

Jharkhand State Electricity Regulatory Commission



Order on
True-up for FY 2022-23,
Annual Performance Review for FY 2023-24
for
Tata Power Company Limited (TPCL)

Ranchi
June 06, 2024



Table of Contents

CHAPTER 1: INTRODUCTION	9
JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION	9
TATA POWER COMPANY LIMITED (TPCL)	12
THE PETITIONER'S PRAYERS.....	13
CHAPTER 2: PROCEDURAL HISTORY.....	15
BACKGROUND	15
INFORMATION GAPS IN THE PETITIONS	16
INVITING PUBLIC COMMENTS/SUGGESTIONS	16
SUBMISSION OF COMMENTS/SUGGESTIONS AND CONDUCT OF PUBLIC HEARING	17
CHAPTER 3: BRIEF FACTS OF THE PETITION	18
TRUING UP FOR FY 2022-23	18
CHAPTER 4: PUBLIC CONSULTATION PROCESS.....	20
QUERIST- SHRI. V. P. SINGH	20
QUERIST- SHRI. JAWAHARLAL SHARMA.....	21
QUERIST- MS. ANNY AMRITA	22
QUERIST- MS. ANNY AMRITA	23
QUERIST- SHRI. RAJESH KUMAR	24
QUERIST- SHRI. SAURABH VISHNU	25
CHAPTER 5: TRUE-UP FOR FY 2022-23	27
OPERATIONAL PERFORMANCE	27
<i>Plant Availability Factor (PAF)</i>	27
<i>Auxiliary Consumption</i>	28
<i>Plant Load Factor and Generation</i>	29
<i>Gross Station Heat Rate (GHR)</i>	30
<i>Specific Fuel Oil Consumption</i>	31
FUEL COST PARAMETER.....	32
<i>Coal Mix and Gross Calorific Value (GCV) of Primary Fuel</i>	32
<i>Transit Loss</i>	35
<i>Landed Cost of Coal</i>	35
<i>Calorific value and Cost of Secondary Fuel</i>	37
<i>Energy Charge Rate (ECR)</i>	37
SUMMARY OF FUEL COST	40
DETERMINATION OF FIXED COST	41
<i>Additional Capitalization</i>	41
<i>Depreciation</i>	47
<i>Operation & Maintenance Expenses</i>	51
<i>Water Charges, Capital Spare</i>	57
<i>Interest on Loan</i>	58
<i>Interest on Working Capital (IOWC)</i>	62
<i>Return on Equity</i>	65
<i>Incentive (Pre-Tax)</i>	68
SHARING GAIN/LOSS	70
<i>Operation Gain due to variation in Norms FY 2022-23</i>	70
<i>Gain in Operation & Maintenance</i>	72
NON-TARIFF INCOME.....	74
SHAKTI SCHEME DISCOUNT.....	75
SUMMARY OF ANNUAL REVENUE REQUIREMENT	75



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Revenue from Sale of Power.....	77
Gap/ Surplus for FY 2022-23	77
CHAPTER 6: ANNUAL PERFORMANCE REVIEW FOR FY 2023-24	80
OPERATIONAL PERFORMANCE	80
Plant Availability Factor (PAF).....	80
Auxiliary Consumption.....	81
Plant Load Factor and Generation	82
Gross Station Heat Rate (GHR)	83
Specific Fuel Oil Consumption.....	84
FUEL COST PARAMETER.....	84
Coal Mix and Gross Calorific Value (GCV) of Primary Fuel	84
Transit Loss.....	88
Landed Cost of Coal.....	89
Calorific value and Cost of Secondary Fuel	90
Energy Charge Rate (ECR)	91
SUMMARY OF FUEL COST	94
DETERMINATION OF FIXED COST	94
Additional Capitalization.....	94
Depreciation	98
Operation & Maintenance Expenses	100
Water Charges, Capital Spare	105
Interest on Loan	106
Interest on Working Capital (IOWC)	108
Return on Equity	109
INCENTIVE (PRE-TAX) FY 2022-23.....	111
SUMMARY OF ANNUAL REVENUE REQUIREMENT	112
CHAPTER 7: STATUS OF EARLIER DIRECTIVES	114
CHAPTER 8: DIRECTIVES	119
PRIMARY FUEL	119
RESIDUAL LIFE STUDY.....	119
COMPLIANCE OF DIRECTIVES ISSUED IN EARLIER ORDERS.....	119
CHAPTER 9: LIST OF PARTICIPANT	120



List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
APR	Annual Performance Review
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
COD	Date of Commercial Operation
Cr.	Crore
ECR	Energy Charge Rate
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoI	Government of India
HO & SS	Head Office and Shared Services
JSERC	Jharkhand State Electricity Regulatory Commission
Kcal	Kilocalorie
Kg	Kilogram
kWh	Kilowatt-hour
LDC	Load Dispatch Centre
LPPF	Landed Price of primary fuel
MAT	Minimum Alternative Tax
MCL	MCL Mahanadi Coalfields Ltd. (IB Valley Coalfields)
ml	Millilitre
MT	Million Tonnes
MU	Million Units
MW	Megawatt
NAPAF	Normative Annual Plant Availability Factor
O&M	Operation and Maintenance
PAF	Plant Availability Factor
PLF	Plant Load Factor
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
SLM	Straight Line Method
TPCL	Tata Power Company Limited
TSL	Tata Steel Limited
UoM	Unit of Measurement
WB	West Bokaro



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

LIST OF TABLES

Table 1: List of newspapers and dates of publication of public notice by the Petitioner.....	16
Table 2: List of newspapers and dates of publication of public notice by the Commission.....	17
Table 3: Annual Revenue Requirement (Rs. Cr.) as submitted by the Petitioner.	18
Table 4: Annual Revenue Requirement (Rs. Cr.) as submitted by the Petitioner	19
Table 5: Plant availability as approved by the Commission.	28
Table 6: Auxiliary Consumptions as approved by the Commission.....	29
Table 7: Plant Load Factor and Generation as approved by the Commission	30
Table 8: Gross Station Heat Rate (GHR) as approved by the Commission.....	31
Table 9: Specific Fuel Oil Consumption as approved by the Commission	31
Table 10: Coal Mix and GCV for Unit-II as approved by the Commission	34
Table 11: Coal Mix and GCV for Unit-III as approved by the Commission	34
Table 12: Landed Price of Primary Fuel (Rs/Ton) for Unit-II as approved by the Commission.	36
Table 13: Landed Price of Primary Fuel (Rs/Ton) for Unit- III as approved by the Commission.	36
Table 14: Calorific value & Landed Price of Secondary fuel as approved by the Commission... ..	37
Table 15: Energy Charge Rate (ECR) for Unit-II as approved by the Commission.....	40
Table 16: Energy Charge Rate (ECR) for Unit-III as approved by the Commission.....	40
Table 17: Fuel Cost for Unit-II as approved by the Commission.....	40
Table 18: Fuel Cost for Unit-III as approved by the Commission.....	41
Table 19: Apportionment ratio as submitted by the Petitioner.	41
Table 20: Asset wise Capitalization (Rs. Lakh) as submitted by the Petitioner.	42
Table 21: Capitalization and Decapitalization (in Rs. Crore) as submitted by the Petitioner	43
Table 22: Asset wise Capitalization (Rs. Crore) as approved by the Commission.	46
Table 23: Capitalization and Decapitalization (Rs. Crore) as approved by the Commission	47
Table 24: Gross Fixed Assets (Rs. Crore) for Unit II as approved by the Commission.	47
Table 25: Gross Fixed Assets (Rs. Crore) for Unit III as approved by the Commission.	47
Table 26: Depreciation (Rs. Crore) as submitted by the Petitioner.	48
Table 27: Depreciation (Rs. Crore) as approved by the Commission.	51
Table 28: Normative Employee Expenses (Rs. Crore) as submitted by Petitioner.	52
Table 29: Revised normative Expenses (Rs. Crore) as submitted by Petitioner.	53
Table 30: Water Charges (Rs. Crore) as submitted by Petitioner.	53
Table 31: O&M Expenses (Rs. Crore) as submitted by the Petitioner.	54
Table 32: Normative Employee Expenses (Rs Crore) as approved by the Commission.	55
Table 33: Normative A&G Expenses (Rs Crore) as approved by the Commission.	56
Table 34: Normative R&M Expenses (Rs Crore) as approved by the Commission.	56
Table 35: O&M Expenses (Normative Component) as approved by the Commission (Rs. Cr.) ..	56
Table 36: O&M Expenses (Variable Component) as approved by the Commission (Rs. Cr)	57
Table 37: Net O&M Expenses (Rs. Crore) as approved by the Commission.	57
Table 38: Water charges and capital expenses (Rs. Crore) as approved by the Commission. ...	58
Table 39: Interest on Loan (Rs. Crore) as submitted by the Petitioner.	59
Table 40: Interest on Loan (Rs. Crore) as approved by the Commission.....	62
Table 41: IOWC as submitted by the Petitioner (Rs. Crore)	62
Table 42: IOWC (Rs. Crore) as approved by the Commission.....	64
Table 43: Return on Equity (Rs. Crore) as submitted by the Petitioner.....	65
Table 44: Return on Equity (Rs. Crore) for Unit II as approved by the Commission	68
Table 45: Return on Equity (Rs. Crore) for Unit III as approved by the Commission	68
Table 46: Incentive (Pre-Tax) as submitted by Petitioner.....	69
Table 47: Incentive (Pre-Tax) as approved by Commission.	69
Table 48: Operational Gain (Rs. Cr.) as submitted by Petitioner.....	70
Table 49: Operational Gain (Rs. Cr.) as approved by the Commission	72
Table 50: Gain in Operation & Maintenance (Rs. Crore) as submitted by Petitioner	73
Table 51: Gain in Operation & Maintenance (Rs. Crore) as approved by the Commission.	74



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 52: Non-Tariff Income (Rs. Cr) as submitted by the Petitioner for Unit-II & Unit-III.	74
Table 53: Non-Tariff income (Rs. Cr.) as approved by the Commission for both Unit.	74
Table 54: Shakti Scheme Discount (Rs. Crore) as submitted by Petitioner.....	75
Table 55: Shakti Scheme Discount (Rs. Crore) as approved by the Commission.	75
Table 56: Annual Fixed Cost (Rs. Crore) as approved by the Commission.....	76
Table 57: AFC (Rs. Cr.) after availability as approved by the Commission.	76
Table 58: Annual Revenue Requirement (Rs. Crore) as approved by the Commission	76
Table 59: Revenue (Rs. Crore) as submitted by the Petitioner.	77
Table 60: Revenue (Rs. Crore) as approved by the Commission	77
Table 61: Gap/(Surplus) as approved by the Commission	78
Table 62: Carrying Cost for Unit-II as approved by the Commission (Rs. Crore).....	78
Table 63: Carrying Cost for Unit-III as approved by the Commission (Rs. Crore).....	79
Table 64: Carrying Cost on Revenue Gap/(Surplus) for Unit-II & Unit-III as approved by the Commission (In Rs. Cr.)	79
Table 65: Plant Availability Factor as approved by the Commission	81
Table 66: Auxiliary Consumptions as approved by the Commission.....	82
Table 67: Plant Load Factor and Generation as approved by the Commission	83
Table 68: Gross Station Heat Rate (GHR) as approved by the Commission.....	83
Table 69: Specific Fuel Oil Consumption as approved by the Commission	84
Table 70: Coal Mix and GCV for Unit-II as submitted by the Petitioner	86
Table 71: Coal Mix and GCV for Unit-III as submitted by the Petitioner.	86
Table 72: Coal Mix and GCV for Unit-II as approved by the Commission	87
Table 73: Coal Mix and GCV for Unit-III as approved by the Commission	88
Table 74: Landed Price of Primary Fuel for Unit-II as approved by the Commission.....	90
Table 75: Landed Price of Primary Fuel for Unit- III as approved by the Commission.....	90
Table 76: Calorific value & Landed Price of Secondary fuel as approved by the Commission...	91
Table 77: Energy Charge Rate (ECR) for Unit-II as approved by the Commission.....	92
Table 78: Energy Charge Rate (ECR) for Unit-III as approved by the Commission.....	93
Table 79: Total Shakti discount for FY 2023-24 as approved by the Commission after considering the impact of Discounting on SHAKTI Scheme Coal.	93
Table 80: Fuel Cost for Unit-II as approved by the Commission	94
Table 81: Fuel Cost for Unit-III as approved by the Commission	94
Table 82: Apportionment ratio as submitted by the Petitioner	95
Table 83: Asset wise Capitalization (Rs. Crore) as submitted by the Petitioner.....	96
Table 84: Capitalization and Decapitalization (Rs. Crore) as submitted by the Petitioner.	96
Table 85: Asset wise Capitalization as approved by the Commission (Rs. Crore).....	97
Table 86: Capitalization as approved by the Commission (Rs. Crore)	97
Table 87: Gross Fixed Assets (Rs. Crore) for Unit II as approved by the Commission	98
Table 88: Gross Fixed Assets (Rs. Cr) for Unit III as approved by the Commission.....	98
Table 89: Depreciation (Rs. Crore) as submitted by the Petitioner	99
Table 90: Depreciation (Rs. Crore) as approved by the Commission.	100
Table 91: Normative Employee Expenses (Rs. Crore) as submitted by the Petitioner.....	101
Table 92: Normative O&M Expenses (Rs. Crore) as submitted by the Petitioner.....	101
Table 93: Water Charges (Rs. Crore) as submitted by the Petitioner	102
Table 94: O&M Expenses (Rs. Crore) as submitted by the Petitioner	103
Table 95: Normative Employee Expenses (Rs Crore) as approved by the Commission.	103
Table 96: Normative A&G Expenses (Rs Crore) as approved by the Commission.	104
Table 97: Normative R&M Expenses (Rs Crore) as approved by the Commission.	104
Table 98: Normative O&M Expenses (Rs. Cr.) as approved by the Commission	105
Table 99: O&M Expenses (Variable Component) as approved by the Commission (Rs. Cr)	105
Table 100: Net O&M Expenses (Rs. Crore) as approved by the Commission.	105
Table 101: Water charges and capital expenses (Rs. Crore) as approved by the Commission.	106
Table 102: Interest on Loan as submitted by the Petitioner (Rs. Crore).....	107
Table 103: Interest on Loan as approved by the Commission (Rs. Crore).....	108
Table 104: IOWC (Rs. Crore) as submitted by the Petitioner.	108



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 105: IOWC (Rs. Crore) as approved by the Commission.....	109
Table 106: Return on Equity as submitted by the Petitioner (Rs. Crore)	110
Table 107: Return on Equity for Unit II as approved by the Commission (Rs. Crore).....	110
Table 108: Return on Equity for Unit III as approved by the Commission (Rs. Crore).....	111
Table 109: Annual Fixed Cost (Rs. Crore) as approved by the Commission.....	112
Table 110: AFC (Rs. Crore) after availability as approved by the Commission.....	112
Table 111: Annual Revenue (Rs. Crore) as approved by the Commission.....	112
Table 112: List of participant in the Public Hearing.....	120



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

BEFORE

**Jharkhand State Electricity Regulatory Commission,
Ranchi**

Case (Tariff) No.: 11 of 2023

In the matter of:

**Petition for
True-up for FY 2022-23, and
Annual Performance Review for FY 2023-24**

In the matter:

Tata Power Corporation Limited (TPCL)
Jojobera Power Plant, P.O. Rahargora, Jamshedpur-
831016..... **Petitioner**

PRESENT

Hon'ble Mahendra Prasad
Hon'ble Atul Kumar

Member (Law)
Member (Technical)

Order dated June 06, 2024

Tata Power Company Limited (hereinafter referred to as TPCL or the Petitioner) has filed the Petition dated December 05, 2023 for Truing up for FY 2022-23, Annual Performance Review for FY 2023-24, for Unit-II and Unit-III at Jojobera.



