22	FY 2022-23
Gap/(Surplus) for the Year	251.66	222.76
Carrying Cost	145.33	104.20
Total Revenue Gap/(Surplus)	396.99	326.96
Total Revenue Gap/(Surplus) for the FY 2021-22 & FY 2022-23	723.95	



Chapter 4: PUBLIC CONSULTATION PROCESS

- 4.1 On the Petitioner's petition several stakeholders have responded. A Public Hearing was held by the Commission on November 21, 2025 for giving additional opportunity to all the stakeholders to submit their comments/suggestions on the said petition for ensuring maximum public participation and transparency. Accordingly, stakeholders voiced their comments and suggestions and the list of the attendees is mentioned in Chapter-9 of this Order.
- 4.2 The comments and suggestions of the public along with the response of the Petitioner and the views of the Commission are summarized in this Chapter. The issues raised by the stakeholders which do not have any significance to petition have not been discussed in this Chapter.

Plant Availability Factor (PAF)

Public Comments/Suggestions

- 4.3 TVNL was not able to maintain the Plant Availability Factor (PAF) as approved by the Honorable Commission. Plant Availability Factor (PAF) is a controllable parameter under Regulation 6.11(a). Further, Regulation 6.13 prohibits recovery of financial loss arising from under-performance of controllable parameters. Further, TVNL has not demonstrated any Force Majeure under Regulation 3.29, or Change in Law under Regulation 3.14, to justify deviation. Coal shortage as stated by the Petitioner is a commercial and operational issue, not Force Majeure. Accordingly, PAF must be treated as per normative 85%, and any revenue loss for shortfall cannot be passed on the consumers.

Petitioner's Response

- 4.4 The Petitioner submitted that TVNL has claimed the actual Plant Availability Factor (PAF) as certified by SLDC for the relevant period. TVNL has not sought to recover any financial loss on account of underperformance. The Hon'ble Commission may kindly consider the claim after prudence check.

Views of the Commission

- 4.5 The Commission has considered the submissions of the Stakeholder and the response by the Petitioner.

Gross Generation/ Plant Load Factor (PLF)

Public Comments/Suggestions

- 4.6 TVNL seeks approval of Gross Generation as per the actuals citing coal shortages. PLF is directly linked to the PAF and fuel management and a controlled parameter. Any shortfall from normative PLF/PAF is TVNL's risk. Regulation 6.13 explicitly mentioned that "Any financial loss on account of underperformance shall not be recovered through tariff." TVNL has not



submitted any evidence of coal supply agreement violations or force majeure. Hence, PLF/ Gross Generation cannot supersede normative parameters for cost recovery.

Petitioner's Response

4.7 The Petitioner submitted that TVNL has claimed the actual Plant Load Factor (PLF) and has not prayed for any additional incentive on account of PLF. The Hon'ble Commission may kindly consider the same after prudence check.

Views of the Commission

4.8 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Auxiliary Consumption

Public Comments/Suggestions

4.9 Auxiliary consumption is a controllable and a performance parameter as per JSERC Generation Tariff Regulations, 2020. For a controllable parameter, Normative values must apply unless justified under the force majeure. TVNL requested for the approval of actual auxiliary consumption of 9.85% and 10.05%. TVNL cited the partial load operation, however no technical justification beyond self-certification has been provided. TVNL's reference to CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016 is not applicable unless adopted by the honorable Commission. TVNL has not submitted unit loading curves, heat rate test reports, evidence of auxiliary load rise. Hence normative auxiliary consumption must apply and excess auxiliary consumption must be borne by the TVNL.

Petitioner's Response

4.10 The Petitioner submitted that the deviation from normative auxiliary consumption was primarily due to operational constraints arising from coal shortages during the relevant period. TVNL has already submitted all relevant documents and justifications in its earlier submissions. The Hon'ble Commission may kindly consider the claim after prudence check.

Views of the Commission

4.11 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Station Heat Rate (SHR)

Public Comments/Suggestions



4.12 TVNL has not provided the complete justification for deviation from the approved SHR. SHR is a controllable parameter as per the regulation 6.11 and 6.13 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 and the deviation cannot be passed to beneficiaries. Any increase in energy charge due to higher SHR must be disallowed. No SHR test result or SLDC backing down instructions have been annexed.

Petitioner's response

4.13 The Petitioner submitted that the higher Station Heat Rate (SHR) was primarily attributable to ageing units and prolonged partial load operation during FY 2021-22, compounded by reserve shutdowns due to acute coal shortages. These factors adversely impacted turbine efficiency and heat rate. TVNL has submitted all relevant documents and justification in its earlier submissions and requests the Commission to consider the same after prudence check.

Views of the Commission

4.14 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Additional Capitalisation

Public Comments/Suggestions

4.15 As per the regulation 14.1 to 14.4 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020, additional capitalization should be allowed only for safety, environmental norms, replacement of damaged equipment, change in law or deferred works within the cutoff date. TVNL has not provided the Scheme-wise DPR, BoQ, Competent Authority Approval, Proof of capitalization and prudence justification in its petition. Hence the additional capitalization cannot be allowed until detailed prudence check documents are furnished.

Petitioner's response

4.16 The Petitioner submitted that TVNL has provided all available documents and justification in its earlier submissions. The Hon'ble Commission may kindly consider the claim after prudence check.

Views of the Commission

4.17 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Operation and Maintenance (O&M)

Public Comments/Suggestions



4.18 Operation and Maintenance expenses is fixed normatively. TVNL seeks approval of actual O&M. Actuals are not automatically admissible. Efficiency gains/losses shared only if the actual are more than the normative as per the regulation 6.14 and 6.15 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020. As TVNL exceeds the normative O&M, it should not be allowed. No manpower rationalization plan or R&M plan submitted. Hence, only Normative O&M should be allowed.

Petitioner's response

4.19 The Petitioner submitted that the Hon'ble Commission, in its MYT Order dated 14.12.2023 for the third control period, had noted that O&M figures were estimated in the absence of audited data for FY 2017-21 and further stated that additional expenditure, if any, shall be considered at the time of true-up. TVNL has also provided detailed justification for claiming O&M on actual basis, along with the reasons for variation in actual O&M expenses compared to previous years and supporting documents during its past submissions.

Views of the Commission

4.20 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Depreciation

Public Comments/Suggestions

4.21 Depreciation cannot exceed 90% of the asset value. Additional capitalization is not proved, depreciation on such capital expenditure must be disallowed.

Petitioner's response

4.22 The Petitioner submitted that TVNL has claimed depreciation as booked in its accounts and requests the Hon'ble Commission to allow the same after prudence check.

Views of the Commission

4.23 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Interest on Loan

Public Comments/Suggestions

4.24 Interest must be calculated based on the actual loan portfolio supported by the audited accounts. Without audited accounts, claim is incomplete. Any interest on the disallowed capex must also be disallowed.



Petitioner's response

4.25 The Petitioner submitted that TVNL faced difficulty in servicing its debt timely due to delayed and partial payments from JBVNL. As on 31.03.2022, JBVNL owed TVNL cumulative dues of ₹4998.79 Crores. Due to late payments, TVNL incurred penalties along with interest on loans during FY 2021-22 and FY 2022-23. TVNL requests the Hon'ble Commission to approve the actual interest on loan after prudence check.

Views of the Commission

4.26 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Interest on working capital

Public Comments/Suggestions

4.27 The interest on working capital must be calculated on normative parameters. It cannot be computed based on inflated actual fuel stock or higher receivable due to self-delay.

Petitioner's response

4.28 The Petitioner submitted that TVNL has computed Interest on Working Capital strictly as per the applicable regulations and requests the Hon'ble Commission to allow the same after prudence check.

Views of the Commission

4.29 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Return on Equity

Public Comments/Suggestions

4.30 Return on Equity should be admissible only on the prudence-checked GFA and additional capex. Any RoE on unapproved or unsubstantiated capex must be rejected.

Petitioner's response

4.31 The Petitioner submitted that TVNL has provided all available justification and supporting documents and requests the Hon'ble Commission to allow RoE after prudence check.

Views of the Commission

4.32 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.



Secondary Fuel Oil Cost

Public Comments/Suggestions

4.33 Secondary fuel oil consumption is a controllable parameter. Hence excess secondary fuel cost cannot be passed through tariff.

Petitioner's response

4.34 The Petitioner submitted that TVNL has claimed actual specific oil consumption, which is well below the normative value. Hence, TVNL is not passing any additional burden; rather, due to improved performance, it has benefited consumers by reducing the financial impact.

Views of the Commission

4.35 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.

Revenue Gap Surplus & Carrying cost

Public Comments/Suggestions

4.36 TVNL has claimed the carrying cost on revenue gap. As per the regulation 7.4 of the JSERC (Terms and Conditions for Determination of Generation Tariff), if the petition is not filed on time as per the section 39 "Summary of Timeline" no carrying cost is allowed.

Petitioner's response

4.37 The Petitioner submitted that TVNL requests the Hon'ble Commission to consider the claim after prudence check, keeping in view the circumstances explained in earlier submissions.