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 has 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 came into force, the earlier Electricity Regulatory Commission Act of 1998 stands repealed and the functions of State Electricity Regulatory Commission 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



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:

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;

- (b) 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;
- (c) facilitate intra-state transmission and wheeling of electricity;
- (d) issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
- (e) 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;
- (f) adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
- (g) levy fee for the purposes of this Act;
- (h) specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;
- (i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
- (j) fix the trading margin in the intra-state trading of electricity, if



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

considered, necessary;

- (k) 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 shall ensure transparency while exercising its powers and discharging its functions.

1.7 In discharge of its functions, the State Commission is also guided by the National Tariff Policy, 2016 as brought out by Government of India in compliance to Section 3 of the Act. The objectives of the National 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;



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

- (e) Promote generation of electricity from Renewable sources;
- (f) Promote Hydroelectric Power generation including Pumped Storage Projects (PSP) to provide adequate peaking reserves, reliable grid operation and integration of variable renewable energy sources;
- (g) Evolve a dynamic and robust electricity infrastructure for better consumer services;
- (h) Facilitate supply of adequate and uninterrupted power to all categories of consumers;
- (i) Ensure creation of adequate capacity including reserves in generation, transmission and distribution in advance, for reliability of supply of electricity to consumers.

Tata Power Company Limited (TPCL)

- 1.8 Tata Power Company Limited (hereinafter referred to as TPCL or the Petitioner), is a company incorporated under the Indian Companies Act, (VII of 1913) with its Registered Office at Bombay House, 24, Homi Mody Street, Fort, Mumbai - 400001 and is engaged in the business of Electricity Generation, Transmission and Distribution.
- 1.9 Tata Steel Limited (TSL), which is engaged in the production of iron and steel and is also a distribution licensee in Jamshedpur (Jharkhand), obtained permission from the Government of Bihar to establish power plants in Jojobera in 1991 through its subsidiary company named Jamshedpur Power Company Limited (JAPCOL) which was subsequently transferred to Tata Power Company Limited (TPCL). TPCL thereafter commissioned five Units out of which two Units (Unit-II & Unit-III) of 120 MW each at Jojobera is dedicated to supply power to TSL.
- 1.10 TPCL operates five units at Jojobera, Jharkhand with a cumulative capacity of 547.5 MW out of which two units (Unit-II & Unit-III) are the subject matter of tariff determination in this Tariff Order. Both units have an installed capacity of 120 MW each. Unit-II commenced its operations on February 01, 2001 and Unit-III on February 01, 2002.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

The Petitioner's Prayers

1.11 The Petitioner in the instant Petition made the following prayers before the Commission:

- Accept the Petition;
- Approve the Combined Operational, Fuel and Financial Parameters, Additional Capitalization, Annual Revenue Requirement and Generation Tariff for Unit-II and Unit-III of Jojobera proposed through Truing-up for FY 2022-23 and APR for FY 2023-24 proposals enclosed herewith;
- Grant liberty to the Petitioner to approach Hon'ble Commission at appropriate stage subsequently:
 - a. for determination of Supplementary Tariff for FGD System to be installed for Units-II and III including compensation for additional capital cost, operational parameter deterioration and O&M/water expenses in accordance with Regulation 14.16 and all other relevant Regulations/provisions under JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020. It is pertinent to mention here that Jojobera TPP has been classified to be under Category C and date of implementation of FGD System for this Category has been extended by MoEFCC to December 2026;
 - b. for approval of Renovation & Modernization (R&M) Plan for Unit-II and Unit- III after carrying out RLA Study in upcoming annual shutdowns in Third/Fourth Control Period as the case may be;
 - c. for pass through of arrears of Water Charges paid/payable to TSL but not approved/claimed as per Hon'ble Commission's Orders along with applicable carrying cost;
 - d. for claiming compensation for deterioration in operational parameters due to low PLF;
 - e. to modify/make additions to the above Capex proposal, if need arises during the proceedings of the present Petition



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

and/or in subsequent True-up/APR Petitions;

- f. to seek revision in tariff due to wage revision agreement being reached/or with subsequent Turing-up Petition(s).
- Provide an opportunity to the Petitioner to present its case prior to the finalization of the Tariff Order. Tata Power believes that such an approach would provide a fair treatment to all the stakeholders and may eliminate the need for a review or clarification.
 - Permit the Petitioner to propose suitable changes to the Petition and the mechanism of meeting the revenue on further analysis, prior to the final approval by the Hon'ble Commission;
 - Condone any inadvertent omissions/errors/rounding-off differences/shortcomings and permit the Petitioner to add/alter this filing and make further submissions as may be required at a future date.
 - Pass such further and other Orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.



Chapter 2: PROCEDURAL HISTORY

Background

- 2.1 The Commission had passed Business Plan & Multi Year Tariff for Control Period for FY 2016-17 to FY 2020-21 by Order dated February 19, 2018.
- 2.2 Later, the Petitioner had filed a review petition against the MYT Order dated February 19, 2018 which was disposed off by the Commission by Order dated January 9, 2019.
- 2.3 The Commission had passed the True-up for FY 2016-17 by Order dated December 27, 2019.
- 2.4 The Commission had passed the True-up for FY 2017-18, Annual Performance Review for FY 2018-19 and Mid-Term review for Revised Annual Revenue Requirement and Generation Tariff for FY 2019-20 & FY 2020-21 by Order dated February 14, 2020.
- 2.5 The Commission had passed the True-up for FY 2018-19 and Annual Performance Review for FY 2019-20 by Order dated September 09, 2020.
- 2.6 The Commission had passed the True-up for FY 2019-20, Annual Performance Review for FY 2020-21, Business Plan and Multi Year Tariff for the Control Period for FY 2021-22 to FY 2025-26 by Order dated November 04, 2022.
- 2.7 The Commission had passed the True-up for FY 2020-21 and Annual Performance Review for FY 2021-22 by Order dated May 22, 2023.
- 2.8 Later the Petitioner had filed a review petition against the True-up for FY 2019-20, Annual Performance Review for FY 2020-21, Business Plan and Multi Year Tariff for the Control Period for FY 2021-22 to FY 2025-26 by Order dated November 04, 2022 which was disposed off by the Commission by Order dated January 09, 2024.
- 2.9 The Commission had passed the True-up for FY 2021-22 and Annual Performance Review for FY 2021-22 by Order dated January 09, 2024.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Information Gaps in the Petitions

- 2.10 In exercise of the 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. 11 of 2023/314 dated January 17, 2024.
- 2.11 In response the Petitioner has furnished the revised petition to the Commission vide letter no. dated February 07, 2024.
- 2.12 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.

Inviting Public Comments/Suggestions

- 2.13 On scrutiny of the petition, the Commission has 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.
- 2.14 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	Date of Publication
Prabhat Khabar	13.02.2024 & 14.02.2024
Hindustan	13.02.2024 & 14.02.2024
The Hindustan Times	13.02.2024 & 14.02.2024
The Stateman	13.02.2024 & 14.02.2024

- 2.15 Further, the Commission had organized a Public Hearing on April 03, 2024, where an additional opportunity to all the Stakeholders was provided to submit their comments/suggestions on the instant petition. The newspapers wherein the Notice was published by the Commission are mentioned below:



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 2: List of newspapers and dates of publication of public notice by the Commission

Newspaper	Date of Publication
Prabhat Khabar	23.03.2024
Dainik Bhaskar	23.03.2024
The Times of India (English)	23.03.2024
The Hindustan Times (English)	23.03.2024
Dainik Jagaran (Hindi)	02.04.2024
Hindustan Dainik (Hindi)	02.04.2024
The Times of India (English)	02.04.2024
The Hindustan Times (English)	02.04.2024

Submission of Comments/Suggestions and Conduct of Public Hearing

2.16 Objections/Comments/Suggestions on the Petition were received. The Objections/Comments/Suggestions of the Public, Petitioner's responses and Commission's views thereon are detailed in **Chapter 4** of this Order.



Chapter 3: BRIEF FACTS OF THE PETITION

3.1 This Chapter summarizes the Petition of Truing-up for FY 2022-23, and Annual Performance Review for FY 2023-24, as filed by the Petitioner for the Commission’s approval.

Truing up for FY 2022-23

3.2 The table below summarizes the Annual Revenue Requirement for FY 2022-23 as submitted by the Petitioner against approved in the APR dated January 09, 2024.

Table 3: Annual Revenue Requirement (Rs. Cr.) as submitted by the Petitioner.

Particulars	UoM	Unit-II		Unit-III	
		APR	Petition	APR	Petition
O&M Expenses	Rs. Cr.	53.50	53.90	51.61	52.17
Depreciation	Rs. Cr.	7.03	15.66	7.67	15.24
Interest on Loan	Rs. Cr.	2.29	1.98	2.30	2.07
Interest on Working Capital	Rs. Cr.	9.99	10.30	9.80	10.16
Return on Equity	Rs. Cr.	29.57	29.53	28.86	28.58
AFC	Rs. Cr.	102.39	111.38	100.24	108.22
Water Charges	Rs. Cr.	4.21	4.15	4.35	4.28
Capital Spare	Rs. Cr.	0.43	0.37	0.00	0.00
Incentive (Pre-Tax)	Rs. Cr.		0.14		1.66
Energy Charge	Rs. Cr.	260.73	256.01	265.64	261.65
Less: Discount as per [SHAKTI 2&3]	Rs. Cr.	3.03	3.32	3.03	3.30
Less: Gain on Operational Parameters[25%]	Rs. Cr.		2.38		2.49
Less: Gain on O&M Expenses [50%]	Rs. Cr.		3.31		0.00
Less: Non-Tariff Income	Rs. Cr.		1.86		1.91
Net Annual Revenue Requirement	Rs. Cr.	364.72	361.17	367.20	364.79

Annual Performance Review for FY 2023-24

3.3 The Petitioner has projected the Annual Revenue Requirement for FY 2023-24 based on the actual figures for first six months of FY 2023-24 and estimated for the remaining six months of FY 2023-24 as tabulated below.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 4: Annual Revenue Requirement (Rs. Cr.) as submitted by the Petitioner

Particulars	UoM	Unit-II		Unit-III	
		MYT	Petition	MYT	Petition
O&M Expenses	Rs. Cr.	52.94	58.20	51.50	56.50
Depreciation	Rs. Cr.	8.53	16.73	9.01	16.05
Interest on Loan	Rs. Cr.	1.82	1.43	1.20	1.80
Interest on Working Capital	Rs. Cr.	9.14	11.90	9.26	11.83
Return on Equity	Rs. Cr.	28.33	29.74	27.53	28.80
AFC	Rs. Cr.	100.76	117.99	98.49	114.98
Water Charges	Rs. Cr.	5.80	5.88	5.76	5.68
Capital Spare	Rs. Cr.	0.00	0.00	0.00	0.00
Incentive (Pre-Tax)	Rs. Cr.				0.00
Energy Charge	Rs. Cr.	221.74	250.75	227.60	243.71
Less: Discount as per [SHAKTI 2&3]	Rs. Cr.	3.63	3.87	3.63	3.58
Less: Non-Tariff Income	Rs. Cr.		0.00		0.00
Net Annual Revenue Requirement	Rs. Cr.	324.67	370.76	328.22	360.78



Chapter 4: PUBLIC CONSULTATION PROCESS

- 4.1 On the Petitioner's plea several stakeholders responded. The Public Hearing was held on April 03, 2024 at Jamshedpur to ensure maximum public participation and transparency wherein Stakeholders put forth their comments and suggestions before the Commission. The list of attendees is attached as **Chapter 9** to 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 meaning to True-up, and APR have not been discussed in this Chapter.

Querist- Shri. V. P. Singh

Public Comments/Suggestions

- 4.3 The querist suggested that actual duration of coal stock should be considered for working capital and sufficient coal quantity should be maintained.
- 4.4 The querist further expressed that sharing of gains for both units on a combined basis has been rightly proposed and the same should be separate for outage.
- 4.5 It was suggested that the FPPPA should be charged at once so as to avoid regulatory assets

Petitioner Response

- 4.6 The Petitioner has submitted that the for the purpose of tariff, the coal stock towards working capital is considered as per the norms specified in the tariff regulations issued by the Hon'ble Commission. It is further submitted that adequate coal quantity is always maintained which is evident from the plant availability in respect of 98.18% & 98.99% for unit-2 and unit-3 respectively.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

- 4.7 As regards the suggestion that the gains for both units should be considered separately for the outage period, TPCL wishes to express that it is principally in agreement with the suggestion. It is further iterated that the Petitioner is undertaking the units' overhaul/ maintenance biannually. Therefore, in the year when annual overhaul is undertaken, R&M expenses would be higher than the year with no outage. In view of this fact, while unit may have sufficient normative expense in the year with no outage, leading to savings in that year, 50% of the same would be passed on to the consumers. In the next year, the Petitioner would be required to incur higher R&M expenses than the norm because of annual outage of the Unit, which needs to be incurred from its pocket, since savings of the previous year is not available with it as it has already been shared as per the Regulations. Under this situation, the Petitioner actually would incur loss instead of savings. The same situation shall prevail for the succeeding year with the units interchanged.
- 4.8 In Order to avoid this anomaly, the Petitioner has proposed the sharing of savings in O&M expenses taking both the Units together which is also in line with the views of the querist.
- 4.9 As regards the adjustments in the energy billing is concerned, it is submitted that as a practice, the required adjustments are carried over through supplementary billing with due reconciliation as soon as the truing up Order/ is issued by the Hon'ble Commission.

Querist- Shri. Jawaharlal Sharma

Public Comments/Suggestions

- 4.10 The querist has submitted that cheap and 24x7 power should be available for whole "Greater Jamshedpur" as envisaged in the lease. The issue is however not yet satisfactorily responded yet by the Commission.
- 4.11 The querist suggested for enhancement of the solar power utilization.
- 4.12 Concern was expressed over the water charges kept on hold by the Company.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Petitioner Response

- 4.13 As regards the query for cheap and uninterrupted power supply as per lease for entire Jamshedpur and not limited only to command area of Tata Steel distribution licensee, it is most humbly submitted that the same is beyond the purview of tariff petition and may kindly be kept aside.
- 4.14 Further, the suggestion for promoting solar power utilization is also beyond the purview of tariff petition and may kindly be kept aside.
- 4.15 As regards the water charges, it is submitted that the Petitioner in the instant petition has claimed the water charges for FY 2022-23 in terms of the methodology approved by the Hon'ble Commission in the MYT Order dated 04.11.2022 i.e. 100% base water charges + 52% water tax and further requested to allow the balance water tax along with carrying cost subject to decision in the WRIT matter pending before the High Court.
- 4.16 As regards the water charges for FY 2023-24, Government of Jharkhand (GoJ) has issued the revised water notification, w.e.f. the 1st April 2023. In terms of the revised notification, there is separate classification for supply for industrial usage and supply for municipal usage. Tata Steel vide its email communication dated 05.07.2023 informed Tata Power that they agreed to the rates for supply of water for industrial usage (Rs 13.00 per KL) and have started paying the same in its entirety to GoJ and further requested Tata Power to also make full payment in terms of Invoices raised from 01.04.2023. Accordingly, the Petitioner has considered 100% of the base water charges and 100% of the tax component, since no dispute is pending before any court, 01.04.2023 onwards.

Querist- Ms. Anny Amrita

Public Comments/Suggestions

- 4.17 The querist raised question regarding the efforts in Order to increase the participation of the common people in the public hearing.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

- 4.18 The querist enquired why power cannot be made available at subsidized rates for Jamshedpur as envisaged in the Lease.
- 4.19 Concern was raised regarding pollution impacts on the health of local people.

Petitioner Response

- 4.20 The Petitioner has submitted that proper/ prescribed mechanism is followed to make the common people aware of the petition as well as of the Public Hearing by publishing public notices in two English and two Hindi newspapers on two consecutive days.
- 4.21 It was further submitted that Tata Power's Jojobera Unit 2 and Unit 3 of 120 MW each are supplying power to Tata Steel Ltd (TSL), which is a Distribution Licensee as per the provisions of Power Purchase Agreement (PPA) duly approved by Hon'ble Commission read with Generation Tariff Regulations, 2015 & 2020. Hence, the issue of subsidized power for Jamshedpur is beyond the ambit of the instant tariff petition.
- 4.22 As regard the issue of pollution impacts, Tata Power humbly submits that it is in compliance to all environmental norms applicable to the Jojobera Thermal Power Plant. Further, it may be noted that the compliance of such norms is looked after by JSPCB and does not fall within the purview of tariff regulations issued by the Hon'ble Commission.

Querist- Ms. Anny Amrita

Public Comments/Suggestions

- 4.23 The querist suggested that the coal linkage should be increased which is presently corresponding to 75% PLF which will help to contain the Energy Charges.
- 4.24 It was further submitted that the Petitioner has claimed depreciation based on 25-year life which should be as per PPA terms i.e. 30 years. The same should be as per regulations.



Petitioner Response

- 4.25 The current coal linkage with CCL under SHAKTI Round-2 and Round-3 which is corresponding to the quantity allowed under the scheme document which was 90% of quantity at 85% PLF. This was also consistent with the PLF of the units which also used to be around 75%. For additional coal requirement, if any, Tata Power is taking due measures to secure the same at the best possible competitive rates through e-auctions conducted by CIL or Tata Steel West Bokaro mines. It is submitted that further increase in SHAKTI Coal linkage depends upon the future requirement and its commercial viability.
- 4.26 As regards the query regarding depreciation, the Petitioner most humbly submits that Residual Life Assessment in respect of the unit-2 and unit-3 has yet not been conducted. Accordingly, the extended life over the useful life as per regulations i.e. life beyond 25 years, is not certain. In such scenario, the Petitioner has prudently claimed the depreciation as per 1st proviso to regulation 15.30 of GTR-20 by spreading balance depreciable value over remaining useful life of the asset.

Querist- Shri. Rajesh Kumar

Public Comments/Suggestions

- 4.27 It was enquired by the querist that why coal purchase is made only from CIL and why not from open market or from coal mines owned by Tata.
- 4.28 The querist further commented that no plan has been proposed to reduce the maintenance expenses of the units and to contain the R&M expenses.

Petitioner Response

- 4.29 The coal supplied from CIL is at notified prices which are most competitive whereas coal procured from open market is definitely at some premium over and above the notified prices. Further, to ensure assured supply at notified rates, FSA has been entered into with CIL. Only additional coal quantity, if required, is procured through open market or



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

mines by Tata Steel securing interest of end consumers.

- 4.30 As regards the suggestion regarding the plans to reduce the maintenance of the units and to contain the R&M expenses, Tata Power humbly submits that the units are in the fag stage of its useful life i.e. 22 and 23 years completed out of the useful life of 25 years. Despite of the age of the plant, the plant availability has been maintained more than 90% with minimal outage and maintenance requirement. Further, the R&M expenses claimed are as per the approval accorded in MYT Order read with tariff regulations. It is most humbly submitted that no additional R&M expenses have been claimed by the Petitioner.

Querist- Shri. Saurabh Vishnu

Public Comments/Suggestions

- 4.31 The querist submitted that water charges payable to Government of Jharkhand by Tata Steel are still unpaid and the Commission should examine the claim of the Petitioner in this regard before approving the same.
- 4.32 Concerns were raised regarding pollution, CSR and local employment.

Petitioner Response

- 4.33 As regards the payment by Tata Steel to Government of Jharkhand on account of water charges, it is submitted that the same is beyond the purview of the instant petition. However, it is submitted that the Petitioner in the instant petition has claimed the water charges for FY 2022-23 in terms of the methodology approved by the Hon'ble Commission in the MYT Order dated 04.11.2022 and in terms of the revised water notification, w.e.f. the 1st April 2023. For further details, it is requested to refer to the response submitted hereinabove against the query raised by Mr. Jawaharlal Sharma.
- 4.34 As regard the issue of issues raised by the querist related to pollution, CSR and local employment, the same does not fall within the purview of



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

tariff regulations issued by the Hon'ble Commission.

Commission analysis

4.35 The Commission has noted the Stakeholder's objection and Petitioner's response on the said issue.



Chapter 5: TRUE-UP FOR FY 2022-23

- 5.1 The Commission had passed order on MYT for the 3rd Control Period i.e., FY 2021-22 to FY 2025-26 vide Order dated November 04, 2022 based on the principles specified in the JSERC Generation Tariff Regulations, 2020.
- 5.2 The Commission had passed review order case no. 18 of 2022 vide order dated January 09, 2024 based on principles specified in the JSERC Generation Tariff Regulations, 2015, and JSERC Generation Tariff Regulations 2020 along with amendment thereof.
- 5.3 The Commission had passed True-up for FY 2021-22 and Annual Performance Review for FY 2022-23 by Order dated January 09, 2024.
- 5.4 In the instant petition the Petitioner has sought approval for True-up for FY 2022-23 and Annual Performance Review for FY 2023-24 based on the Generation Tariff Regulation 2020, Generation Tariff Regulation (1st Amendment) 2023 and the methodology adopted by the Commission in the previous Tariff Order.
- 5.5 The Commission on the basis of provisions of the Tariff Regulations, 2020, and GTR (1st Amendment) 2023, has determined the True-up for FY 2022-23 on consideration of:
- Audited account for FY 2022-23;
 - Certified Document submitted by the Petitioner;
 - Methodology adopted by the Commission in its earlier Orders.

Operational Performance

Plant Availability Factor (PAF)

Petitioner's Submission

- 5.6 The Petitioner has submitted that the month-wise actual plant availability duly certified by Tata Steel Load Dispatch Centre (LDC). Accordingly, claimed the average annual plant availability for Unit-II &

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Unit-III as 98.99% and as 97.37% respectively.

Commission's Analysis

- 5.7 In accordance with '**clause 16.1**' of JSERC Generation Tariff Regulation (1st Amendment) 2023, the Commission approves the Normative Plant Availability factor as 85.00%.
- 5.8 On scrutinizing and analyzing the month wise actual plant availability factor duly certified by Tata Steel, LDC as annexed in '**annexure P3**' of main petition and on prudent check, the Commission approves the actual plant availability for FY 2022-23 as 98.99% and as 97.37% for Unit-II and Unit-III respectively as given below:

Table 5: Plant availability as approved by the Commission.

Particulars	UoM	APR	Petition	Approved
Unit-II				
NAPAF	%	85.00	85.00	85.00
Actual Plant Availability	%	-	98.99	98.99
Unit-III				
NAPAF	%	85.00	85.00	85.00
Actual Plant Availability	%	-	97.37	97.37

Auxiliary Consumption

Petitioner's Submission

- 5.9 The Petitioner has submitted that the actual Auxiliary Power Consumption of Unit-II and Unit-III for FY 2022-23 has been at 8.50% and 8.61% respectively as compared to Normative Auxiliary Power Consumption of 10.00% for each Unit as specified in 1st Amendment Generation Tariff Regulation 2023. While these are annual average of monthly actual auxiliary consumption, the Normative of 10.00% has been considered for Truing-up for both Unit-II and Unit-III. Accordingly, Auxiliary Consumption of 10.00% has been considered for FY 2022-23.

Commission's Analysis

- 5.10 In accordance with **clause 16.1** of JSERC Generation Tariff Regulation



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

(1st Amendment) 2023, the Commission approves the normative auxiliary Consumption as 10.00% for both units.

- 5.11 On scrutinizing and analyzing the material, information, and actual figure and details as annexed in '**annexure-R1**' data Gap reply submission and on prudent check the Commission approves the actual auxiliary consumption is given below.

Table 6: Auxiliary Consumptions as approved by the Commission.

Particulars	UoM	MYT	Petition	Approved
UNIT-II				
Normative Auxiliary Consumption	%	9.00	10.00	10.00
Actual Auxiliary Consumption	%	8.76	8.50	8.50
UNIT-III				
Normative Auxiliary Consumption	%	9.00	10.00	10.00
Actual Auxiliary Consumption	%	8.87	8.61	8.61

Plant Load Factor and Generation

Petitioner's Submission

- 5.12 The Petitioner has submitted the actual Plant Load Factor (PLF) for Unit-II and Unit-III as 83.83% and 86.30% respectively. For Unit-II the PLF is less than the normative PLF of 85.00% is mainly due to lower system demand for some of the month.
- 5.13 The Petitioner has further submitted that the actual gross generation for both the Units is lower than that approved in APR Oder dated January 09, 2024 is due to low demand from the System.
- 5.14 The Petitioner has claimed the actual gross generation from Unit-II and Unit-III of Jojobera generating station as 881.29 MUs and 907.14 MUs respectively. Likewise, the Petitioner has submitted net generation (ex-bus generation) for Unit-II and Unit-III as 806.26 MUs and 829.04 MUs respectively.

Commission’s Analysis

5.15 On scrutinizing and analyzing the material, information, actual figure and details submitted by the Petitioner and on prudent check the Commission approves the Gross Generation, Net Generation, and Plant Load Factor for FY 2022-23 is given below.

Table 7: Plant Load Factor and Generation as approved by the Commission

Particulars	UoM	APR	Petition	Approved
UNIT-II				
Gross Generation	MU	893.80	881.23	881.23
Net Generation	MU	815.47	806.29	806.29
Actual PLF	%	85.03	83.83	83.83
UNIT-III				
Gross Generation	MU	925.33	907.14	907.14
Net Generation	MU	843.26	829.04	829.04
Actual PLF	%	88.03	86.30	86.30

Gross Station Heat Rate (GHR)

Petitioner’s Submission

5.16 The Petitioner has submitted the actual Gross Station Heat Rate (GHR) as 2535.92 kCal/kWh for Unit-II and 2533.35 kCal/kWh for Unit-III against the normative approved value of 2567.00 kCal/kWh and 2577.00 kCal/kWh for Unit-II and Unit-III respectively.

Commission’s Analysis

5.17 In accordance with **clause 16.1** of JSERC Generation Tariff (1st Amendment) Regulation, 2023, the Commission approves the Normative Station Heat Rate as 2567.00 kCal/kWh and 2577.00 kCal/kWh for Unit-II and Unit-III respectively.

5.18 On scrutinizing and analyzing the material, information, actual figure and details submitted by the Petitioner, the Commission approves the Actual Gross Station Heat Rate for FY 2022-23 is given below.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 8: Gross Station Heat Rate (GHR) as approved by the Commission.

Particulars	UoM	APR	Petition	Approved
UNIT-II				
Normative Station Heat Rate	kCal/kWh	2567.00	2567.00	2567.00
Actual Gross SHR	kCal/kWh	2541.32	2535.92	2535.92
UNIT-III				
Normative Station Heat Rate	kCal/kWh	2577.00	2577.00	2577.00
Actual Gross SHR	kCal/kWh	2540.62	2533.35	2533.35

**Specific Fuel Oil Consumption
Petitioner's Submission**

5.19 The Petitioner has submitted the specific fuel oil consumption as 0.50 ml/kWh for both the Units for purpose of True-up for FY 2022-23. It has further submitted that actual specific fuel oil consumption as 0.09 ml/kWh and 0.21 ml/kWh respectively for Unit-II & Unit-III for the purpose of computing gain due to actual operational performance.

Commission's Analysis

5.20 In accordance with **clause 16.1** of JSERC Generation Tariff Regulation (1st Amendment) 2023, the Commission approves the specific fuel oil consumption as 0.5 ml/kWh for both the Units.

5.21 On scrutinizing and analyzing the material, information, actual figure and details submitted by the Petitioner. And on prudent check the Commission approves the actual specific fuel oil consumption for FY 2022-23 is given below.