Views of the Commission

4.38 The Commission has considered the submissions of the Stakeholder and the replies by the Petitioner.



Chapter 5: TRUE-UP FOR FY 2021-22 to FY 2022-23

- 5.1 The Commission had approved the MYT Order for the 3rd Control Period i.e. FY 2021-22 to FY 2025-26 and determined the Energy Charge Rate and Fixed Charges for FY 2021-22 to FY 2025-26 vide its Order dated December 14th, 2023, based on the principles specified in the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020.
- 5.2 In the instant petition, the Petitioner has now sought approval for True-up for FY 2021-22 to FY 2022-23, based on the Audited Accounts taking into consideration the provisions of the Tariff Regulations 2020 and the methodology adopted by the Commission in the previous Orders.
- 5.3 While conducting the true up of FY 2021-22 to FY 2022-23, the Commission has taken into consideration:
- Audited accounts for FY 2021-22 to FY 2022-23 of the Petitioner;
 - Principles and provisions laid down in the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 and its amendments thereof;
 - Materials placed before the Commission;
 - Methodology adopted by the Commission in its previous Orders.
- 5.4 The component-wise details, filed by the Petitioner and the Commission's analysis and discussion is made in the upcoming paragraph.

Plant Availability Factor (PAF) & Plant Load Factor (PLF)

Petitioner's Submission

- 5.5 The Petitioner in its Tariff Petition has submitted the PAF for FY 2021-22 to FY 2022-23 as per actual data as shown in table below against the PAF of 85% as approved by the Commission in its previous MYT Tariff Order for the first control period.

Table 13 Plant availability factor (%) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Plant Availability Factor	%	85.00%	59.58%	85.00%	81.85%

The Petitioner in its Tariff Petition has submitted the PLF for FY 2021-22 to FY 2022-23 as per actual data available as shown in the table below against PLF of 85% as approved by the Commission in its previous MYT Tariff Order for the third control period.

Table 14 Plant Load Factor(%) as submitted by the Petitioner for FY 2021-22 & FY



2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Plant Load Factor	%	85.00%	48.08%	85.00%	70.33%

5.6 The Petitioner has submitted reasons for low PAF for the second control period and not being able to achieve the Commission approved PAF due to the following reasons:

- (a) The Petitioner has submitted that the lower PAF during FY 2021-22 was primarily on account of acute shortage of coal, which restricted the operation of one unit for extended periods, while the other unit remained under shutdown to optimize the limited fuel availability. The Petitioner stated that the situation was aggravated due to disruptions in coal supply logistics and non-availability of rakes, resulting in generation loss.
- (b) The Petitioner has further stated that during FY 2022-23, both units were operational for most of the year; however, sporadic shortfalls in coal supply and planned overhauling activities led to marginally lower availability than the normative target of 85%.

5.7 The Petitioner submitted that the shortfall in PAF during these years was due to uncontrollable external factors and not due to any operational inefficiency on part of TVNL. The Petitioner has therefore requested the Hon'ble Commission to consider the actual PAF achieved during FY 2021-22 and FY 2022-23 for the purpose of True-up of the Third Control Period.

Commission's Analysis

5.8 The Commission has scrutinized and verified the actual availability during FY 2021-22 & FY 2022-23 from SLDC certificates (Provided by the Petitioner in Annexure -2) and accordingly approves a final availability of the plant vis-à-vis normative availability as mentioned in table below:

Table 15 Plant availability factor (%) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Plant Availability Factor	%	85.00%	59.58%	59.58%	85.00%	81.85%	81.85%

5.9 The Commission has scrutinized and verified the actual load factor during FY 2021-22 & FY 2022-23 from SLDC certificates (Provided by the Petitioner in Annexure -1) and accordingly approves a final availability of the plant vis-à-vis normative availability as mentioned in table below

Table 16 Plant Load Factor (%) as approved by the Commission for FY 2021-22 &



FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Plant Load Factor	%	85.00%	48.08%	48.08%	85.00%	70.33%	70.33%

Gross Generation

Petitioner's Submission

5.10 The Petitioner in its Tariff Petition has submitted that the actual gross generation for both units during FY 2021-22 & FY 2022-23 is as mentioned in table below:

Table 17 Gross Generation (MUs) submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Gross generation	MU	3,127.32	1,768.80	3,127.32	2,587.53

Commission's Analysis

5.11 The Commission upon scrutinizing and verifying the documents submitted by the Petitioner and considering the PLF as approved in para above, approves gross generation of the plant for FY 2021-22 & FY 2022-23 as mentioned in the table below:

Table 18 Gross Generation (MUs) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Gross Generation	MU	3,127.32	1,768.80	1,768.80	3,127.32	2,587.53	2,587.53

Auxiliary Consumption

Petitioner's Submission

5.12 The Petitioner has submitted that the actual auxiliary consumption for both the units for FY 2021-22 to FY 2022-23 is mentioned in the table below:

Table 19 Auxiliary Consumption (%) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Auxiliary Consumption	%	9.50%	9.85%	9.50%	10.05%

5.13 The Petitioner has also submitted that deviation from normative auxiliary consumption values is due to operational constraints arising



from coal shortages. The coal shortage necessitated operation of generating units at partial load and, at times, required frequent cycling between units, both of which adversely affect auxiliary consumption efficiency. The increase is thus a technical consequence of unavoidable operating conditions and not due to plant inefficiency.

- 5.14 The Petitioner has also referred to the provisions of Regulation 6.3B of the CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016, which provide for compensation to generating stations on account of partial-load operation and multiple start-stop conditions. TVNL submitted that similar considerations may be extended to the plant in view of its ageing equipment and operation in flexible load conditions.
- 5.15 The Petitioner has further contended that the Tenughat Thermal Power Station (TTPS) has already completed more than 25 years of operation, and the marginal deviation in auxiliary consumption should be viewed in the context of ageing equipment and site-specific conditions. The Petitioner has therefore requested the Hon'ble Commission to approve auxiliary consumption at actual levels for FY 2021-22 and FY 2022-23.

Commission's Analysis

- 5.16 The Commission has examined the submissions of the Petitioner and the supporting data furnished for FY 2021-22 and FY 2022-23. It is observed that the actual auxiliary consumption marginally exceeded the normative values approved in the MYT Order for both years.
- 5.17 Clause 6.11 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 stipulates that performance parameters, including Auxiliary Consumption, are deemed to be controllable in nature. The Commission further notes that Regulation A16 of the JSERC (Terms and Conditions for Determination of Generation Tariff) (First Amendment) Regulations, 2023 specifies the normative auxiliary consumption applicable for coal-based thermal generating stations.
- 5.18 Accordingly, the Commission observes that any deviation from the approved norm cannot be passed on to the beneficiaries, as auxiliary consumption is a controllable parameter. Therefore, for the purpose of True-up of FY 2021-22 and FY 2022-23, the Commission has approved the normative auxiliary consumption as per the applicable Regulations.

Table 20 Auxiliary Consumption (%) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Auxiliary Consumption	%	9.50%	9.85%	9.50%	9.50%	10.05%	9.50%



Net Generation

Petitioner's Submission

5.19 The Petitioner has submitted the net generation of the plant for FY 2021-22 to FY 2022-23 as mentioned in the table below:

Table 21 Net Generation(MUs) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Net Generation	MU	2,830.22	1,594.51	2,830.22	2,327.47

Commission's Analysis

5.20 The Commission, after scrutiny of the documents, finds a difference in the values of net generation w.r.t. to the data submitted by the Petitioner and as per the actual net energy exported to JBVNL for the period. The Commission upon prudence check of the documents has considered the net energy exported to JBVNL as the net generation of TVNL for FY 2021-22 & FY 2022-23 and approves net generation as mentioned in the table below:

Table 22 Net Generation(MUs) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Net Generation	MU	2,830.22	1,594.51	1,600.76	2,830.22	2,327.47	2,341.71

Station Heat Rate

Petitioner's Submission

5.21 The Petitioner has submitted the actual Station heat rate for the third control period i.e. FY 2021-22 to FY 2022-23 as mentioned in the table below:

Table 23 Station Heat Rate (kcal/kWh) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Station Heat Rate	kcal/kWh	2,547.00	2,590.29	2,547.00	2,547.24

5.22 The Petitioner has also submitted that over the years it has taken several measures to improve its Station Heat Rate which is also evident from the data of SHR submitted during previous Control Period True Up. The Station Heat Rate has been improved from 2795.41 kcal/kWh in FY 2016-17 to 2547.24 kcal/kWh in FY 2022-23.

Commission's Analysis

5.23 Clause 6.11 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 stipulates that performance parameters are deemed to be controllable in nature. As such, the Commission, approves the Gross Station Heat Rate in accordance with Regulation A 16 of the JSERC (Terms & Conditions for Determination of Generation Tariff) (First Amendment) Regulations, 2023:

Table 24 Station Heat Rate(kcal/kWh) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Station Heat Rate	kcal/kWh	2,547.00	2,590.29	2,547.00	2,547.00	2,547.24	2,547.00

Secondary Fuel Oil Consumption

Petitioner's Submission

5.24 The Petitioner has submitted secondary fuel oil consumption for FY 2021-22 & FY 2022-23 as mentioned in table below:

Table 25 Secondary fuel oil consumption (ml/kWh) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Secondary Fuel Oil Consumption	ml/kWh	1.00	0.88	1.00	0.53

5.25 The Petitioner has submitted that the actual Specific Oil Consumption (SOC) of Tenughat Thermal Power Station (TTPS) for FY 2021-22 and FY 2022-23 was 0.88 ml/kWh and 0.53 ml/kWh, respectively, as against the normative value of 1.00 ml/kWh approved by the Commission in the MYT Order dated 14th December 2023.

5.26 The Petitioner stated that over the years, TVNL has undertaken continuous efforts to improve plant performance and reliability through systematic maintenance and adoption of efficient start-up procedures, which have resulted in a progressive reduction in oil consumption. The Petitioner highlighted that the specific oil consumption has reduced substantially from 4.21 ml/kWh in FY 2016-17 to 0.53 ml/kWh in FY 2022-23, demonstrating consistent improvement in operational efficiency.

5.27 The Petitioner also stated that the low oil consumption levels are a result of improved combustion stability, minimization of start-up oil usage, and reduced tripping frequency. Accordingly, the Petitioner has requested the Hon'ble Commission to approve the actual specific oil consumption achieved during FY 2021-22 and FY 2022-23 for the purpose of True-up.

Commission's Analysis

5.28 The Commission observes that the submission made by the Petitioner is in accordance with the Commission's MYT Order dated December 14, 2023 and JSERC (Terms and Conditions for Determination of Generation Tariff) (First Amendment) Regulations, 2023. Hence, the Commission approves the secondary fuel oil consumption as submitted by the Petitioner.

Table 26 Secondary fuel oil consumption (ml/kWh) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Secondary Fuel Oil Consumption	ml/kWh	1.00	0.88	0.88	1.00	0.53	0.53

Gross Calorific Value (GCV) of Primary and Secondary Fuel

Petitioner's Submission

5.29 The gross calorific value of coal and secondary fuel as submitted by the Petitioner for FY 2021-22 to FY 2022-23 is mentioned in table below:

Table 27 Gross Calorific Value of Primary fuel (kCal/kg) & Secondary Fuel (kCal/ltr) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
GCV of Primary Fuel	kcal/kg	3583.15	3592.34	3,583.15	3,476.17
GCV of Secondary Fuel	kcal/kL	9,359.00	9,359.00	9,359.00	9,359.00

Commission's Analysis

5.30 Calorific value of a fuel refers to the amount of heat released on burning of one unit of the fuel. Thus, a higher GCV indicates better quality of fuel and also lowers fuel cost, since it lowers the consumption of fuel needed for producing the required amount of energy.

5.31 The Commission had directed the Petitioner to submit information on consumption and GCV of coal and secondary fuel oil for the FY 2021-22 & FY 2022-23 as a part of additional data requirements during the process of initial scrutiny of the Petition.

5.32 The Commission, upon prudence check of the documents submitted by the Petitioner, has analyzed month wise coal quantity and GCV as fired data submitted by the Petitioner and accordingly approves the GCV of coal for the FY 2021-22 & FY 2022-23 as mentioned in table below:

Table 28 Gross Calorific value (kcal/kg) of primary fuel as approved by the



Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
GCV of Primary Fuel	kcal/kL	3583.15	3592.34	3,592.34	3,583.15	3,476.17	3,476.17

5.33 The Commission, upon prudence check of the information's submitted by the Petitioner has found that the Petitioner has not submitted the actual GCV of the secondary fuel. In its place, it has submitted the GCV value of secondary fuel as 9359 kcal/ltr as approved in MYT order. The Commission has taken note of the same and has approved the GCV of secondary fuel for the FY 2021-22 to FY 2022-23 as mentioned in the table below:

Table 29 GCV of secondary fuel (kcal/ltr) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
GCV of Secondary Fuel	kcal/kg	9,359.00	9,359.00	9,359.00	9,359.00	9,359.00	9,359.00

Cost of Primary Fuel

Petitioner's Submission

5.34 The Petitioner has submitted the actual cost of primary fuel for FY 2021-22 to FY 2022-23 as mentioned below:

Table 30 Cost of Primary Fuel (Rs./MT) as submitted by Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Cost of coal per MT	Rs./MT	3349.81	3416.88	3,349.81	3,952.10

Commission's Analysis

5.35 The Commission, upon scrutinizing and analyzing the documents submitted by the Petitioner, and also upon verification of the figures as per audited accounts, approves the cost of primary fuel for the third control period. For the FY 2021-22, the Petitioner's claim is less than the submission in the audited account, the Commission approves the Petitioner's value. For the FY 2022-23, since the Petitioner submission is greater than the accounts value, the Commission approves the audited value to normalize the financial impact on beneficiaries. The details are as follows:

Table 31 Cost of Primary Fuel (Rs./MT) as approved by the Commission for FY



2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Cost of coal per MT	Rs./MT	3349.81	3416.88	3416.88	3,349.81	3,952.10	3,771.27

Transit Loss

Petitioner's Submission

5.36 The Petitioner has submitted the actual Transit Loss in all types of Coal as 0.8%. The transit loss for other category of coal had been considered by the Petitioner as per the norms given in clause 17.11 of the Generation Tariff Regulations 2020.

Table 32 Transit loss(%) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Transit Loss	%	0.80%	0.80%	0.80%	0.80%

Commission's Analysis

5.37 The Commission has scrutinized the detail along with the auditor's certificate certifying the transit loss as submitted by the Petitioner and approves the transit loss at a normative value of 0.80% as per Clause 17.11 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020.

Table 33 Transit loss (%) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Transit Loss	%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%



Summary of Plant Parameters & Fuel Cost Determinants as approved by the Commission for FY 2021-22 & FY 2022-23

Table 34 Approved Energy Charge Rate (Rs./kWh) for FY 2021-22 & FY 2022-23

S. No	Particulars	UoM	FY 2021-22			FY 2022-23		
			MYT	Petition	Approved	MYT	Petition	Approved
1	Capacity	MW	420.00	420.00	420.00	420.00	420.00	420.00
2	Plant Availability Factor	%	85.00%	59.58%	59.58%	85.00%	81.85%	81.85%
3	PLF	%	85.00%	48.08%	48.08%	85.00%	70.33%	70.33%
4	Gross generation	MU	3,127.32	1,768.80	1,768.80	3,127.32	2,587.53	2,587.53
5	Auxiliary consumption	%	9.50%	9.85%	9.50%	9.50%	10.05%	9.50%
6	Net generation	MU	2,830.22	1,594.51	1,600.76	2,830.22	2,327.47	2,341.71
7	Station Heat Rate	kcal/kWh	2,547.00	2,590.29	2,547.00	2,547.00	2,547.24	2,547.00
8	Specific oil consumption	ml/kWh	1.00	0.88	0.88	1.00	0.53	0.53
9	Calorific value of oil	kcal/kL	9,359.00	9,359.00	9,359.00	9,359.00	9,359.00	9,359.00
10	Calorific value of coal	kcal/kg	3,583.15	3,592.34	3,592.34	3,583.15	3,476.17	3,476.17
11	Cost of coal per MT	Rs./MT	3,349.81	3,416.88	3,416.88	3,349.81	3,952.10	3,771.27
12	Cost of oil per kL	Rs./kL	40,083.17	61,754.29	61,754.29	40,083.17	89,346.02	89,346.02
13	Transit Loss	%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
14	Total quantum of oil	kL	3,127.32	1,554.60	1,554.60	3,127.32	1,361.80	1,361.80
15	Total coal cost	Rs. Cr.	747.90	437.91	430.57	747.90	753.93	719.36
16	Total oil cost	Rs. Cr.	12.54	9.60	9.60	12.54	12.17	12.17
17	Total Energy Cost (17=15+16)	Rs. Cr.	760.44	447.51	440.17	760.44	766.10	731.53
18	Energy Charge Rate (Total Energy Cost*10/Net Generation)	Rs./kWh	2.69	2.81	2.75	2.69	3.29	3.12

MYT: Values approved in MYT order dated 14.12.2023



Determination of Fixed Cost

Operation & Maintenance Expense

Petitioner's Submission

- 5.38 The Petitioner has submitted the details of the O&M Expenses divided into A&G Expenses, R&M Expenses and Employee Expenses and has claimed as per approved in MYT order.
- 5.39 The Petitioner has clarified that employee expenses as submitted, consists of salaries, overtime allowance, leave salary and expenses for staff & officers' welfare.
- 5.40 The Petitioner submitted that the Hon'ble Commission, in Paragraph 6.40 of the MYT Order dated 14th December 2023, had observed as under:
- “The Commission has analyzed the submissions made by the Petitioner and has noted the fact that the Petitioner has not conducted True-up of the Second Control Period. In the absence of audited data for FY 2017-21, the Commission has considered the figures approved by the Commission for the Second Control Period and has accordingly escalated the same with an escalation factor of 6.09% and has arrived at the figures for the Third Control Period. However, the Commission shall consider additional expenditure incurred, if any, towards O&M expenses during True-up of the respective years of the Third Control Period, provided that the same is supported by audited accounts.”*
- 5.41 The Petitioner stated that, as per the above direction, the O&M expenses for FY 2021-22 and FY 2022-23 may be considered on actual basis as reflected in the annual accounts. It was further submitted that the increase in O&M expenditure is primarily due to:
- (a) The revision in actuarial valuation of long-term employee benefits such as pension and gratuity;
 - (b) Escalation in maintenance costs on account of ageing plant equipment; and
 - (c) Higher A&G expenditure relating to compliance, security, and statutory obligations.
- 5.42 The Petitioner emphasized that such costs are essential for ensuring continued operational reliability and performance of the generating station, which has completed over 25 years of operation, and requested that the Hon'ble Commission approve the O&M expenses as per the actuals for FY 2021-22 and FY 2022-23.