Table 9: Specific Fuel Oil Consumption as approved by the Commission

Particulars	UoM	APR	Petition	Approved
UNIT-II				
Specific Fuel Oil Consumption	ml/kWh	0.50	0.50	0.50
Actual Specific Fuel Oil Consumption	ml/kWh	-	0.09	0.09
UNIT-III				
Specific Fuel Oil Consumption	ml/kWh	0.50	0.50	0.50
Actual Specific Fuel Oil Consumption	ml/kWh		0.21	0.21



Fuel Cost Parameter

Coal Mix and Gross Calorific Value (GCV) of Primary Fuel

Petitioner's Submission

- 5.22 The Petitioner has submitted that with the commencement of supply from SHAKTI allocations, consumption of Shakti Coal has been maximized and benefits of the lower tariff along with the SHAKTI Discount has been passed on to the beneficiary through monthly billing.
- 5.23 It was submitted that the linkage under Shakti coal is only sufficient corresponding to PLF of 75% and, hence, the balance coal has to be arranged from alternate sources including Middling Coal from West Boakro Collieries. These fact was also highlighted by the Petitioner in the MYT Petition and has also been acknowledged by this Hon'ble Commission in the MYT Order dated 04.11.2022. The Hon'ble Commission may further appreciate that demand of a distribution licensee is beyond the control of Generating Station and, hence, variations in fuel mix on account of it is beyond the control of Generating Station.
- 5.24 It was further submitted that in series of directions/notifications of Ministry of Power (MoP) starting from 7.12.2021, it had stressed upon the Generating Companies to import coal considering the increase in demand and also supply from Coal India Limited not being commensurate with the requirements of thermal power plants. It was pertinent to mention that the situation of inadequate coal/depleted coal stocks at Power Stations was at peak during the 1st Quarter of FY 22-23 and same is evident from the fact that MoP increased the blending ratio of Imported coal from 4% as advised in advisory dated 07.12.2021 to 10% in Advisory issued dated 28.04.2022 and, thereafter, issuing directions u/s 11 of the Electricity Act for import of coal. The situation has only started improving slowly from month of July 2022 and, accordingly, MoP on 1st August onwards has left IPPs to decide on import of coal after assessing the availability of domestic coal supplies. The said Advisory issued by MoP on dated 7.12.2021, 28.04.2022 and 01.08.2022 is enclosed herewith

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

and marked as **‘Annexure-1’**. Accordingly, Petitioner during above crisis, apart from approved sources has also relied on other domestic sources viz., e-auction Coal, Tailing and Reject Coal from West Bokaro Collieries to meet its coal requirement.

- 5.25 It was also submitted that the Sub-Group Committee has been constituted comprising of members from MoP, MoC, Railways, CEA, CIL and officials from Generating companies for weekly review on supply of coal to power sector and supply plan to augment the coal stock at Plants/Generating companies having lesser coal stock. Sub-group Committee during weekly review had mostly recommended a maximum of 1 Rake in RCR mode from CCL to Jojobera Unit-II & III. Accordingly, coal supply from CCL to Jojobera unit was constrained to be supplied under Road cum Rail (RCR) mode only. The above restriction has, thus, impacted the actual coal materialization of CCL Shakti coal, led to supply of CCL WIV Coal and thereby impacted overall coal cost.
- 5.26 Moreover, it was stated that the sourcing of imported coal could have impacted the Energy Charge Rate severely, however, with all proactive measures, the Petitioner was able to manage its coal requirements through CIL, E-Auction Coal organized by CIL or other coal from West Bokaro Collieries thereby containing the overall increase in coal cost.
- 5.27 Accordingly, the Petitioner-Tata Power has procured coal from e-auction to meet the coal deficit and overcome the emergency situation had duly apprised the beneficiaries and obtained due consent from the same.
- 5.28 The Petitioner has enclosed **annexure P4** which apprised the Hon’ble Commission on such minor deviation and overall impact on ECR on dated 30.09.2022, 31.12.2022, 31.03.2023 and 30.06.2023.

Commission’s Analysis

- 5.29 The Commission has observed that the Petitioner had procured coal against the planned/agreed quantum and shortage in FY 2022-23 that are approved by the Commission in its MYT Order dated November 04, 2022. In this regard, the Commission in the discrepancy note dated

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

January 17, 2024 had directed the Petitioner to provide justification for deviation from the approved coal purchase plan as per earlier Order. The Petitioner in its reply dated February 06, 2024 submitted the details of coal consumption along with justification for deviations from the approved procurement plan.

- 5.30 Considering the facts submitted by the Petitioner and after due diligence, the Commission approves the coal mix and weighted average GCV of coal for Unit-II and Unit-III of Jojobera Generation station as tabulated hereunder.

Table 10: Coal Mix and GCV for Unit-II as approved by the Commission

Particulars	Fuel Mix (%)			GCV (kCal/kg)		
	APR	Petition	Approved	APR	Petition	Approved
Middling Coal	5.54%	12.65%	12.65%	4140.12	4100.16	4100.16
WB Reject Coal	0.00%	0.03%	0.03%		1904.80	1904.80
CCL [Shakti 3] Coal	9.44%	14.87%	14.87%	3717.68	3753.98	3753.98
E Auction	7.97%			4140.12		
Tailing (Road) Coal	0.00%	0.08%	0.08%		4205.17	4205.17
CCL [Shakti 2] WIV Coal	28.87%	28.44%	28.44%	3944.59	4001.80	4001.80
ECL [Shakti 2] Coal	6.21%	9.95%	9.95%	5041.66	4965.09	4965.09
CCL [Shakti 2] Coal	10.80%	9.57%	9.57%	3634.42	3715.82	3715.82
MCL [Shakti 2] Coal	11.89%	12.55%	12.55%	3137.84	3206.77	3206.77
CCL SFA	19.28%	11.86%	11.86%	2940.27	2940.27	2940.27
Wtg. Avg. GCV				3694.71	3819.69	3819.69

Table 11: Coal Mix and GCV for Unit-III as approved by the Commission

Particulars	Fuel Mix (%)			GCV (kCal/kg)		
	APR	Petition	Approved	APR	Petition	Approved
Middling Coal	6.56%	17.93%	17.93%	4145.34	4104.50	4104.50
CCL [Shakti 3] Coal	9.71%	14.18%	14.18%	3776.13	3775.57	3775.57
E Auction	6.88%			4145.34		
CCL [Shakti 2] WIV Coal	28.06%	28.38%	28.38%	3954.52	4009.78	4009.78

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	Fuel Mix (%)			GCV (kCal/kg)		
	APR	Petition	Approved	APR	Petition	Approved
ECL [Shakti 2] Coal	6.07%	4.50%	4.50%	4970.10	4965.39	4965.39
CCL [Shakti 2] Coal	13.90%	10.76%	10.76%	3683.29	3723.96	3723.96
MCL [Shakti 2] Coal	14.14%	15.32%	15.32%	3195.33	3242.92	3242.92
CCL SFA	14.67%	8.93%	8.93%	2985.29	2985.29	2985.29
Wtg. Avg. GCV				3737.26	3796.75	3796.75

Transit Loss

Petitioner's Submission

5.31 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.

Commission's Analysis

5.32 The Commission has observed that the actual transit loss of coal depends on various factors like category of coal, foreign particles content, moisture content, distance from mines etc. Considering all the factors, the Commission approves the weighted average normative transit loss of 0.8%.

Landed Cost of Coal

Petitioner's Submission

5.33 The Petitioner has submitted the source wise actual landed price of coal from each source by incorporating the normative transit loss.

Commission's Analysis

5.34 On scrutinizing and analyzing the material, information, actual figure and details submitted by the Petitioner and on prudent check the



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Commission approves the Landed price of primary fuel for FY 2022-23 is tabulated hereunder.

Table 12: Landed Price of Primary Fuel (Rs/Ton) for Unit-II as approved by the Commission.

Particulars	Rs./Ton		
	APR	Petition	Approved
Middling Coal	5316.81	5301	5301.47
WB Reject Coal		4519	4519.00
CCL [Shakti 3] Coal	3627.93	3551	3551.14
E Auction	5316.81		
Tailing (Road) Coal		9220	9220.00
CCL [Shakti 2] WIV Coal	4390.91	4551	4551.39
ECL [Shakti 2] Coal	5545.15	5497	5497.14
CCL [Shakti 2] Coal	3340.35	3364	3364.06
MCL [Shakti 2] Coal	2653.23	2673	2673.21
CCL SFA	3411.29	3411	3411.29
Wtg. Avg. Landed Price of Primary Fuel	4006.76	4110.70	4110.70

Table 13: Landed Price of Primary Fuel (Rs/Ton) for Unit- III as approved by the Commission.

Particulars	Rs./Ton		
	APR	Petition	Approved
Middling Coal	5407.84	5170.83	5170.83
CCL [Shakti 3] Coal	3649.19	3559.76	3559.76
E Auction	5407.84		
CCL [Shakti 2] WIV Coal	4401.88	4580.85	4580.85
ECL [Shakti 2] Coal	5464.17	5461.83	5461.83
CCL [Shakti 2] Coal	3294.44	3316.67	3316.67
MCL [Shakti 2] Coal	2652.30	2672.79	2672.79
CCL SFA	3388.01	3388.01	3388.01
Wtg. Avg. Landed Price of Primary Fuel	3978.40	4046.44	4046.44



Calorific value and Cost of Secondary Fuel

Petitioner’s Submission

5.35 The Petitioner has submitted the weighted average calorific value and landed price of secondary fuel (i.e., LDO) is 8845.92 kCal/L and Rs. 74076.89 /kL for Unit-II and 8647.95 kCal/L and Rs. 71491.22 /kL for Unit-III respectively.

Commission’s Analysis

5.36 On scrutinizing and analyzing the material, information, actual figure and details as annexed in ‘**annexure P7**’ & ‘**annexure P8**’ of the main petition and on prudent check the Commission approves the calorific value and landed price of secondary fuel for FY 2022-23 is tabulated hereunder.

Table 14: Calorific value & Landed Price of Secondary fuel as approved by the Commission.

Particulars	Calorific Value (kcal/L)			Landed Price (Rs./kL)		
	APR	Petition	Approved	APR	Petition	Approved
UNIT-II	10331.04	8845.92	8845.92	67946.50	74076.89	74076.89
UNIT-III	10326.70	8647.95	8647.95	67399.32	71491.22	71491.22

Energy Charge Rate (ECR)

Petitioner’s Submission

5.37 The Petitioner has submitted the Energy Charge Rate (ECR) for FY 2022-23 as Rs. 3.175/kWh and Rs. 3.156/kWh for Unit-II and Unit-III respectively before taking into account the discount of Shakti Coal.

5.38 The Petitioner has considered the operational parameters at normative level as specified in Generation Tariff Regulation (First Amendments) 2023 i.e. Specific Fuel Consumption at 0.5 ml/kWh, Auxiliary Power Consumption of 10.00% for each units and station Heat rate as 2567 kCal/kWh and 2577 kCal/kWh for Unit-II & Unit-III respectively, for the



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

purpose of computing the Energy Charge Rate for FY 2022-23.

- 5.39 Further, the Petitioner has considered the storage and handling loss of 85 kCal/kg in received GCV for Computation of ECR as specified in the Generation Tariff Regulation (First Amendments) 2023.
- 5.40 The Petitioner has further submitted that the variation in ECR compared to approved ECR is on the account of revised Operational Target as specified in Generation Tariff Regulation (First Amendments) 2023 and due to change in GCV/price of the approved sources, sourcing of e-auction coal at the time of crisis as stated in above paragraph which has led to increase in the coal cost.

Commission's Analysis

- 5.41 The Commission has outlined **clause 17.7**, **clause 17.8** of JSERC Generation Tariff Regulation, 2020, and **clause 7.1** of JSERC Generation Tariff (1st Amendment) Regulation, 2023 for the approval of the Energy Charge Rate (ECR) as reproduced below:

“17.7 Total Energy charge payable to the Generating Company for a month shall be = Energy charge rate (in Rs. /kWh) x Scheduled energy (ex-bus) for the month (in kWh.)

17.8 Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

a) For coal based stations

$$ECR = \{(SHR - SFC \times CVSF) \times LPPF / CVPF + SFC \times LPSFi + LC \times LPL\} \times 1 / (1 - AUX)\}$$

Where,

AUX - Normative auxiliary energy consumption in percentage;

CVPF- (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations;

(b) Weighted Average Gross calorific value of primary fuel as received in kCal per kg, per litre or per standard cubic



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

meter, as applicable for lignite, gas and liquid fuel based stations;

(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio;

CVSF - Calorific value of secondary fuel, in kCal per ml

ECR - Energy charge rate, in Rupees per kWh.

SHR - Gross station heat rate, in kCal per kWh.

LC = Normative limestone consumption in kg per kWh

LPPF - Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed price of primary fuel shall be arrived in proportion to blending ratio)

LPSFi=Weighted Average Landed Price of Secondary Fuel in Rs./ml during the month

LPL = Weighted average landed price of limestone in Rupees per kg.

SFC - Specific fuel oil consumption, in ml per kWh”

Generation Tariff (1st Amendment) Regulation 2023

*7.1 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**’ less **85 kCal/Kg** on account of variation during storage at generating station as per actual weighted average for three months preceding the first month for which tariff is to be determined:*

5.42 In accordance with **clause 10.1** of JSERC (Generation Tariff Regulation) 1st Amendment 2023, the Commission approves the normative operational parameter such as normative auxiliary consumption, Normative station Heat Rate, Specific fuel oil Consumption.

5.43 Accordingly, the Commission compute the ECR based on coal mix, GCV of primary fuel, GCV of secondary fuel, landed price of primary and

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

secondary fuel, normative transit loss, operational parameter as approved earlier in this Order is tabulated hereunder.

Table 15: Energy Charge Rate (ECR) for Unit-II as approved by the Commission.

Particulars	UoM	APR	Petition	Approved
Normative Auxiliary Consumption (AUX)	%	10.00%	10.00%	10.00%
Normative SHR	kCal/kWh	2,567.00	2567.00	2,567.00
Normative SFC	mL/kWh	0.50	0.50	0.50
Calorific Value of Oil (CVSF)	kCal/ml	10.33	8.85	8.85
GCV of Primary Fuel (CVPF)	kCal/kg	3,609.71	3,734.69	3,734.69
Landed Price of Primary Fuel (LPPF)	Rs./kg	4.01	4.11	4.11
Landed Price of Secondary Fuel (LPSFi)	Rs./ml	0.07	0.07	0.07
Energy Charge Rate (ECR)	Rs/kWh	3.197	3.175	3.175

Table 16: Energy Charge Rate (ECR) for Unit-III as approved by the Commission

Particulars	UoM	APR	Petition	Approved
Normative Auxiliary Consumption (AUX)	%	10.00%	10.00%	10.00%
Normative SHR	kCal/kWh	2,577.00	2577.00	2,577.00
Normative SFC	mL/kWh	0.50	0.50	0.50
Calorific Value of Oil (CVSF)	kCal/ml	10.33	8.65	8.65
GCV of Primary Fuel (CVPF)	kCal/kg	3,652.26	3,711.75	3,711.75
Landed Price of Primary Fuel (LPPF)	Rs./kg	3.98	4.05	4.05
Landed Price of Secondary Fuel (LPSFi)	Rs./ml	0.07	0.07	0.07
Energy Charge Rate (ECR)	Rs/kWh	3.150	3.156	3.156

Summary of Fuel Cost

5.44 On consideration of the submission and details furnished by the Petitioner, the Commission approves the Fuel Cost for both the unit as summarized below:

Table 17: Fuel Cost for Unit-II as approved by the Commission.