Table 35: O&M Expense (Rs. Cr.) as submitted by the Petitioner for the FY 2021-



22 to FY 2022-23

S.No	Particulars	UoM	FY 2021-22		FY 2022-23	
			MYT	Petition	MYT	Petition
1	Employee Expenses	Rs. Cr.	58.49	68.39	62.05	72.10
2	Terminal liabilities	Rs. Cr.	-	70.32	-	36.31
3	Employee Expense including Terminal Liability	Rs. Cr.	58.49	138.71	62.05	108.41
4	A&G Expenses	Rs. Cr.	23.21	28.35	24.63	40.22
5	R&M Expenses	Rs. Cr.	62.05	53.48	65.83	60.88
6	Water Charges	Rs. Cr.	12.00	-	12.00	-
7	Security Expenses	Rs. Cr.	-	23.09	-	20.78
8	Total O&M expenses including water and security charges	Rs. Cr.	155.75	243.62	164.51	230.30

Commission's Analysis

5.43 The Commission outlines clause 15.35 and clause 15.40 of JSERC Generation Tariff Regulation, 2020 for the approval of Operation & Maintenance Charges for a generating station as reproduced below:

“15.35 Operation and Maintenance (O&M) expenses shall comprise of the following:

- 1. Salaries, wages, pension contribution and other employee costs;*
- 2. Administrative and General costs;*
- 3. Repairs and maintenance expenses;*

Existing Thermal Generating Stations:

15.40 The O&M Expenses for the Base Year of the Control Period shall be approved by the Commission taking into account the audited accounts of FY 2015-16 to FY 2019-20, Business Plan filed by the Generating Company, estimates of the actual for the Base Year, prudence check and any other factor considered appropriate by the Commission”.

5.44 The Commission has examined the submissions of the Petitioner, the audited data furnished for FY 2021-22 and FY 2022-23, and the methodology laid down under the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 and its First Amendment, 2023.

5.45 The Commission observes that as per Paragraph 6.40 of the MYT Order dated 14th December 2023, in the absence of audited data for the Second Control Period, the O&M expenses for the Third Control Period were derived based on the escalation of previously approved values, with the provision that additional expenditure, if any, would be considered at the

time of True-up based on audited accounts.

- 5.46 The Commission notes that O&M expenses consist of three major components, namely Employee Expenses, Repair & Maintenance (R&M) Expenses, and Administrative & General (A&G) Expenses, which are assessed on a normative basis using appropriate inflation, growth, and “K-factor” parameters as approved by the Commission in earlier Orders.

Normative Employee Expenses

- 5.47 Based on the facts and circumstances of the Petition, the Commission has approved the Normative Employee Expenses for FY 2021-22 and FY 2022-23 by applying the actual inflation and growth factors to the previous year’s approved employee expenses.
- 5.48 The Commission had, through the Second Data Gap Notice, sought additional information from the Petitioner pertaining to employee data, including the number of employees, category-wise breakup, etc. Based on the information furnished in response to the 2nd Data Gap the employee count is as follows:

Table 36: Number of Employees of TVNL

Particulars	Sanctioned Strength (submitted)	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Management Cadre	282	190	189	183	178	172
Non-Management Cadre	390	486	488	477	479	462
Total	672	676	677	660	657	634

- 5.49 It can be observed from above that the employee count is reducing over the years showcasing no growth. As per clause 15.42 of JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 and its subsequent amendments:

*“G_n – is a growth factor for the nth year and it can be **greater than or lesser than zero** based on the actual performance. Value of G_n shall be determined by the Commission in the MYT Order for meeting the additional manpower requirement based on the Generating Company Filing, benchmarking and any other factor that the Commission feels appropriate;*
”

- 5.50 Therefore, the Commission has considered a growth factor at 0% and subsequently, the employee cost has been determined as follows:

Table 37 Normative Employee Expenses as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22	FY 2022-23
Employee Expenses (n-1) Year	Rs Cr.	55.13	58.95



Particulars	UoM	FY 2021-22	FY 2022-23
Inflation Factor	%	6.93%	6.87%
Growth Factor	%	0.00%	0.00%
Normative Employee Expenses	Rs Cr.	58.95	63.00

Normative A&G Expenses

5.51 Likewise, the Commission has computed the Normative Administrative & General (A&G) Expenses for FY 2021-22 and FY 2022-23 based on the approved A&G Expenses of the previous year, escalated by the actual inflation factor of 6.93% and 6.87%, respectively.

Table 38 Normative A&G Expenses as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22	FY 2022-23
A&G Expenses (n-1) Year	Rs Cr.	21.88	23.40
Inflation Factor	%	6.93%	6.87%
Normative A&G Expenses	Rs Cr.	23.40	25.00

Normative R&M Expenses

5.52 The Commission has noted in its MYT Order dated 14th December 2023 that, the O&M expenses for the Third Control Period were determined by escalating the values of the previous Control Period due to the non-availability of audited data for FY 2016-20. The Commission had also stated that the K-factor (representing the ratio of R&M expenses to Gross Fixed Assets) shall be reviewed and finalized at the time of True-up of the respective years of the Third Control Period based on actual audited data.

5.53 In the present True-up, the Commission has now determined the K-factor for the Third Control Period using the audited financial data of FY 2015-16 to FY 2019-20, as shown below. This represents the ratio of R&M expenditure to the opening Gross Fixed Assets (GFA) for each year, normalized for any abnormal items.

Table 39 'K-Factor' as approved by the Commission for the third control period i.e, FY 2020-21 to 2024-25

Particulars	FY 16	FY 17	FY 18	FY 19	FY 20
Opening GFA	1,491.74	1,493.00	1,551.21	1,562.45	1,566.53
R&M Approved	79.14	45.81	48.69	51.76	55.02
K - Factor	5.31%	3.07%	3.14%	3.31%	3.51%
Average K-Factor	3.67%				

5.54 Accordingly, the Commission adopts a K-factor of **3.67%** for computation of the normative R&M expenses for FY 2021-22 and FY 2022-23. The approved R&M expenses have been derived by applying the approved K-factor and the respective inflation factors of 6.93% and 6.87% to the



opening GFA of each year.

Table 40 Normative R&M Expenses as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22	FY 2022-23
R&M Expenses (n-1) Year	Rs Cr.	58.49	64.84
Inflation Factor	%	6.93%	6.87%
K Factor	%	3.67%	3.67%
Normative R&M Expenses	Rs Cr.	64.84	71.83

Security Expense

Petitioner's Submission

5.55 The Petitioner has claimed a security expense of Rs. 23.09 Cr. and Rs. 20.78 Cr. in FY 2021-22 and FY 2022-23 respectively.

Commission's Analysis

5.56 The Commission has taken into consideration the audited accounts of the Petitioner to verify the expense towards security expenses and approves the value of Rs. 23.09 Cr. and Rs. 20.78 Cr. in FY 2021-22 and FY 2022-23 respectively.

5.57 Based on the above discussion, the Commission summarizes the of O&M expenses as given below.

Table 41 O&M Expense (Rs. Cr.) approved by the Commission for FY 2021-22 & FY 2022-23

S.No	Particulars	UoM	FY 2021-22			FY 2022-23		
			MYT	Petition	Approved	MYT	Petition	Approved
1	Employee Expenses	Rs. Cr.	58.49	68.39	58.95	62.05	72.10	63.00
2	Terminal liabilities	Rs. Cr.	-	70.32	70.32	-	36.31	36.31
3	Employee Expense, including Terminal Liability	Rs. Cr.	58.49	138.71	129.27	62.05	108.41	99.31
4	A&G Expenses	Rs. Cr.	23.21	28.35	23.40	24.63	40.22	25.00
5	R&M Expenses	Rs. Cr.	62.05	53.48	64.84	65.83	60.88	71.83
6	Total O&M Expenses	Rs. Cr.	143.75	220.53	217.51	152.51	209.51	196.15
7	Water Charges	Rs. Cr.	12.00	-	-	12.00	-	-
8	Security Expenses	Rs. Cr.	-	23.09	23.09	-	20.78	20.78
9	Total O&M Expenses including water and security charges	Rs. Cr.	155.75	243.62	240.60	164.51	230.30	216.93



Additional capitalization

Petitioner's Submission

5.58 The Petitioner has submitted that the additional capitalisation for FY 2021-22 and FY 2022-23 has been computed in accordance with Clauses 14.1, 14.2, 14.3, and 14.4 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020, which specify the admissibility of additional capital expenditure incurred after the date of commercial operation, subject to prudence check.