Particulars	UoM	APR	Petition	Approved
Primary Fuel Cost	Rs. Cr.	257.65	252.69	252.69
Secondary Fuel Cost	Rs. Cr.	3.08	3.32	3.32
Energy Cost	Rs. Cr.	260.73	256.01	256.01

Table 18: Fuel Cost for Unit-III as approved by the Commission

Particulars	UoM	APR	Petition	Approved
Primary Fuel Cost	Rs. Cr.	262.49	258.35	258.35
Secondary Fuel Cost	Rs. Cr.	3.16	3.29	3.29
Energy Cost	Rs. Cr.	265.64	261.65	261.65

Determination of Fixed Cost

Additional Capitalization

Petitioner's Submission

5.45 The Petitioner has submitted the actual capitalization for Unit-II and Unit-III for FY 2022-23 which is broadly categorized under two heads:

- **Capitalization-Standalone:** This category includes the capitalized costs incurred for assets/schemes exclusively for Unit-II or Unit-III.
- **Capitalization-Common Facilities:** This category includes the assets/schemes which are common to all the Units at the Jojobera Power Plant i.e. Unit-I, Unit-II, Unit-III, Unit-IV of Tata Power and Unit-V of Industrial Energy Limited (IEL). These assets/schemes provide facilities to all the above Units and therefore the capitalized cost of such assets/schemes are apportioned to derive the GFA part of Unit-II and Unit-III appropriately.

5.46 The Petitioner has further submitted that the apportionment ratio was worked out individually for Unit-II and Unit-III and combined based on the installed capacity of these Units with respect to the installed capacity of Unit-I, Unit-II, Unit-III, Unit-IV and IEL Unit-V of Jojobera Power Plant is given below.

Table 19: Apportionment ratio as submitted by the Petitioner.

Particulars	UoM	MYT
Installed Capacity (Unit-I)	MW	67.5
Installed Capacity (Unit-II)	MW	120
Installed Capacity (Unit-III)	MW	120
Installed Capacity (Unit-IV)	MW	120



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	UoM	MYT
Installed Capacity (Unit-V-IEL)	MW	120
Installed Capacity of Jojobera Power Plant	MW	547.5
Contribution of Unit-II	%	21.92
Contribution of Unit-III	%	21.92
Combined Contribution (Unit-II + Unit-III)	%	43.84

5.47 The Petitioner has submitted the scheme wise additional capitalization performed in FY 2022-23 compared to capitalization plan as proposed in APR petition for FY 2022-23 have been presented hereunder.

Table 20: Asset wise Capitalization (Rs. Lakh) as submitted by the Petitioner.

Sr. No	Project Description	Total Cost as per Order (Lakh)	Total Proposed Cost (Lakh)	Used in Units	Apportioned Cost (Proposed) to U2&3(Lakh)	Approved in the MYT Order(Valu e Apportione d to Unit 2&3)	Revised Capitalisatio n Plan (Value Apportioned to Unit 2&3) proposed in APR FY 2022-23	Petitio n
1	Replacement of Dead Tank CT with Live Tank CT (Carry forward)	174.00	205.26	1,2,3,4,5	89.98	17.75	18.42	13.51
2	Turbine and Generator Bearing sets (Carry Forward)		78.97	2	78.97		42.69	36.90
3	Control Room AC System	345	345	2,3	345	172.5	172.50	
4	Ash Conveying pipe line	280	280	2,3	280	180	50.00	
5	Workshop machine Tools, Condition Monitoring tools & Mobile Environmental dust Extractor	200	200	1,2,3,4,5	87.67	54.79	30.00	
6	Turbine Parting Plane Bolts & Coupling Bolts	433.76	433.76	2	433.76	433.76		
7	BFP Destaging	275	275	2,3	275		52.46	18.09
8	Multi-Layered Security System for Jojobera Power Plant.	275	275	1,2,3,4,5	120.55	54.79	40.00	
9	CHP PLC Upgradation		150	1,2,3,4,5	65.75		65.75	65.63
10	Procurement of Laptops/IT Equipment's		9.49	1,2,3,4,5	4.16			4.16
11	Water cooler for employees/worke		2.00	1,2,3,4,5	0.88			0.88



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Sr. No.	Project Description	Total Cost as per Order (Lakh)	Total Proposed Cost (Lakh)	Used in Units	Apportioned Cost (Proposed) to U2&3(Lakh)	Approved in the MYT Order(Value Apportioned to Unit 2&3)	Revised Capitalisation Plan (Value Apportioned to Unit 2&3) proposed in APR FY 2022-23	Petition
	r							
12	Vehicles		44.21	1,2,3,4,5	19.38			19.38
	Total	1,982.76	2,298.69		1,801.10	913.60	471.82	158.55

Table 21: Capitalization and Decapitalization (in Rs. Crore) as submitted by the Petitioner

Particulars	Unit-II		Unit-III	
	APR	Petition	APR	Petition
Capitalization	2.15	0.52	2.15	0.70
Decapitalization	0.44	0.14	0.44	0.02

Commission's Analysis

5.48 The Commission has outlined **clause 14.1** to **clause 14.6** of JSERC Generation Tariff Regulation, 2020 for approval of any additional capitalization for a generating station as reproduced below:

“Additional Capitalization

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*



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

existing law;

- (f) *Capital Expenses incurred due to force majeure conditions:*

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

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/up gradation of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization 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*



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

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 capitalization 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 the detail justification of its necessity during the fag year, 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 based on the detail submitted by the Generating Company, its necessity, its financial viability before approval of such

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

additional capitalization.

14.6 In case of de-capitalisation of assets of a Generating Company, the original cost of such asset as on the date of decapitalization 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. Such deductions shall be carried out in the year such de-capitalisation takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan shall be carried out duly taking into consideration the year in which it was capitalized”

5.49 The Commission has observed that the Petitioner has deviated from the MYT Order dated November 04, 2022 and APR Order dated January 09, 2024. Accordingly, the Commission approves the capitalization for FY 2022-23. The Commission also directs the Petitioner to ensure that proper planning should be carried out before finalization and submission of Capex planning before the Commission for approval. Further, in case there is need to review/revise any scheme or change in the Scope of Work, the same need to be submitted before the Commission with proper justification for approval.

Table 22: Asset wise Capitalization (Rs. Crore) as approved by the Commission.

Particulars	APR	Petition	Approved
Unit II Standalone			
Unit III Standalone			
BFP Destaging		0.181	0.181
Unit II & Unit III Common			
Replacement of Dead Tank CT with Live Tank CT (Carry forward)	0.184	0.135	0.135
P&M in Generating Station	2.082	0.652	0.652
Air Conditioning Plants (Static)	1.725	0.005	0.005
Procurement of Laptops/IT Equipment's		0.042	0.042
Office Furniture and Furnishing		0.009	0.009
Self-propelled vehicles		0.194	0.194
Any Other Asset not cover	0.300		
Net- Capitalization	4.291	1.217	1.217

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

- 5.50 Based on the submission made by the Petitioner and on prudent check, the Commission observes that the de-capitalization is related to Original Project Cost for which loan already had been paid by the Petitioner and Additional Capitalization for which the Petitioner has financed from internal accruals.
- 5.51 On scrutinizing, analyzing the material, information, and actual figure, the Commission approves the Capitalization and Decapitalization for FY 2022-23 is given below.

Table 23: Capitalization and Decapitalization (Rs. Crore) as approved by the Commission

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Capitalization	2.15	0.52	0.52	2.15	0.70	0.70
Decapitalization	0.44	0.14	0.14	0.44	0.02	0.02

Table 24: Gross Fixed Assets (Rs. Crore) for Unit II as approved by the Commission.

Particulars	APR	Petition	Approved
Opening GFA	490.89	490.89	490.89
Additional Capitalisation	2.15	0.52	0.52
Decapitalisation	0.44	0.14	0.14
Closing GFA	492.60	491.27	491.27

Table 25: Gross Fixed Assets (Rs. Crore) for Unit III as approved by the Commission.

Particulars	APR	Petition	Approved
Opening GFA	474.98	474.99	474.98
Additional Capitalisation	2.15	0.70	0.70
Decapitalisation	0.44	0.02	0.02
Closing GFA	476.69	475.67	475.66

Depreciation

Petitioner's Submission

- 5.52 The Petitioner has submitted the depreciation for FY 2022-23 as summation of depreciation incurred on the following assets:

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

- Original Project Cost;
- Additional Capitalization approved for FY 2011-12 to FY 2020-21;
- Actual Additional Capitalization FY 2021-22, FY 2022-23;

5.53 The Petitioner has proposed the recovery of remaining depreciable value on original project cost in accordance with depreciation rate specified in the Regulations, in case the cumulative depreciation of asset is less than 70%, else, by spreading it equally in the remaining Useful life i.e. 25 years.

5.54 The Petitioner has submitted that the cumulative depreciation on total assets [i.e. GFA (Including Additional Capitalization)] up to FY 2022-23 has crossed 70% for both the Units-II and-III. Further, in accordance with **clause 15.30**, the balance depreciable value (i.e. 90% of the Capital Cost minus Cumulative depreciation recovered for assets in service upto 2021-22) spread over the balance useful life (taking useful life of 25 years specified in Regulations) of the Plant.

Table 26: Depreciation (Rs. Crore) as submitted by the Petitioner.

Particulars	Unit-II		Unit-III	
	APR	Petition	APR	Petition
Depreciation (Original Project Cost)	2.18	4.93	3.36	6.75
Depreciation (Add Cap)	4.85	10.73	4.31	8.49
Net Depreciation	7.03	15.66	7.67	15.24

Commission's Analysis

5.55 The Commission has outlined **clause 15.28** to **clause 15.34** of JSERC Generation Tariff Regulation, 2020 for the approval of Depreciation for a generating station as reproduced below:

“15.28 Depreciation shall be calculated every year, on the amount of Capital Cost of the assets as admitted by the Commission. In case tariff of multiple Units of a generating station is determined, weighted average life for the generating station shall be applied:

Provided that depreciation shall not be allowed on assets funded by Consumer Contribution and Capital



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Subsidies/Grants. Provision for replacement of such assets shall be made in the Capital Investment Plan.

15.29 Depreciation for each year shall be determined based on the methodology as specified in these Regulations along with the rates and other terms specified in these Regulations.

15.30 Depreciation shall be calculated annually, based on the straight-line method, at the rates specified at Appendix-I. The base value for the purpose of depreciation shall be original cost of the asset:

Provided that the Generating Company shall ensure that once the individual asset is depreciated to the extent of seventy (70) percent of the Book Value of that asset, remaining depreciable value as on March 31 of the year closing shall be spread over the balance useful life of the asset;

Provided that in case the tenure of PPA executed between the Generating plant and Beneficiaries is more than that of the Useful life of the plant, the Commission after prudence check may consider the PPA life for spreading the remaining depreciable value as on March 31 of the year instead of useful life;

Provided that in case after carrying out the residual life assessment, it is found that the residual life of the generating station or unit as the case may be is beyond the useful life specified in these regulations the Commission after prudence check, may spread the remaining depreciable value to be recovered over the extended life of the plant.

15.31 Depreciation shall be charged from the first year of commercial operation of the asset. In case, the operation of the asset is for a part of the year, depreciation shall be charged on pro-rata basis:

Provided that any depreciation disallowed on account of lower availability of the generating station shall not be allowed to be recovered at a later stage during the useful life and the extended life.

15.32 The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. Land is not a depreciable asset and its cost shall be excluded while computing 90% of the original



cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable: Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

15.33 The Commission may, in the absence of the Fixed Assets Register, calculate Depreciation (%) arrived by dividing the Depreciation and the Average Gross Fixed Assets as per the latest available Audited Accounts of the Generating Company. The Depreciation (%) so arrived shall be multiplied by the Average GFA approved by the Commission for the relevant Financial Year to arrive at the Depreciation for that Financial Year.

15.34 In case of de-capitalization of assets in respect of Generating Station or Unit thereof the cumulative depreciation shall be adjusted by taking into account the depreciation recovered through tariff towards decapitalization asset during its useful services.

- 5.56 The Commission has observed that the Petitioner has adopted different methodology for calculation of depreciation vis-à-vis the method approved by the Commission.
- 5.57 On scrutinizing and analyzing the data, information submitted by the Petitioner, the Commission observes that the Plant is in fag end of its life and overall depreciation of the generating stations had reached 70% for both the Units. Hence, in accordance with **clause 15.30** Generation Tariff Regulation 2020, the Commission is of the view to spread equally the remaining depreciable amount.
- 5.58 In accordance with **clause 3.1 (65)** of Generation Tariff Regulation 2020, the Useful life of the generating station is 25 years, however, the petitioner had executed the Power Purchase Agreement (PPA) with the beneficiary for 30 years. Such signing of PPA, clearly infers that both the petitioner and beneficiary are aware that the existing plant is able to stand even after 25 years. Further, depreciating the legitimate depreciable amount in 25 years will defeat the purpose of reliability and

economical power which is an attribute of long term PPA.

5.59 Accordingly, the Commission taking into account the PPA tenure and **clause 15.30 (proviso)** of Generation Tariff Regulation 2020, has spread the remaining depreciable amount in PPA life (30 years) which shall also economize the power cost, and therefore approves the depreciation taking into PPA life instead of Useful life.

Table 27: Depreciation (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Depreciation (Original Project Cost)	2.18	4.93	2.19	3.36	6.75	3.38
Depreciation (Add Cap)	4.85	10.73	4.77	4.31	8.49	4.24
Net Depreciation	7.03	15.66	6.96	7.67	15.24	7.62

Operation & Maintenance Expenses

Petitioner's Submission

5.60 The Petitioner has claimed the Operation and Maintenance (O&M) expenses under the following broad categories: -

- Projected O&M Expenses for the Control Period FY 2021-22 to 2025-26;
 - Employee Expenses without Terminal Liabilities;
 - Repairs & Maintenance (R&M) Expenses;
 - Administrative and General (A&G) Expenses;
- Petition application Fee & Publication Expenses;
- Ash Disposal Expenses;
- Raw water Expenses;
- Terminal Benefit
- Legal Expenses:

5.61 Regarding Employee Expenses, it has been submitted that in the MYT petition, for the purpose of projection growth factor of 1 was considered. However, considering the tighter norms to be met, stringent emission norms to be complied with and to rationalize already lean strength for improving reliability, additional manpower was required out of which 6

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

was sanctioned in 2020-21, 8 has been added in 2021-22 and 2 in FY 2022-23 for Units 1-4 of the Jojobera Power Plant. Accordingly, Growth Factor (Gn), specified in GTR 2020 has been revised for three years as follows.

Particulars	Submitted for FY 21 and thereafter	Actual as on 31.03.2021	Actual as on 31.03.2022	Actual as on 31.03.2023
Management Cadre	136	142	150	153
Non- Management Cadre	43	43	43	42
Total	179	185	193	195
Increase		6	8	2
In % (G)		3.35%	4.32%	1.04%

5.62 Accordingly, Employee Expenses for FY 2022-23 has been revised considering the actual growth factor till FY 2021 and for subsequent years of the MYT considering cumulative growth factor upto FY 2023 i.e., (1+3.35%) (1+4.32%) (1+1.04%) and further taking into account the actual inflation factor of 7.56% for FY 2023 in place of 3.47% as considered in the MYT Order. The revised employee expenses without terminal benefits are summarized below for kind consideration of the Hon'ble Commission:

Table 28: Normative Employee Expenses (Rs. Crore) as submitted by Petitioner.

Particulars	FY-21 (Base Year)	FY-22	FY-23	FY-24	FY-25	FY-26
Unit-II						
Employee Expenses	7.74	9.07	9.86	10.20	10.55	10.92
Unit-III						
Employee Expenses	7.74	9.07	9.86	10.20	10.55	10.92

5.63 Accordingly, the Petitioner has considered the actual inflation factor of 7.56% (as elaborated above) for the purpose of truing-up in place of inflation factor of 3.47% as approved in the MYT Order November 04, 2022. Further it was submitted that to arrive at the Normative R&M Expenses, Other A&G Expenses, Legal Expenses and HO expenses for FY 23 the approved expenses in the MYT Order for FY 2022-23 is multiplied with the factor $(1+7.56\%)/(1+3.47\%)$ i.e., inflation of 3.47% is removed

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

and in place of it, the actual inflation of 7.56% has been factored to arrive at the revised Normative Expenses. With actual inflation factor the Normative R&M Expenses, Other A&G Expenses, HO Expenses, Legal Expenses for FY 2022-23 works out to following for Unit 2&3 and the same has been considered for the purpose of Truing-up of FY 2022-23.

Table 29: Revised normative Expenses (Rs. Crore) as submitted by Petitioner.

Particulars	Unit 2		Unit 3	
	Approved in the MYT Order	Revised	Approved in the MYT Order	Revised
	FY 23	FY 23	FY 23	FY 23
R&M Expenses	17.09	17.77	15.94	16.57
A&G Expenses	6.58	6.84	6.17	6.41
Legal Expenses	0.01	0.01	0.01	0.01
HO Expenses	13.16	13.68	13.12	13.64

5.64 The Petitioner has claimed raw water expenses in accordance with the approach adopted in the MYT Order i.e. 100% of Base Water Charge and 52% of water tax. Accordingly, total water charges for FY 2022-23 have been worked out as Rs 4.15 crore for Unit-2 and Rs 4.28 crore for Unit-3.

Table 30: Water Charges (Rs. Crore) as submitted by Petitioner.

Particulars	Unit wise Water Consumption allocated based on generation (in m ³)		Effective Water Rate for FY 2022-23(in Rs./m ³)	Water Charges (in Rs. Cr.)	
	Unit 2 (a)	Unit 3 (b)		Unit 2	Unit 3
Base water charge rate	1993007	2053098	14.15	2.82	2.91
Water tax			12.86	2.56	2.64
Total			27.02	5.38	5.55
Total Water Consumption (c)	8811300				
Total Bill paid (d) excluding TCS & TDS	23,80,47,209				
Allocation to Unit 2	e = d x a/c/10 ⁷			5.38	
Allocation to Unit 3	f = d x b/c/10 ⁷			5.55	



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	Unit wise Water Consumption allocated based on generation (in m ³)		Effective Water Rate for FY 2022-23(in Rs./m ³)	Water Charges (in Rs. Cr.)	
	Unit 2 (a)	Unit 3 (b)		Unit 2	Unit 3
Claim of Water Charges in Unit 2	100% base water charges+@52% for Water Tax as per Order dated 04.11.2022			4.15	
Claim of Water Charges in Unit 2				4.28	

5.65 The Petitioner has claimed Ash Disposal Expenses, and Terminal Liabilities on actual basis for the purpose of true-up for FY 2022-23.

5.66 The Petitioner has claimed application and publication expenses of Rs 14.20 lakh for filing of True-up petition of FY 2022-23 and APR of FY 2023-24, which have been apportioned equally among Unit-2 & Unit-3. Additionally, the petitioner has incurred expenses of Rs. 8.84 lakh towards publication of public notice for the petition for trueing-up for FY 21 in December 2022 and Rs 17.34 lakh in February 23 towards publication of public notice for the petition for trueing-up for FY 22 and APR for FY 23.

5.67 The Petitioner has also claimed capital spare amount of Rs 36.90 lakh namely **‘Turbine and Generator Bearing Sets’** under operation and Maintenance.

5.68 Based on the above submission, the detailed component-wise summary of O&M expenses for Unit-2 and Unit-3 has been shown below.

Table 31: O&M Expenses (Rs. Crore) as submitted by the Petitioner.

Particulars	UoM	UNIT-II		UNIT-III	
		APR	Petition	APR	Petition
Employee Expenses	Rs. Cr.	8.70	9.86	8.70	9.86
Terminal Liabilities	Rs. Cr.	0.92	0.40	0.92	0.40
R&M Expenses	Rs. Cr.	19.44	20.21	18.13	18.85
Ash Disposal Expenses	Rs. Cr.	4.56	2.70	4.43	2.80
Raw Water	Rs. Cr.	4.21	4.15	4.35	4.28
HO Expenses	Rs. Cr.	13.16	13.68	13.12	13.64
Application & Publication Fee	Rs. Cr.	0.13	0.20	0.13	0.20



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	UoM	UNIT-II		UNIT-III	
		APR	Petition	APR	Petition
Other A&G Expenses	Rs. Cr.	6.58	6.84	6.17	6.41
Capital Expenses	Rs. Cr.	0.43	0.37	-	-
Legal Expenses	Rs. Cr.	0.01	0.01	0.01	0.01
O&M Expenses	Rs. Cr.	58.14	58.43	55.96	56.45

Commission's Analysis

5.69 The Commission has outlined **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”.

5.70 Based on facts and circumstance of the petition, the Commission approves the normative Employee Expenses for FY 2022-23 by taking the actual value of inflation factor (6.87%) and growth factor (4.32%).

Table 32: Normative Employee Expenses (Rs Crore) as approved by the Commission.

Particulars	UoM	Unit-II	Unit-III
		Approved	Approved
Employee Cost of Previous Year	Rs. Cr.	8.41	8.41
Inflation Factor	%	6.87%	6.87%
Growth Factor	%	4.32%	4.32%
Normative Employee Expenses	Rs. Cr.	9.38	9.38

5.71 Likewise, the Commission approves the normative A&G Expenses for FY 2022-23 based on the approved normative A&G Expenses for FY 2021-



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

22 (excluding petition filing fee and CGRF expenses) by multiplying the actual inflation factor 6.87%.

Table 33: Normative A&G Expenses (Rs Crore) as approved by the Commission.

Particulars	UoM	Unit-II	Unit-III
		Approved	Approved
A&G (n-1) Year	Rs Cr.	6.36	5.97
Inflation Factor	%	6.87%	6.87%
Normative A&G Expenses	Rs Cr.	6.80	6.38

5.72 For the purpose of evaluating the normative R&M Expenses, the Commission has taken the approved opening value of GFA for FY 2022-23 and multiplied it with the “K” factor of as approved in the MYT Order and actual inflation factor for FY 2022-23 as 6.87%.

Table 34: Normative R&M Expenses (Rs Crore) as approved by the Commission.

Particulars	UoM	Unit-II	Unit-III
		Approved	Approved
Opening GFA	Rs. Cr.	490.89	490.89
Inflation Factor	%	6.87%	6.87%
K-Factor	%	3.46%	3.30%
Normative R&M Expenses	Rs. Cr.	18.14	17.31

5.73 Furthermore, the Commission approves the HO Expenses for FY 2022-23 based on the approved value HO Expenses for FY 2021-22 by multiplying the actual inflation factor as 6.87%.

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

Table 35: O&M Expenses (Normative Component) as approved by the Commission (Rs. Cr.)

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Employee Cost	8.70	9.86	9.38	8.70	9.86	9.38
R&M Expenses	19.44	20.21	18.14	18.13	18.85	17.31
HO & SS Expenses	13.16	13.68	13.59	13.12	13.64	13.55
Other A&G Expenses	6.58	6.84	6.80	6.17	6.41	6.38

5.75 On Scrutinizing and analyzing the data, information, material on record



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

the Commission approves Terminal Liabilities, Ash Disposal Expenses, Legal Expenses, and Petition Application Fee & Publication Expenses as per audited accounts.

Table 36: O&M Expenses (Variable Component) as approved by the Commission (Rs. Cr)

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Terminal Liabilities	0.92	0.40	0.40	0.92	0.40	0.40
Ash Disposal Expenses	4.56	2.70	2.70	4.43	2.80	2.80
Application & Publication Expenses	0.13	0.20	0.20	0.13	0.20	0.20
Legal Expenses	0.01	0.01	0.01	0.01	0.01	0.01

Table 37: Net O&M Expenses (Rs. Crore) as approved by the Commission.

Particulars	Unit-II	Unit-III
	Approved	Approved
Employee Cost	9.38	9.38
R&M Expenses	18.14	17.31
HO & SS Expenses	13.59	13.55
Other A&G Expenses	6.80	6.38
Terminal Liabilities	0.40	0.40
Ash Disposal Expenses	2.70	2.80
Application & Publication Expenses	0.20	0.20
Legal Expenses	0.01	0.01
O&M Expenses	51.23	50.02

Water Charges, Capital Spare

Commission Analysis

5.76 The Commission has outlined **clause 15.46** JSERC Generation Tariff Regulation (1st Amendment), 2023 for the approval of Water Charges, capital spare, security deposit for a generating station as reproduced below:

“The Water Charges, Security Deposit, and Capital Spare for thermal generating stations shall be allowed separately after prudent check”.

5.77 The Commission has gone through the submissions of the Petitioner and observed that the matter related to Water Tax is sub-judice before the

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Hon'ble Jharkhand High Court. Thus, the Commission is approving total Water Charge payable to TSL for its service. The net Raw Water Expense approved in this Order is subject to final outcome of above-mentioned Petition before the Hon'ble Jharkhand High Court.

5.78 The Commission has observed that the capital spare amount of Rs 36.90 lakh towards the approved capital spares namely '**Turbine and Generator Bearing Sets**' as annexed in '**annexure P12**' of main petition. Hence, the Commission approves the carry forward capital expenses in accordance with **clause 15.46** of JSERC Generation Tariff Regulation (1st Amendment), 2023.

5.79 The table below summarizes the water charges and capital spare as claimed by the Petitioner and as approved by the Commission for FY 2022-23.

Table 38: Water charges and capital expenses (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Raw Water Expenses	4.21	4.15	4.15	4.35	4.28	4.28
Capital Spare	0.43	0.37	0.37	-	-	-

Interest on Loan

Petitioner's Submission

5.80 The Petitioner has submitted that the repayment of the long-term loan on Original Project Cost of Unit-II & Unit-III had been completed in the FY 2009-10 and FY 2010-11 respectively.

5.81 Further, the Petitioner has submitted that all subsequent Additional Capitalization have been done through internal accruals, 70% of the same is considered as Normative Loan for FY 2022-23. The present computation is limited to computation of interest on loan on Normative Loan arising on account of Additional Capitalizations undertaken from 2011-12 onwards.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

- 5.82 The Petitioner had considered the normative repayment of debt equal to the depreciation of the additional capitalization only citing the reason that the interest payment on original project cost is already completed in year FY 2009-10 and FY 2010-11 respectively for Unit- II and Unit-III and hence depreciation part on original cost is not considered as part of normative repayment of debt.
- 5.83 Further, the Petitioner has submitted that it has considered the closing loan for FY 2021-22 as the Opening loan for FY 2022-23. Further, interest Rate has been considered as Bank Rate plus 200 basis points as on 01.04.2022 i.e. 1st April of respective year of the Control Period i.e. at 9.00% for Unit-II and Unit-III in accordance with **clause 15.18** of the JSERC Generation Tariff Regulations 2020 for working out the interest on loan on Additional Capitalization. Also, adjustment due to deletion on outstanding loan has been considered as nil since IT Assets and Vehicles are the only assets which have been decapitalized which were not in the Original Project cost and there is no normative outstanding loan on these assets as cumulative depreciation of more than 70% has been recovered against these Assets.
- 5.84 The table below summarizes the Interest on Loan as claimed by the Petitioner for FY 2022-23.

Table 39: Interest on Loan (Rs. Crore) as submitted by the Petitioner.

Particulars	UoM	Unit-II		Unit-III	
		APR	Petition	APR	Petition
Opening Loan	Rs. Cr.	27.14	27.14	27.00	27.00
Deemed Loan Addition	Rs. Cr.	1.50	0.36	1.50	0.49
Deletion During year	Rs. Cr.	-	0.02	-	0.02
Deemed Loan Repayment	Rs. Cr.	4.85	10.73	4.31	8.49
Closing Loan	Rs. Cr.	23.79	16.77	24.19	19.00
Average Loan Balance	Rs. Cr.	25.47	21.96	25.59	23.00
Interest Rate	%	9.00%	9.00%	9.00%	9.00%
Interest on Loan	Rs. Cr.	2.29	1.98	2.30	2.07

Commission's Analysis

- 5.85 The Commission has outlined **clause 15.6** to **clause 15.8** JSERC Generation Tariff Regulation 2020, for the approval Debt: Equity ratio for



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

a generating station as reproduced below:

“15.6 Existing Projects: For existing projects declaring Commercial Operation on or before April 01, 2021, the following Capital Structure is allowed: -

- 1. Debt-Equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2021 shall be considered;*
- 2. In case of the generating station declared under commercial operation prior to April 01, 2021, but where debt-equity ratio has not been determined by the Commission for determination of tariff for the period ending March 31, 2021, the Commission shall approve the debt-equity ratio in accordance with Clause 15.7 of these Regulations.*
- 3. Any expenditure incurred or projected to be incurred on or after April 01, 2021, as may be admitted by the Commission as additional capital expenditure for determination of tariff and renovation and modernization expenditure for life extension shall be serviced in the manner as specified in Clause 15.7 of these Regulations.*

15.7 New Projects: For new projects, declaring Commercial Operation on or after April 01, 2021, the following Capital Structure is allowed:-

- 1. Normative debt-equity ratio of 70:30 shall be considered for the purpose of determination of Tariff.*
- 2. In case the actual equity employed is in excess of 30%, the amount of equity for the purpose of tariff determination shall be limited to 30%, and the balance amount shall be considered as normative loan;*
- 3. In case the actual equity employed is less than 30%, the actual debt-equity ratio shall be considered;*
- 4. The premium, if any raised by the Generating Company while issuing share capital and investment of internal accruals created out of free reserve, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and*



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

internal resources are actually utilized for meeting capital expenditure of the generating station;

5. The Equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;

6. Any consumer contribution, work carried out under deposit and grant obtained for the execution of the project shall not be considered as part of the capital structure for the purpose of computation of normative debt-equity.