“14.1 The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original Scope of Work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- a) Undischarged liabilities recognized to be payable at a future date;*
- b) Works deferred for execution;*
- c) Procurement of initial capital spares within the original scope of work, subject to ceiling norms specified in this Regulation;*
- d) Liabilities to meet award of arbitration or for compliance of the order or directions of any statutory authority, or order or decree of any court of law;*
- e) On account of change in law or in compliance to any existing law; and*
- f) Capital Expenses incurred due to force majeure conditions:*

Provided that in case of any replacement/up gradation of the assets, the additional capitalisation shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of decapitalisation;

Provided further that the details of work included in the original scope of work along with estimates of expenditure, undischarged liabilities and works deferred for execution shall be submitted along with the application for determination of tariff.

14.2 *The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check on the following counts:*

- a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- b) Change in law or compliance of any existing law;*
- c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- d) Liability for works executed prior to the cut-off date;*



e) Force Majeure events;

f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

g) Raising of ash dyke as a part of ash disposal system.....”

5.59 It has been submitted that during FY 2021-22, an additional capitalisation of Rs.5.83 crore was incurred on various works within the original scope of the project, which is duly reflected in the books of accounts. Both Unit-1 and Unit-2 were within their useful life during FY 2021-22, and hence the entire amount of Rs. 5.83 crore has been claimed for tariff purposes in line with the applicable provisions of the Regulations.

5.60 For FY 2022-23, the Petitioner has submitted that Unit-1 of the station completed its useful life of 25 years before the commencement of the financial year. As per Regulation 14.11 and 14.12 of the JSERC Generation Tariff Regulations, 2020, once a generating unit completes its useful life, the generating company may, at its discretion, opt to avail a Special Allowance In lieu of Renovation & Modernization (R&M) and additional capitalisation.

5.61 The Petitioner has stated that a total capital expenditure of Rs.8.47 crore was booked during FY 2022-23 in the audited accounts. Out of this, only the apportioned share of Rs.4.24 crore corresponding to Unit-2 (based on capacity ratio) has been claimed towards additional capitalisation, as no additional capitalisation is claimed for Unit-1, which has opted for the Special Allowance.

5.62 The Petitioner has therefore requested the Hon'ble Commission to approve the additional capitalisation for tariff purposes as summarized below:

Table 42 Additional capitalisation as submitted by the Petitioner for the FY 2021-22 to FY 2022-23

Particulars	Units	FY 2021-22	FY 2022-23
Opening GFA	Rs. Cr.	1,571.70	1,577.53
Additions	Rs. Cr.	5.83	4.24
Closing GFA	Rs. Cr.	1,577.53	1,581.77
Addition in Debt (70%)	Rs. Cr.	4.08	2.97
Addition in Equity (30%)	Rs. Cr.	1.75	1.27

Commission's Analysis

5.63 The Commission has outlined Clause 14.1 to Clause 14.6 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 for approval of any additional capitalisation for a generating station, as reproduced below:



“Additional Capitalisation

14.1 The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original Scope of Work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, subject to ceiling norms specified in this Regulation;*
- (d) Liabilities to meet award of arbitration or for compliance of the order or directions of any statutory authority, or order or decree of any court of law;*
- (e) On account of change in law or in compliance to any existing law; and*
- (f) Capital expenses incurred due to force majeure conditions:*

Provided that in case of any replacement/upgradation of the assets, the additional capitalisation shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of decapitalisation;

Provided further that the details of work included in the original scope of work along with estimates of expenditure, undischarged liabilities and works deferred for execution shall be submitted along with the application for determination of tariff.

14.2 The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check on the following counts:

- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force majeure events;*
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- (g) Raising of ash dyke as a part of ash disposal system.*

14.3 In case of replacement/upgradation of assets deployed under the original scope of the existing project after the cut-off date, the additional capitalisation may be admitted by the Commission, after necessary



adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
- (b) The replacement of the asset or equipment is necessary on account of change in law or force majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.

14.4 The capital expenditure, in respect of existing generating station incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:

- (a) Liabilities to meet award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;
- (b) Change in law or compliance of any existing law;
- (c) Force majeure events;
- (d) Any additional works/services, which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost;
- (e) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;
- (f) Deferred works relating to ash pond or ash handling system in addition to the original scope of work, on case-to-case basis:

Provided also that if any expenditure has been claimed under Renovation and Modernisation or Repairs and Maintenance under O&M expenses, the same shall not be claimed under this Regulation;

- (g) Usage of water from sewage treatment plant in thermal generating station.

14.5 In case there is additional capitalisation proposed during the fag end of the project (at least 5 years before the useful life or extended useful life) of the plant, the Generating Company is required to submit detailed justification of its necessity, cost-benefit analysis, DPR (if any), and rate reasonability along with the residual life assessment report of the Project. The Commission may carry out prudence check before approval of such additional capitalisation.

14.6 In case of de-capitalisation of assets of a Generating Company, the original cost of such asset as on the date of decapitalisation duly certified by its Statutory Auditor shall be deducted from the value of gross fixed asset and corresponding outstanding loan on such assets as well as equity shall be

deducted from loan and the equity balances respectively.”

- 5.64 The Commission observes that the Petitioner has claimed additional capitalisation of Rs.5.83 crore in FY 2021-22 and Rs.4.24 crore in FY 2022-23, based on the audited financial statements. These additions primarily relate to plant modification and refurbishment works within the original scope of the project.
- 5.65 The total capital expenditure booked in the audited accounts for FY 2022-23 amounts to Rs.8.47 crore. Of this, the apportioned share of Rs.4.24 crore corresponding to Unit-2 (on capacity basis) has been claimed towards tariff determination. The balance portion of expenditure attributable to Unit-1 has not been claimed under additional capitalisation, as Unit-1 has completed its useful life of 25 years prior to FY 2022-23 and TVNL has opted for the Special Allowance mechanism under Regulations 14.11 and 14.12 of the JSERC Generation Tariff Regulations, 2020. The Commission’s analysis and approval of the Special Allowance claimed by the Petitioner is discussed in a later section of this Order.
- 5.66 The Commission has verified the additions in Gross Fixed Assets (GFA) as per the audited accounts and supporting details furnished by the Petitioner. It is observed that the expenditure pertains to works within the approved scope of the generating station and no abnormal or non-recurring expenditure has been identified.
- 5.67 Based on the prudence check, the Commission finds that the claimed additional capitalisation for both FY 2021-22 and FY 2022-23 is in compliance with Regulation 14.1(a), (b), and (f) of the JSERC Generation Tariff Regulations, 2020. Accordingly, the Commission approves the same as detailed below.

Table 43 Additional capitalisation (Rs. Cr.) approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	Units	FY 2021-22		FY 2022-23	
		Petition	Approved	Petition	Approved
Opening GFA	Rs. Cr.	1,571.70	1,571.70	1,577.53	1,577.53
Additions	Rs. Cr.	5.83	5.83	4.24	4.24
Closing GFA	Rs. Cr.	1,577.53	1,577.53	1,581.77	1,581.77
Addition in Debt (70%)	Rs. Cr.	4.08	4.08	2.97	2.97
Addition in Equity (30%)	Rs. Cr.	1.75	1.75	1.27	1.27

Depreciation

Petitioner’s Submission

- 5.68 The Petitioner has submitted depreciation expenses for FY 2021-22 & FY 2022-23 as mentioned in the table below:



Table 44 Depreciation (Rs. Cr.) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Depreciation	Rs. Cr.	18.31	18.36	18.31	16.33

5.69 The Petitioner has submitted that the depreciation for the First Control Period of FY 2012-13 to FY 2015-16 has been computed based on the asset classification, cost of acquisition and additional capitalisation of assets during the Control Period.

Commission's Analysis

5.70 The Commission has reviewed the depreciation details submitted by the Petitioner and has also checked the audited accounts of FY 2021-22 & FY 2022-23. The Auditor has specifically highlighted the following in the audited accounts under note 6:

5.71 Hence for the FY 2021-22 & FY 2022-23, the Commission is approving the depreciation as per audited accounts as submitted by the Petitioner which is mentioned in the table below:

Table 45 Depreciation (Rs. Cr.) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Depreciation	Rs. Cr.	18.31	18.36	18.36	18.31	16.33	16.33

Interest on Debt

Petitioner's Submission

5.72 The Petitioner has submitted the interest & finance charges for FY 2021-22 to FY 2022-23 as per below table: -

Table 46 Interest on loan (Rs. Cr.) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Interest on Loan	Rs. Cr.	13.45	103.27	11.80	108.84

5.73 The Petitioner has also submitted that the increase in actual interest cost over the approved normative values is primarily on account of delayed and partial payments by Jharkhand Bijli Vitran Nigam Limited (JBVNL), which has led to accumulation of dues and delayed servicing of debt obligations.

5.74 The Petitioner submitted that as on 31st March 2022, JBVNL owed TVNL cumulative receivables of Rs. 4,999.81 Cr. Due to such delays in realization of dues, TVNL could not service its debt obligations on time



and had to incur penal and overdue interest charges from financial institutions.

- 5.75 The Petitioner has requested the Hon'ble Commission to approve the actual interest on loan as per the audited accounts for FY 2021-22 and FY 2022-23, amounting to Rs.103.27 crore and Rs.108.84 crore respectively.