Note 1: Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in these Regulations;

Note 2: Any expenditure on replacement of old assets or on renovation and modernization or life extension shall be considered on normative debt-equity ratio specified in these Regulations after writing off the entire book value of the original assets from the capital cost of the new asset;

Note 3: Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in these Regulations.

15.8 The Generating Company shall submit the resolution of the Board of the Company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station.

5.86 The Commission has scrutinized the details submitted by the Petitioner and has observed that the actual loan on the assets capitalized as on Commercial Date of Operation is entirely repaid by the Petitioner. Since the normative loan value approved by the Commission is on the additional capitalization from FY 2011-12, the normative opening loan for FY 2022-23 is considered equal to closing normative loan amount of FY 2021-22 as approved in the True-up Order dated January 09, 2024.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

5.87 In accordance with **clause 15.15** of JSERC GTR 2020, the Commission approves the deemed loan repayment equal to approved depreciation (Additional Capitalization) for FY 2022-23.

5.88 In accordance with **clause 15.18** of JSERC Generation Tariff Regulations, 2020, the Commission approves the interest rate as 9.00% (SBI MCLR as on 01.04.2022 plus 200 bp) for both the Units as given below.

Table 40: Interest on Loan (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Opening Loan	27.14	27.14	27.14	27.00	27.00	27.00
Deemed Loan Addition	1.50	0.36	0.36	1.50	0.49	0.49
Deemed Loan Repayment	4.85	10.73	4.77	4.31	8.49	4.24
Closing Loan	23.79	16.77	22.74	24.19	19.00	23.24
Average Loan Balance	25.47	21.96	24.94	25.59	23.00	25.12
Interest Rate	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%
Interest on Loan	2.29	1.98	2.24	2.30	2.07	2.26

Interest on Working Capital (IOWC)

Petitioner's Submission

5.89 In accordance with **clause 15.23, clause 15.26** of the JSERC Generation Tariff Regulations, 2020, the Petitioner has claimed the Interest on Working Capital (IoWC) as given below.

Table 41: IOWC as submitted by the Petitioner (Rs. Crore)

Particulars	Unit-II		Unit-III	
	APR	Petition	APR	Petition
Cost towards Coal for Generation 50 days	34.81	34.91	34.37	34.71
Cost of Oil for Generation (2 months)	0.51	0.56	0.41	0.54
Maintenance Spares (20% O&M)	10.70	11.69	10.32	11.29
O&M Expenses (1 month)	4.81	4.87	4.66	4.70
Receivables (45 days)	44.32	46.12	43.59	45.51
Total Working Capital	95.14	98.14	93.35	96.75
Interest Rate	10.50%	10.50%	10.50%	10.50%
Interest on Working Capital	9.99	10.30	9.80	10.16



Commission's Analysis

5.90 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,

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

the cost of fuel for 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 filed 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 trueed 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”.

5.91 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 42: IOWC (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Cost of Coal (for 50 days)	34.81	34.91	34.52	34.37	34.71	34.33
Cost of Oil for Generation (2 months)	0.51	0.56	0.55	0.41	0.54	0.53
Maintenance Spares (20% O&M)	10.70	11.69	10.25	10.32	11.29	10.00
O&M Expenses (1 month)	4.81	4.87	4.62	4.66	4.70	4.53
Receivables (45 days)	44.32	46.12	43.78	43.59	45.51	43.43
Total Working Capital	95.14	98.14	93.72	93.35	96.75	92.82
Interest Rate	10.50%	10.50%	10.50%	10.50%	10.50%	10.50%
Interest on Working Capital	9.99	10.30	9.84	9.80	10.16	9.75

Return on Equity

Petitioner’s Submission

5.92 The Petitioner has claimed the Return on Equity (Pre-tax) for FY 2022-23 in accordance with **clause 15.9, and 15.10** of Generation Tariff Regulation, 2020 read with **Clause 15.11** and considering the estimated Additional Capitalization and decapitalization during 2022-23.

5.93 While calculating the Return on Equity (post-tax), the Petitioner has taken Minimum Alternate Tax (MAT) rate of 25.17%. Accordingly, the Petitioner had calculated the Return on Equity for FY 2022-23 as given below.

Table 43: Return on Equity (Rs. Crore) as submitted by the Petitioner.

Particulars	Unit-II		Unit-III	
	APR	Petition	APR	Petition
Opening Equity	147.27	147.27	143.72	142.50
Net Addition	0.51	0.11	0.51	0.20
Closing Equity	147.78	147.38	144.23	142.70
Average Equity	147.52	147.32	143.98	142.60
Rate of Return on Equity	15.00%	15.00%	15.00%	15.00%
ROE (Post-Tax)	20.04%	20.04%	20.04%	20.04%
MAT	25.17%	25.17%	25.17%	25.17%
ROE (Pre-Tax)	29.57	29.53	28.86	28.58

Commission’s Analysis

5.94 The Commission has outlined **clause 15.6 to clause 15.8** JSERC Generation Tariff Regulation 2020 and clause 6.1 of Generation Tariff (1st Amendment), Regulation 2023 for approval Return on Equity for a generating station as reproduced below:

“15.6 Existing Projects: For existing projects declaring Commercial Operation on or before April 01, 2021, the following Capital Structure is allowed: -

- 1. Debt-Equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2021 shall be considered;*
- 2. In case of the generating station declared under commercial*



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

operation prior to April 01, 2021, but where debt-equity ratio has not been determined by the Commission for determination of tariff for the period ending March 31, 2021, the Commission shall approve the debt-equity ratio in accordance with Clause 15.7 of these Regulations.

3. Any expenditure incurred or projected to be incurred on or after April 01, 2021, as may be admitted by the Commission as additional capital expenditure for determination of tariff and renovation and modernisation expenditure for life extension shall be serviced in the manner as specified in Clause 15.7 of these Regulations.

15.7 New Projects: For new projects, declaring Commercial Operation on or after April 01, 2021, the following Capital Structure is allowed: -

- 1. Normative debt-equity ratio of 70:30 shall be considered for the purpose of determination of Tariff.*
- 2. In case the actual equity employed is in excess of 30%, the amount of equity for the purpose of tariff determination shall be limited to 30%, and the balance amount shall be considered as normative loan;*
- 3. In case the actual equity employed is less than 30%, the actual debt-equity ratio shall be considered;*
- 4. The premium, if any raised by the Generating Company while issuing share capital and investment of internal accruals created out of free reserve, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilized for meeting capital expenditure of the generating station;*
- 5. The Equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;*
- 6. Any consumer contribution, work carried out under deposit and grant obtained for the execution of the project shall not be considered as part of the capital structure for the purpose of computation of normative debt-equity.*

Note 1: Any expenditure admitted on account of committed liabilities



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in these Regulations;

Note 2: Any expenditure on replacement of old assets or on renovation and modernization or life extension shall be considered on normative debt-equity ratio specified in these Regulations after writing off the entire book value of the original assets from the capital cost of the new asset;

Note 3: Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in these Regulations.

15.8 The Generating Company shall submit the resolution of the Board of the Company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station.

JSERC Generation Tariff Regulation (1st Amendment) 2023

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:

5.95 On scrutinizing and analyzing the data information and material on record, the Commission observed that the company has transitioned to



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

the new tax regime effective from 01.04.2020. Accordingly, approves the applicable Tax rate of 25.168% ($22\% \times 1.10 \times 1.04$) (i.e. 22% (with surcharge of 10% and cess of 4%) in accordance with Generation Tariff Regulations, 2020.

5.96 In accordance with the **clause 6.1** of JSERC Generation Tariff (1st Amendment), Regulation 2023, the Commission approves the Rate of Return on Equity as 15.00% is given below.

Table 44: Return on Equity (Rs. Crore) for Unit II as approved by the Commission

Particulars	APR	Petition	Approved
Opening Equity	147.27	147.27	147.27
Net Addition	0.51	0.11	0.11
Closing Equity	147.78	147.38	147.38
Average Equity	147.52	147.32	147.32
Rate of Return on Equity	15.00%	15.00%	15.00%
ROE (Post-Tax)	20.04%	20.04%	20.04%
MAT	25.17%	25.17%	25.17%
ROE (Pre-Tax)	29.57	29.53	29.53

Table 45: Return on Equity (Rs. Crore) for Unit III as approved by the Commission

Particulars	APR	Petition	Approved
Opening Equity	143.72	142.50	143.72
Net Addition	0.51	0.20	0.20
Closing Equity	144.23	142.70	143.92
Average Equity	143.98	142.60	143.82
Rate of Return on Equity	15.00%	15.00%	15.00%
ROE (Pre-Tax)	20.04%	20.04%	20.04%
MAT	25.17%	25.17%	25.17%
ROE (Pre-Tax)	28.86	28.58	28.83

Incentive (Pre-Tax)

Petitioner Submission

5.97 The Petitioner has submitted the incentive for FY 2022-23 in terms of **clause 17.5** of GTR 2020 as shown below.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 46: Incentive (Pre-Tax) as submitted by Petitioner.

Particulars	UoM	FY 2022-23	
		Unit-II	Unit-III
No. of Days in a Year	Days	365.00	365.00
Installed Capacity	MW	120.00	120.00
Normative Aux Power Consumption	%	10.00%	10.00%
Normative PLF (NAPLF)	%	85%	85%
Actual PLF	%	84%	86%
Gross Generation at NAPLF	MUs	893.52	893.52
Ex-Bus Generation at NAPLF	MUS	804.17	804.17
Gross Generation	MUs	881.23	907.14
Ex-Bus Generation	MUs	806.29	829.04
Excess Generation Corresponding to NAPLF	MUs	2.12	24.88
Rate of Incentive	Rs/kWh	0.50	0.50
Incentive Post Tax	Rs Cr.	0.11	1.24
MAT Rate	%	25.17%	25.17%
Incentive (Pre-Tax)	Rs Cr.	0.14	1.66

Commission Analysis

5.98 On Scrutinizing and analyzing the data, material, and information on record the Commission has observed that the actual plant load factor is lower for Unit-II and higher for Unit-III against the the normative approved or specified in the JSERC (Generation Tariff Regulation) (1st Amendment) 2023. Hence, the Commission does not allow any incentive for Unit-II while incentive allow for Unit-III in accordance with **clause 17.5** of JSERC (Generation Tariff Regulation) (1st Amendment) 2023 as computed hereunder.

Table 47: Incentive (Pre-Tax) as approved by Commission.

Particulars	UoM	Approved	Approved
		Unit-II	Unit-III
No. of Days in a Year	Days	365.00	365.00
Installed Capacity	MW	120.00	120.00
Normative Aux Power Consumption	%	10.00%	10.00%
Normative PLF (NAPLF)	%	85%	85%
Actual PLF	%	84%	86%



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	UoM	Approved	Approved
		Unit-II	Unit-III
Gross Generation at NAPLF	MUs	893.52	893.52
Ex-Bus Generation at NAPLF	MUS	804.17	804.17
Gross Generation	MUs	881.23	907.14
Ex-Bus Generation	MUs	806.29	829.04
Excess Generation Corresponding to NAPLF	MUs	2.12	24.88
Rate of Incentive	Rs/kWh	0.50	0.50
Incentive	Rs Cr.	-	1.24

Sharing Gain/Loss

Operation Gain due to variation in Norms FY 2022-23

Petitioner's Submission

5.99 The Petitioner has submitted that it has followed the **clause 6.14** of Generation Tariff Regulation 2020 for computation of gain based on actual performance of controllable parameters.

5.100 Accordingly, in terms of above regulation and considering actual performance of FY 2022-23, the Gain due to Operational Performance of SHR, Auxiliary Power Consumption and SFC works out as follows for Unit-II and Unit-III.

Table 48: Operational Gain (Rs. Cr.) as submitted by Petitioner

Particulars	UoM	Unit-II		Unit-III	
		Normative	Petition	Normative	Petition
Heat Rate	kCal/kWh	10.00%	8.50%	10.00%	8.61%
Auxiliary Power	%	2567.00	2535.92	2577.00	2533.35
Sp. LDO Consumption	ml/Kwh	0.50	0.09	0.50	0.21
Equivalent GCV of Coal (CVPF)	Kcal/Kg	8.85	8.85	8.65	8.65
Equivalent Landed Price of Coal	Rs/Ton	3734.69	3734.69	3711.75	3711.75
Equivalent GCV of LDO (CVPF)	kCal/L	4.11	4.11	4.05	4.05
Equivalent Landed Price of LDO	Rs/KL	0.07	0.07	0.07	0.07
Energy Charge Rate (ECR)	Rs/kWh	3.18	3.06	3.16	3.04
ECRN - ECRA			0.118		0.120
Ex-Bus Generation	MU		806.29		829.04
Gain/(Loss) on Operational Parameters	Rs. Cr.		9.51		9.95
Savings/Gain with Beneficiaries (25%)	Rs. Cr.		2.38		2.49



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Commission's Analysis

5.101 The Commission has outlined **clause 6.14** of JSERC Generation Tariff Regulation 2020 and **clause 5.1** of JSERC Generation Tariff (1st Amendment) Regulation 2023 for approval sharing of gain/loss due to variation in operation norms for a generating station as reproduced below:

6.14 Sharing of gains due to variation in norms: The Generating Company shall workout gains based on the actual performance of applicable controllable parameters as under: -

- 1. Station Heat Rate;*
- 2. Secondary Fuel Oil Consumption;*
- 3. Auxiliary Energy Consumption; and*
- 4. Operations and Maintenance Expenses.*

The financial gains by the Generating Company, on account of above controllable parameters shall be shared between the Generating Company and the beneficiaries on annual basis. The financial gains on account of parameters (1) to (3) shall be computed as per the following formula for a thermal generating station and shall be shared in the ratio of 50:50 between the generating stations and beneficiaries.

Net Gain = (ECRN - ECRA) x Scheduled Generation;

Where,

ECRN: Normative Energy Charge Rate computed on the basis of norms specified for Station Heat Rate, Auxiliary Energy Consumption and Secondary Fuel Oil consumption.

ECRA: Actual Energy Charge Rate computed on the basis of actual Station Heat Rate, Auxiliary Energy Consumption and Secondary Fuel Oil Consumption for the month.