Commission's Analysis

- 5.76 The Commission enquired the Petitioner detailed justification for such a significant increase in interest on loan, along with loan-wise details, repayment schedules, penal interest (if any), and auditor certification. The Petitioner submitted that it has not been able to repay any installment of the long-term loans availed from the State Governments of Bihar and Jharkhand, resulting in accumulation of interest liability over the years. Further, it was submitted that due to partial and delayed payments from JBVNL, the Petitioner has faced severe liquidity constraints, which has further delayed loan servicing and led to additional interest burden, including penal interest.
- 5.77 The Commission also noted that the claimed interest amount is as per provisional accounts of the Petitioner.
- 5.78 Therefore, the Commission, while approving interest on loan has taken into consideration the covenants of JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 reproduces as follows:

“15.13 The loans arrived at in the manner indicated in Clause 15.6 and Clause 15.7 of these Regulations, shall be considered as gross normative loan for calculation of Interest on Loan.

15.14 The normative loan outstanding as on April 01, 2021 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2021 from the gross normative loan.

15.15 The repayment for each year of the Control Period shall be deemed to be equal to the depreciation allowed for that financial year.

15.16 In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on pro-rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such assets.

15.17 Notwithstanding any moratorium period availed by the Generating Company, the repayment of loan shall be considered from the first year of operation of the scheme/asset.

15.18 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the Generating Company:



Provided that if there is no actual loan for a particular year but normative loan is still outstanding, then the rate of interest shall be considered on normative basis and shall be equal to Bank Rate as on April 01 of the respective year of the Control Period plus 200 basis points;

Provided also that, in case of new Generating Company commencing its operation after the date of effectiveness of these Regulations, and which does not have actual loan portfolio, the rate of interest shall be considered on normative basis and shall be equal to Bank Rate as on April 01 of the respective year of the Control Period plus 200 basis points.

15.19 The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest;

15.20 The above interest computation shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by Consumer Contribution, Grants or Deposit Works carried out by Generating Company.”

5.79 Accordingly, the Commission has computed the Interest on Loan at SBI MCLR rate plus 200 basis points on a normative basis as per the below table:

Table 47 Interest on Loan (Rs. Cr.) as approved by the Commission for FY 2021-22 & FY 2022-23

S.No	Particulars	Units	FY 2021-22	FY 2022-23
			Approved	Approved
1	Opening Balance	Rs. Cr.	390.79	376.51
2	Addition	Rs. Cr.	4.08	2.97
3	Repayment	Rs. Cr.	18.36	16.33
4	Closing Balance	Rs. Cr.	376.51	363.15
5	Average Loan	Rs. Cr.	383.65	369.83
6	Rate of Interest	%	9.00%	9.00%
7	Interest on Loan	Rs. Cr.	34.53	33.28

Return on Equity

Petitioner's Submission

5.80 The Petitioner has submitted return on equity for the third control period i.e. FY 2021-22 & FY 2022-23 as per details mentioned in table below:

Table 48 Return on Equity (Rs. Cr.) as submitted by the Petitioner for FY 2021-



22 & FY 2022-23

S. No	Particulars	UoM	FY 2021-22		FY 2022-23	
			MYT	Petition	MYT	Petition
1	Opening Balance	Rs. Cr.	184.64	229.05	184.64	230.80
2	Addition	Rs. Cr.	-	1.75	-	1.27
3	Closing Balance	Rs. Cr.	184.64	230.80	184.64	232.07
4	Average Equity	Rs. Cr.	184.64	229.92	184.64	231.44
5	Rate of Equity	%	15.00%	15.00%	15.00%	15.00%
6	Return of Equity	Rs. Cr.	27.70	34.49	27.70	34.72

5.81 The Petitioner has also submitted that since there is no income tax paid by the Petitioner during the FY 2021-22 to FY 2022-23, the post-tax rate of equity has been considered.

Commission's Analysis

5.82 The Commission has outlined clause 6.1 of Generation Tariff (1st Amendment), Regulation 2023 for approval of Return on Equity for a generating station as reproduced below:

Clause 6.1 states that:

The return on equity shall be computed on post-tax basis at the base rate of 14.50% for thermal generating stations, and run of the river hydro generating station, and at the base rate of 15.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage for generating stations whose Date of Commercial Operation is after April 01, 2021: The return on equity shall be computed on post-tax basis at the base rate of 15.00% for thermal generating stations, and run of the river hydro generating station, and at the base rate of 16.00% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage for generating stations whose Date of Commercial Operation is before April 01, 2021:

5.83 The Commission has scrutinized and verified the documents submitted by the Petitioner and accordingly, the Commission approves Return on Equity as per the details mentioned in the below table:

Table 49 ROE (Rs. Cr.) as approved by the Commission for FY 2021-22 & FY 2022-23

Particulars	UoM	Approved in Order dtd. 14-12-2023 for FY 21	FY 2021-22			FY 2022-23		
			MYT	Petition	Approved	MYT	Petition	Approved
Opening Balance	Rs. Cr.	227.81	184.64	229.05	229.05	184.64	230.80	230.80
Addition	Rs. Cr.	1.24	-	1.75	1.75	-	1.27	1.27
Closing Balance	Rs. Cr.	229.05	184.64	230.80	230.80	184.64	232.07	232.07



Particulars	UoM	Approved in Order dtd. 14-12-2023 for FY 21	FY 2021-22			FY 2022-23		
			MYT	Petition	Approved	MYT	Petition	Approved
Average	Rs. Cr.	228.43	184.64	229.92	229.92	184.64	231.44	231.44
Return of Equity	%	15.50%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Return of Equity	Rs. Cr.	35.41	27.70	34.49	34.49	27.70	34.72	34.72

Interest on Working Capital

Petitioner's Submission

5.84 The Petitioner while computing the working capital and Interest thereon as per the JSERC Generation Tariff Regulations, 2020 the norms for calculation of interest on working capital is as follows:

- i. Cost of coal or lignite and limestone towards stock, if applicable, for 10days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity, whichever is lower;
- ii. Cost of coal or lignite and limestone for 30 days for generation corresponding to normative annual plant availability factor;
- iii. Cost of secondary fuel oil for two months for generation corresponding to the Normative Annual Plant Availability Factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;
- iv. Operation and Maintenance expenses, including water charge and security expenses for one month;
- v. Maintenance spares @ 20% of Operation and Maintenance Expenses;
- vi. Receivables equivalent to 45 days of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor:”

Against the actual values of interest on working capital (In Rs. Cr.) for FY 2021-22 and FY 2022-23, the values of interest on working capital (In Rs. Cr.) as approved by the Hon'ble Commission in MYT Order dated 14th December 2023 are provided below:

Table 50 Interest on working capital (Rs. Cr.) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

S.No	Particulars	UoM	FY 2021-22		FY 2022-23	
			MYT	Petition	MYT	Petition
1	Cost of coal for 40 days considering NAPAF	Rs. Cr.	102.45	83.39	102.45	99.67



S.No	Particulars	UoM	FY 2021-22		FY 2022-23	
			MYT	Petition	MYT	Petition
2	Cost of secondary fuel oil for 2 months	Rs. Cr.	2.06	3.22	2.06	4.66
3	O&M expenses for 1 month	Rs. Cr.	12.98	20.30	13.71	19.19
4	Maintenance of Spares @20% of O&M expenses	Rs. Cr.	31.15	48.72	32.90	46.06
5	45 days receivables (capacity & energy charges @NAPAF)	Rs. Cr.	121.56	145.97	122.37	165.35
6	Working capital requirement	Rs. Cr.	270.20	301.60	273.49	334.93
7	Interest rate applicable	Rs. Cr.	10.50%	10.90%	10.50%	11.05%
8	Interest on working capital	Rs. Cr.	28.37	32.87	28.72	37.01

Commission's Analysis

5.85 The Commission has outlined clause 15.23 to clause 15.26 JSERC Generation Tariff Regulation 2020 for approval interest on working capital for a generating station as reproduced below:

15.23 The Commission shall determine the Working Capital requirement on normative basis for coal-based generating stations, which shall comprise the following components:

1. Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity, whichever is lower;

2. Cost of coal or lignite and limestone for 30 days for generation corresponding to normative annual plant availability factor;

3. Cost of secondary fuel oil for two months for generation corresponding to the Normative Annual Plant Availability Factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

4. Operation and Maintenance expenses, including water charge and security expenses for one month;

5. Maintenance spares @ 20% of Operation and Maintenance Expenses;

6. Receivables equivalent to 45days of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor:

Provided that the cost of primary fuel shall be based on the landed cost incurred (taking into account normative transit and handling losses) by the generating station and gross calorific value of the fuel on 'as received basis' as per actual weighted average for three months preceding the first month for which tariff is to be determined:

Provided further that in case of new generating station, the cost of fuel for



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the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined

15.26 The rate of Interest on Working Capital shall be on normative basis and shall be equal to Bank Rate plus 350 basis points as on September 30 of the financial year in which the MYT Petition is file dor as on April 01, of the year during the Control Period from FY 2021-22 to FY 2025-26 in which the generating station or a Unit thereof, is declared under commercial operation, whichever is later:

Provided that the rate of interest on working capital shall be trued up on the basis of Bank Rate plus 350 basis points as applicable on April 01, of the respective financial year at the time of true up”.

- 5.86 Taking into account the above provision of regulation, the Interest on Working capital has been calculated at an interest rate of 10.50% (Bank Rate plus 350 basis points) as specified in the clause 15.26 JSERC Generation Tariff Regulation, 2020 is given below.

Table 51 Interest on working capital (Rs. Cr.) as approved by the Commission for FY 2021-22 to FY 2022-23

S.No	Particulars	UoM	FY 2021-22			FY 2022-23		
			MYT	Petition	Approved	MYT	Petition	Approved
1	Cost of coal for 40 days considering NAPAF	Rs. Cr.	102.45	83.39	83.39	102.45	99.67	95.11
2	Cost of secondary fuel oil for two months	Rs. Cr.	2.06	3.22	3.22	2.06	4.66	4.66
3	O&M expenses for 1 month	Rs. Cr.	12.98	20.30	18.13	13.71	19.19	16.35
4	Maintenance of Spares @20% of O&M expenses	Rs. Cr.	31.15	48.72	43.50	32.90	46.06	39.23
5	45 days receivables (capacity & energy charges @NAPAF)	Rs. Cr.	121.56	145.97	136.76	122.37	165.35	148.63
6	Working capital requirement	Rs. Cr.	270.20	301.60	284.99	273.49	334.93	303.98
7	Interest rate applicable	Rs. Cr.	10.50%	10.90%	10.50%	10.50%	11.05%	10.50%
8	Interest on working capital	Rs. Cr.	28.37	32.87	29.92	28.72	37.01	31.92

Special Allowance

Petitioner's Submission

- 5.87 The Petitioner has submitted that as per Regulation 14.11 and 14.12 of



the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020, a generating company operating a coal-based thermal unit beyond its useful life of 25 years may, at its discretion, opt to avail a Special Allowance in lieu of claiming any capital cost revision or Renovation & Modernisation (R&M) expenditure.

5.88 The relevant provisions of the Regulations are reproduced below:

“14.11 In case of coal fired generating stations, the Generating Company, at its discretion, may opt to avail a special allowance in accordance with the norms specified in this Regulation, as compensation for meeting the requirement of expenses including renovation and modernization beyond the Useful Life of the generating station or a Unit thereof, and in such an event revision of the capital cost shall not be allowed and the applicable operational norms shall not be relaxed but the special allowance shall be included in the annual fixed cost:

Provided also that such option shall not be available for a generating station or Unit, which is in a depleted condition or operating under relaxed operational and performance norms.

14.12 A Generating Company (coal-based/lignite fired thermal generating station) on opting for Special Allowance shall be allowed @ Rs. 9.50 lakh/MW/year for the Control Period from FY 2021-22 to FY 2025-26, unit-wise from the financial year following the completion of useful life of the respective unit of the generating station:

Provided that if a unit is in commercial operation for more than 25 years as on April 01, 2021, this allowance shall be admissible from FY 2021-22:

Provided further that if special allowance is granted by the Commission, the expenditure incurred or utilized from special allowance shall be maintained separately by the generating station and details of the same shall be made available to the Commission immediately thereafter.”

5.89 The Petitioner submitted that Unit-1 (210 MW) of the Tenughat Thermal Power Station (TTPS) has completed its useful life of 25 years in FY 2021-22, and accordingly qualifies for the Special Allowance under the above provisions.

5.90 TVNL stated that it has opted for the Special Allowance for Unit-1 from FY 2022-23 at the normative rate of Rs. 9.50 lakh/MW/year, in lieu of claiming any further additional capitalisation or R&M expenditure for the said unit. The claimed amount of Rs. 19.95 crore for FY 2022-23 corresponds to the applicable rate for the 210 MW capacity of Unit-1.

5.91 The Petitioner further submitted that a Residual Life Assessment (RLA) Report conducted by M/s Becquerel Industries Pvt. Ltd. dated 29th September 2023 certified the turbine and generator of Unit-1 to be fit for continued operation for another 5 years, subject to routine condition monitoring and non-destructive testing (NDT).

5.92 The Petitioner requested the Hon’ble Commission to approve the Special



Allowance for Unit -1 for FY 2022-23 amounting to Rs. 19.95 crore, in accordance with the applicable provisions of the Regulations.

Table 52 Special Allowance (Rs. Cr.) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		Unit 1	Unit 2	Unit 1	Unit 2
Special Allowance	Rs. Cr.	-	-	19.95	-

Commission's Analysis

5.93 The Commission has outlined clause 14.11 to clause 14.12 JSERC Generation Tariff Regulation 2020 for approval of Special Allowance for a generating station as reproduced below:

14.11 In case of coal fired generating stations, the Generating Company, at its discretion, may opt to avail a special allowance in accordance with the norms specified in this Regulation, as compensation for meeting the requirement of expenses including renovation and modernization beyond the Useful Life of the generating station or a Unit thereof, and in such an event revision of the capital cost shall not be allowed and the applicable operational norms shall not be relaxed but the special allowance shall be included in the annual fixed cost:

Provided also that such option shall not be available for a generating station or Unit, which is in a depleted condition or operating under relaxed operational and performance norms.

14.12 A Generating Company (coal-based/lignite fired thermal generating station) on opting for Special Allowance shall be allowed@ Rs. 9.50 lakh/MW/year for the Control Period from FY 2021-22 to FY 2025-26, Unit-wise from the financial year following the completion of useful life of the respective Unit of generating station:

Provided that if a Unit is in commercial operation for more than 25 years as on April 01, 2021, this allowance shall be admissible from FY 2021-22:

Provided further that if special allowance is granted by the Commission, the expenditure incurred or utilized from special allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission immediately thereafter.

5.94 The Commission has examined the submissions of the Petitioner and notes that Unit-1 of Tenughat Thermal Power Station completed its useful life of 25 years during FY 2021-22. The Petitioner has opted for the Special Allowance for Unit -1 from FY 2022-23 onwards, in line with Regulations 14.11 and 14.12 of the JSERC Generation Tariff Regulations, 2020.

5.95 In response, the Petitioner furnished the required submissions, including the unit-wise treatment of capitalisation, justification for opting for Special Allowance, and reconciliation of the capitalisation reflected in the

audited accounts with the amounts claimed under additional capitalisation and Special Allowance. Based on the submissions, the Commission observes that the Petitioner has correctly claimed Special Allowance of Rs.19.95 crore for Unit-1 for FY 2022-23, in accordance with the normative provision of Rs.9.50 lakh/MW/year.

- 5.96 The Commission further notes that the Petitioner has clarified that out of the total capitalisation of Rs.8.47 crore booked in FY 2022-23, only Rs.4.24 crore pertains to Unit-2 and is therefore claimed under additional capitalisation. The remaining expenditure relating to Unit-1 has appropriately not been claimed as capitalisation, since the Petitioner has exercised the option of Special Allowance for the unit.
- 5.97 In view of the clarifications submitted by the Petitioner and the regulatory provisions governing Special Allowance, the Commission approves the Special Allowance of Rs.19.95 crore for Unit-1 for FY 2022-23. The Commission also clarifies that, since the Petitioner has opted for Special Allowance In lieu of Renovation & Modernisation (R&M) and capital additions, no further GFA additions or capitalisation for Unit-1 shall be permitted going forward, except as expressly allowed under the Regulations.
- 5.98 Accordingly, the Special Allowance of Rs.19.95 crore is hereby approved for FY 2022-23, and the treatment adopted by the Petitioner in segregating capitalisation between Unit-1 and Unit-2 stands accepted. The Commission shall continue to apply the principle that, once Special Allowance is availed, no further GFA additions or capitalisation for that unit will be admissible during the period of claim.

Table 53 Special Allowance(Rs. Cr.) approved by the Commission for FY 2021-22 & FY 2022-23.

Particulars	UoM	FY 2021-22		FY 2022-23	
		Unit 1	Unit 2	Unit 1	Unit 2
Special Allowance	Rs. Cr.	-	-	19.95	-

Non-Tariff Income

Petitioner's Submission

- 5.99 The Petitioner has submitted the non-tariff income for FY 2021-22 to FY 2022-23 as per details mentioned in the table below:

Table 54 Non-Tariff Income (Rs. Cr.) as submitted by the Petitioner for FY 2021-22 & FY 2022-23

Particulars	UoM	FY 2021-22		FY 2022-23	
		MYT	Petition	MYT	Petition
Non-Tariff Income	Rs. Cr.	18.00	28.89	18.86	23.49

Commission's Analysis



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5.100 The Commission has scrutinized the non-tariff income of the Petitioner from the audited annual accounts and has found that it is accrued through various income sources including sale of tender paper, rent received, interest on fixed deposits, miscellaneous receipts etc. The major contribution is from interest on fixed deposits.

5.101 The Commission approves the Non-Tariff income for FY 2021-22 to FY 2022-23 as per audited accounts submitted by the Petitioner as below:

Table 55 Non-Tariff Income (Rs. Cr.) approved by the Commission for FY 2021-22 & FY 2022-23.

Particulars	UoM	FY 2022-23			FY 2022-23		
		MYT	Petition	Approved	MYT	Petition	Approved
Non-Tariff Income	Rs. Cr.	18.00	28.89	28.89	18.86	23.49	23.49



Chapter 6: Summary of Fixed Cost Determinants & Annual Revenue Requirement

6.1 Regulation 15.3 of the Generation Tariff Regulations, 2020 states that the annual fixed cost of a thermal generating station shall consist of the following:

1. Return on Equity;
2. Interest on Loan Capital;
3. Depreciation;
4. Interest on Working Capital;
5. Operation & Maintenance Expenses, and
6. Less: Non-Tariff Income, and
7. Less: Income from Other Business as specified under Clause 15.50 & Clause 15.51:

Provided that Special Allowance in lieu of Renovation & Modernization (R&M), where opted in accordance with Clause 14.11 and Clause 14.12 of these Regulations, shall be recovered separately and shall not be considered for computation of Working Capital.

6.2 The Commission, after due diligence and prudence check of the documents and information's submitted by the Petitioner approves the fixed cost determinant for FY 2021-22 & FY 2022-23 in terms of the Petitioner's submission and the approval granted by the Commission as mentioned in the following table:



Table 56 Summary of ARR & Fixed cost approved by the Commission for the first control period (Rs. Cr.)

S.No	Particulars	UoM	FY 2021-22			FY 2022-23		
			MYT	Petition	Approved	MYT	Petition	Approved
A	Employee Expense including Terminal Liability	Rs. Cr.	58.49*	138.71	129.27	62.05*	108.41	99.31
B	A&G Expense	Rs. Cr.	23.21	28.35	23.40	24.63	40.22	25.00
C	R&M Expense	Rs. Cr.	62.05	53.48	64.84	65.83	60.88	71.83
1	O&M Expenses (1= A+B+C)	Rs. Cr.	143.75	220.53	217.51	152.51	209.51	196.15
2a	Water Expense	Rs. Cr.	12.00	-	-	12.00	-	-
2b	Security Expense	Rs. Cr.	-	23.09	23.09	-	20.78	20.78
3	Depreciation	Rs. Cr.	18.31	18.36	18.36	18.31	16.33	16.33
4	Interest on loans	Rs. Cr.	13.45	103.27	34.53	11.80	108.84	33.28
5	Return on Equity	Rs. Cr.	27.70	34.49	34.49	27.70	34.72	34.72
6	Interest on working capital	Rs. Cr.	28.37	32.87	29.92	28.72	37.01	31.92
7	Total Fixed Cost (7=1+2a+2b+3+4+5+6)	Rs. Cr.	225.58*	432.61	357.90	251.03*	427.20	333.18
8	Non-Tariff Income	Rs. Cr.	(18.00)	(28.89)	(28.89)	-18.86	23.49	23.49
9	Annual Fixed Charge (9=7-8)	Rs. Cr.	225.58*	403.73	329.01	232.17*	423.65	309.69
10	Total Energy Charges	Rs. Cr.		447.51	440.17		766.10	731.53
11	Special Allowance	Rs. Cr.	-	-	-	-	19.95	19.95
12	Annual Revenue Requirement	Rs. Cr.		851.24	769.18		1,189.75	1,061.17

* Excluding Terminal Liabilities



Chapter 7: Gap/(Surplus) for FY 2021-22 & FY 2022-23

Petitioner's Submission

7.1 The Petitioner has submitted Gap/(Surplus) for FY 2021-22 & FY 2022-23 as per below table:

Table 57 Gap/(Surplus) as submitted by the Petitioner for FY 2021-22 & 2022-23

Particulars	FY 2021-22	FY 2022-23
Gap/(Surplus) for the Year	251.66	222.76
Carrying Cost	145.33	104.20
Total Revenue Gap/(Surplus)	396.99	326.96
Total Revenue Gap/(Surplus) for the FY 2021-22 & FY 2022-23	723.95	

Commission's Analysis

7.2 The Commission after consideration of total fixed cost and total energy charges as approved with respect to revenue realized by the Petitioner has calculated and approved the gap/(surplus) for FY 2021-22 to FY 2022-23 as per JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020 regarding recovery or refund of revenue gap or surplus after True-up are reproduced below for reference:

"7.3 Where after the truing up, the revenue recovered is less than the trued up value approved by the Commission under these Regulations, the Generating Company shall recover from the Beneficiaries, the gap amount in accordance with Clause 7.4 of these Regulations.

7.4 The amount under-recovered or over-recovered, along with simple interest at the rate equal to Bank Rate as on April 01 of the respective year plus 350 basis points, 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: Provided that no carrying cost on the duration of delay shall be allowed on unrecovered gap if the Generating Company fails to submit the Petition as per timelines stipulated in Section A 39..."

7.3 The Commission notes that the Petitioner has not filed the True-up Petition within the stipulated timelines prescribed under Section A 39 of the Regulations. Accordingly, in line with the proviso to Regulation 7.4, the Commission disallows the carrying cost claimed by the Petitioner for the revenue gap pertaining to FY 2021-22 and FY 2022-23.

7.4 Based on the above, the Commission approves only the principal revenue gap for FY 2021-22 and FY 2022-23, without any carrying cost, as summarized below.

Table 58: Gap/(Surplus) as approved by the Commission for the FY 2021-22 & FY



2022-23 (Rs. Cr.)

S. No	Particulars	FY 2020-21	FY 2022-23		FY 2022-23	
		Approved in Order dtd. 14-12-2023	Petition	Approved	Petition	Approved
1	ARR	761.42	851.24	769.18	1,189.75	1,061.17
2	Revenue	698.73	599.58	599.58	966.99	966.99
3	Opening Gap/(Surplus)	-95.90	966.99	-40.73	599.58	128.87
4	Addition during the FY	62.69	251.66	169.60	222.76	94.18
5	Closing Gap/(Surplus)	-33.21		128.87		223.05
6	Average Gap/(Surplus)	-64.56		44.07		175.96
7	Interest Rate	11.65%				
8	Carrying Cost for respective FY	-7.52	145.33	-	104.20	-
9	Gap/(Surplus) inclusive of Carrying Cost	-40.73		128.87		223.05

7.5 The Petitioner and its beneficiaries are directed to settle the overall gap/(surplus) in accordance with the table above, in line with Clause 7.4 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020.



Chapter 8: DIRECTIVES

Filing of True Up Petition for the third control period i.e. FY 2023-24 to FY 2024-25

- 8.1 The Commission directs the Petitioner to submit true up petition for the third control period, for the financial year FY 2023-24 and FY 2024-25, within two months from the date of issue of this order.

Conversion of loan to grant

- 8.2 The Commission observed that Petitioner has not been able to service its loan in a timely manner owing to external constraints. Furthermore, the Petitioner, when submitting the interest is charges a penalty on regular basis.

In this regards, the Petitioner is directed to steadfastly approach the Govt. of Jharkhand and convert the loan to grant in order to reduce the financial burden on the beneficiaries and the end consumers of the Power Plant.

Improvement in performance of Operational parameters

- 8.3 The Commission notes with concern that the operational performance of the Petitioner is very low. In particular, the SHR and PLF can be improved further to the extent of approved operational norms. The Commission directs the Petitioner to submit an improvement plan for both its units within three months of the issue of this order.

Ash Utilization & Management

- 8.4 The Commission has observed that the Petitioner has not mentioned regarding ash utilization and its management which can be looked upon as a source of revenue. Moreover, Ministry of Environment, Forest and Climate Change on 31st December 2021 has notified the norms for fly ash utilization by coal fired power plants. In this regard the Commission directs the Petitioner to submit information of the existing practice adopted by the Petitioner.

Accounting for R&M through Special Allowance

- 8.5 As per regulation 14.12 of JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020

"14.12 A Generating Company (coal-based/lignite fired thermal generating station) on opting for Special Allowance shall be allowed@ Rs. 9.50 lakh/MW/year for the Control Period from FY 2021-22 to FY 2025-26, Unit-wise from the financial year following the completion of useful life of the respective Unit of generating station:

Provided that if a Unit is in commercial operation for more than 25 years as on April 01, 2021, this allowance shall be admissible from FY 2021-22:

Provided further that if special allowance is granted by the Commission,



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the expenditure incurred or utilized from special allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission immediately thereafter."

- 8.6 The Petitioner to maintain separate accounts for the works undertaken by the funding of the special allowance and duly submit it in filing of the next petition

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on March 24, 2026 (March Twenty-Four, Two Thousand Twenty-Six).

Date: 24.03.2026

Place: Ranchi

Sd/-

(Mahendra Prasad)

MEMBER (Law)

Sd/-

(Justice Navneet Kumar)

CHAIRPERSON



Chapter 9: ANNEXURE

List of participants in the Public hearing held on 21st November 2025 at Shyamali Guest House, Tenughat Thermal Power Station, Lalpaniya.

Sr. No.	Name	Address/Organization
1	Shri Ram Singh	ESE, TVNL
2	Ashish Kumar Sharma	ESE, TVNL
3	Rakesh Kumar Singh	DDP, TVNL
4	Mukesh Sharma	Consultant, PwC
5	Ravishankar Kumar	EEE, JBVNL
6	Birendra Kisku	Sr. Manager (PGT), JBVNL
7	Prince Ranjan	AEE, TVNL
8	Manjeet Sahay	AEE – IT, TVNL
9	Shiv Mishra	PO (HR), TVNL
10	Kishor Kumar Nayak	AO, TVNL
11	Md, Nehaludding Ansari	EE (Civil), TVNL
12	Krishna Kumar Singh	DDA, TVNL
13	Anil Kr Sharma	HD, TVNL
14	Ram Dular Panda	Press
15	Karamchand Manjhi	TVNL