JSERC Generation Tariff Regulation (1st Amendment) 2023

Clause 5.1 (provisos) states that:

Provided that for generating stations that have signed coal linkage agreement through Shakti Scheme, sharing of gains in the ratio of 75:25 between the generating stations and beneficiaries shall be

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

applicable due to variation in normative controllable operational parameters.

5.102 On scrutinizing and analyzing the material, information, and actual figure as submitted by the Petitioner and on prudent check the Commission approves the operational gain due to variation for FY 2022-23 as given below.

Table 49: Operational Gain (Rs. Cr.) as approved by the Commission

Particulars	UoM	Unit-II		Unit-III	
		Normative	Approved	Normative	Approved
Auxiliary Consumption (AUX)	%	10.00%	8.50%	10.00%	8.61%
Gross Station Heat Rate (SHR)	kCal/kWh	2567.00	2535.92	2577.00	2533.35
Specific fuel Oil Consumption	mL/kWh	0.50	0.09	0.50	0.21
Calorific Value of Oil (CVSF)	kCal/ml	8.85	8.85	8.65	8.65
GCV of Primary Fuel (CVPF)	kCal/kg	3734.69	3734.69	3711.75	3711.75
Landed Price of Primary Fuel	Rs./kg	4.11	4.11	4.05	4.05
Landed Price of Sec. Fuel	Rs./ml	0.07	0.07	0.07	0.07
Energy Charge Rate (ECR)	Rs/kWh	3.18	3.06	3.16	3.04
ECR_N - ECR_A	Rs/kWh		0.118		0.120
Ex-Bus Generation	MU		806.29		829.04
Gain/(Loss) on Operational Parameters	Rs. Cr		9.51		9.95
Savings/Gain with beneficiary (25%)	Rs. Cr		2.38		2.49

Gain in Operation & Maintenance

Petitioner Submission

5.103 Likewise, the Petitioner has submitted the Gain in Operation & Maintenance Expenses in accordance with the above said Regulation.

5.104 Further, the Petitioner pray to consider the O&M expenses for both the Units together and if the actual O&M expenses for both the Units are lower than the overall savings may be shared 50:50 with the consumers with half of 50% allocated to each Unit.

5.105 Accordingly, instead of computing and sharing O&M expense gain separately, the Petitioner has computed the gain collectively (half of which is to be used for each Unit) as given below.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 50: Gain in Operation & Maintenance (Rs. Crore) as submitted by Petitioner

Particulars	Unit-II + Unit-III		Unit-II+ Unit-III
	Performance Target Approved	Actual Expenses incurred	Saving
Employee Cost excl. TL	19.71	17.74	1.97
R&M Expenses	34.34	28.48	5.86
HO & SS Expenses	27.32	19.90	7.42
Other A&G Expenses	13.25	17.71	-4.46
Legal Expenses	0.02	0.000	0.02
Sub-total (f)	94.64	83.83	10.81
Gain to be shared with Beneficiaries of Unit-II & Unit III (50% of f)			5.41

5.106 The Petitioner has considered the adjustment in gain of Rs 5.41 crore in ARR of respective Units-II & Units-III i.e. Rs 2.70 crore with 50:50 gain sharing as per regulation.

Commission Analysis

5.107 The Commission has outlined **clause 6.14** of Generation Tariff Regulation 2020 for the approval of Gain in operation and Maintenance for a generating station as reproduced below:

6.14 Sharing of gains due to variation in norms: The Generating Company shall workout gains based on the actual performance of applicable controllable parameters as under: -

1. Station Heat Rate;
2. Secondary Fuel Oil Consumption;
3. Auxiliary Energy Consumption; and
4. Operations and Maintenance Expenses.

The financial gains by the Generating Company, on account of above controllable parameters shall be shared between the Generating Company and the beneficiaries on annual basis. The financial gains on account of parameters (1) to (3) shall be computed as per the following formula for a thermal generating station and shall be shared in the ratio of 50:50 between the generating stations and beneficiaries.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

5.108 Accordingly, the Commission approves the gain in Operation & Maintenance for FY 2022-23 as tabulated below.

Table 51: Gain in Operation & Maintenance (Rs. Crore) as approved by the Commission.

Particulars	UoM	Unit-II	Unit-III
		Approved	Approved
Normative O&M Expenses	Rs. Cr	47.96	46.62
Actual O&M Expenses	Rs. Cr	39.07	40.53
Gain/(Loss)	Rs. Cr	8.89	6.10
Gain to be shared with Beneficiaries (50% of Gain)	Rs. Cr.	4.45	3.05

Non-Tariff Income

Petitioner Submission

5.109 The Petitioner has submitted the non-tariff income as per audited P&L account for Unit-II and III as given below:

Table 52: Non-Tariff Income (Rs. Cr) as submitted by the Petitioner for Unit-II & Unit-III.

Particulars	UoM	Unit-II	Unit-III
Non-Tariff Income	Rs. Cr.	1.86	1.91

Commission Analysis

5.110 On scrutinizing and analyzing the material, information, and actual figure and details submitted by the Petitioner and on prudent check the Commission approves the Non-Tariff Income for FY 2022-23 as given below.

Table 53: Non-Tariff income (Rs. Cr.) as approved by the Commission for both Unit.

Particulars	UoM	Unit-II		Unit-III	
		Petition	Approved	Petition	Approved
Non-Tariff Income	Rs. Cr.	1.86	1.86	1.91	1.91

Shakti Scheme Discount

Petitioner's Submission

5.111 Based on the allocation of primary fuel under Shakti Scheme and actual coal consumption, the Petitioner has calculated the energy generated from Shakti coal. The Petitioner has calculated the discount rate at Rs. 0.04/kWh for the coal procured under round-II and Rs. 0.07/kWh for coal produced and consumed under round-III bidding.

Table 54: Shakti Scheme Discount (Rs. Crore) as submitted by Petitioner.

Particulars	UoM	Unit-II		Unit-III	
		APR	Petition	APR	Petition
Sales due to Coal (Round-II)	MU	297.67	295.93	235.52	266.98
Sale due to CCL Coal (Round-III)	MU	263.05	305.3	325	319.09
Discount Amount	Rs. Cr.	3.03	3.32	3.03	3.30

Commission's Analysis

5.112 On scrutinizing and analyzing the material, information, and actual figure, FSA, PPA approvals and details submitted by the Petitioner and on prudent check the Commission approves the Shakti Scheme Discount for FY 2022-23 is given below.

Table 55: Shakti Scheme Discount (Rs. Crore) as approved by the Commission.

Particulars	UoM	Unit-II			Unit-III		
		APR	Petition	Approved	APR	Petition	Approved
Sales due to Coal (Round-II)	MU	297.67	295.93	260.97	235.52	266.98	240.45
Sale due to CCL Coal (Round-III)	MU	263.05	305.3	353.65	325	319.09	358.96
Discount Amount	Rs. Cr.	3.03	3.32	3.52	3.03	3.30	3.47

Summary of Annual Revenue Requirement

Commission's Analysis

5.113 On consideration of the submission and details furnished by the



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Petitioner, the Commission approves the Annual Fixed Cost (AFC) for FY 2022-23 which as summarized below.

Table 56: Annual Fixed Cost (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
O&M Expenses	53.50	53.90	51.23	51.61	52.17	50.02
Depreciation	7.03	15.66	6.96	7.67	15.24	7.62
Interest on Loan	2.29	1.98	2.24	2.30	2.07	2.26
Interest on Working Capital	9.99	10.30	9.84	9.80	10.16	9.75
Return on Equity	29.57	29.53	29.53	28.86	28.58	28.83
AFC	102.39	111.38	99.81	100.24	108.22	98.48
Water Charges	4.21	4.15	4.15	4.35	4.28	4.28
Capital Spare	0.43	0.37	0.37	0.00	0.00	0.00
Incentive		0.14	0.00		1.66	1.24

5.114 The Commission approves the Annual Fixed Charge after taking into account the availability Factor for FY 2022-23 is given below.

Table 57: AFC (Rs. Cr.) after availability as approved by the Commission.

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Annual Fixed Cost	102.39	111.38	99.81	100.24	108.22	98.48
Availability	85.00%	98.99%	98.99%	93.64%	97.37%	97.37%
AFC after Availability	102.39	111.38	99.81	100.24	108.22	98.48

5.115 On consideration of the submission and details furnished by the Petitioner, the Commission approve the Annual Revenue Requirement (ARR) for FY 2022-23 which as summarized below.

Table 58: Annual Revenue Requirement (Rs. Crore) as approved by the Commission

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
ARR after Availability	367.75	372.05	360.34	370.23	375.81	365.65
Less: Discount as per [SHAKTI 2&3]	3.03	3.32	3.52	3.03	3.30	3.47
Less: Gain on Operational Parameters[25%]		2.38	2.38		2.49	2.49
Less: Gain on O&M Expense [50%]		3.31	4.45		3.31	3.05

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	Unit-II			Unit-III		
	APR	Petition	Approved	APR	Petition	Approved
Less: Non-Tariff Income		1.86	1.86		1.91	1.91
Net ARR	364.72	361.17	348.13	367.20	364.79	354.73

Revenue from Sale of Power

Petitioner's Submission

5.116 The Petitioner has submitted the revenue from sale of power for FY 2022-23 in its account as Rs. 346.76 Crore and Rs. 350.32 Crore for Unit-II and Unit-III respectively.

Table 59: Revenue (Rs. Crore) as submitted by the Petitioner.

Particulars	Unit-II	Unit-III
	Petition	Petition
Revenue from Sale of Power	346.76	350.32

Commission's Analysis

5.117 The Commission has examined the detail submitted by the Petitioner along with audited certificate and on prudent check, the Commission approves the revenue from sale of power for FY 2022-23 is given below.

Table 60: Revenue (Rs. Crore) as approved by the Commission

Particulars	Unit-II		Unit-III	
	Petition	Approved	Petition	Approved
Revenue from Sale of Power	346.76	346.76	350.32	350.32

Gap/Surplus for FY 2022-23

5.118 The Commission has outlined **clause 7.2 to 7.4** of Generation Tariff Regulation 2020 for the approval Gap/Surplus for a generating station as reproduced below:

“7.2 Where after the truing up, the revenue recovered exceeds the trued up value approved by the Commission under these Regulations, the Generating Company shall refund to the Beneficiaries, the surplus amount so recovered as specified in Clause 7.4 of these Regulations.

7.3 Where after the truing up, the revenue recovered is less than the trued

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

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:

Provided further that any adverse financial impact on account of variation in uncontrollable items due to lapse on part of the Generating Company or its suppliers/contractors shall not be allowed in truing up”.

5.119 The Commission has examined the detail submitted by the Petitioner along with audited certificate and on prudent check, approves the Gap/(Surplus) for FY 2022-23 for Unit-II and Unit-III as tabulated hereunder.

Table 61: Gap/(Surplus) as approved by the Commission

Particulars	Unit-II		Unit-III	
	Petition	Approved	Petition	Approved
Net ARR	361.17	348.13	364.79	354.73
Revenue from Sale of Power	346.76	346.76	350.32	350.32
Gap/(Surplus)	14.42	1.37	14.47	4.41

Table 62: Carrying Cost for Unit-II as approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24
Opening Balance	0	1.37
Addition During the FY	1.37	0
Adjustment during the FY	0	0
Closing Balance	1.37	1.37
Interest Rate	11.65%	10.50%
Carrying Cost for respective FY	0.08	0.14

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 63: Carrying Cost for Unit-III as approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	FY 2023-24
Opening Balance	0	4.41
Addition During the FY	4.41	0
Adjustment during the FY	0	0
Closing Balance	4.41	4.41
Interest Rate	11.65%	10.50%
Carrying Cost for respective FY	0.26	0.46

Table 64: Carrying Cost on Revenue Gap/(Surplus) for Unit-II & Unit-III as approved by the Commission (In Rs. Cr.)

Particulars	Unit-II	Unit-III
	Approved	Approved
Opening Gap/Surplus for FY 2021-22	-	-
Gap/(Surplus) addition during the FY 2022-23	1.37	4.41
Closing Gap/ (Surplus) for FY 2022-23	1.37	4.41
Carrying Cost of FY 2022-23	0.08	0.26
Carrying Cost of FY 2023-24	0.14	0.46
Net Gap/(Surplus)	1.60	5.13

5.120 The Commission would like to clarify the above Gap/(Surplus) is computed based on the information submitted before the Commission. In case there is any other adjustment between the Petitioner and its Beneficiaries, the same need to be taken into account while final adjustment which shall be carried out mutually.

5.121 The Commission has directed the Petitioner to adjust the surplus in the subsequent bills as per **Clause 7.4** of JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020.



Chapter 6: ANNUAL PERFORMANCE REVIEW FOR FY 2023-24

- 6.1 The Commission had passed order on MYT for the 3rd Control Period i.e., FY 2021-22 to FY 2025-26 vide Order dated November 04, 2022 based on the principles specified in the JSERC Generation Tariff Regulations, 2020.
- 6.2 The Commission had passed review order case no. 18 of 2022 vide order dated January 09, 2024 based on principles specified in the JSERC Generation Tariff Regulations, 2015, and JSERC Generation Tariff Regulations 2020 along with amendment thereof.
- 6.3 The Commission had passed True-up for FY 2021-22 and Annual Performance Review for FY 2022-23 by Order dated January 09, 2024.
- 6.4 In the instant Petition, the Petitioner has now sought for the Annual Performance Review (APR) for FY 2023-24 based on the actual operational performance till Oct' 2023 and projected for the remaining months of FY 2023-24.
- 6.5 The Commission has carried out the Annual Performance Review for FY 2023-24 taking into consideration the following:
- a) JSERC Generation Tariff Regulations, 2020;
 - b) JSERC Generation Tariff (1st Amendment), Regulation, 2023;
 - c) Methodology adopted by the Commission in its earlier Tariff Orders.
- 6.6 The component-wise description of the Petitioner's submission and the Commission's analysis thereof is provided hereunder.

Operational Performance

Plant Availability Factor (PAF)

Petitioner's Submission

- 6.7 The Petitioner has projected the Plant Availability Factor as 93.34% and



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

86.44% for Unit-II and Unit-III respectively based on actual availability achieved till October 2023 and estimated for remaining months of FY 2023-24.

Commission's Analysis

6.8 In accordance with **clause 16.1** of JSERC Generation Tariff (1st Amendment), Regulation 2023, the Commission approves the Normative Plant Availability factor as 85.00%.

6.9 On scrutinizing and analyzing the actual till October FY 2022 and estimate for remaining month of FY 2022-23 and on prudent check, the Commission approves the estimated plant availability for FY 2023-24 as 93.34% and 86.44% for Unit-II and Unit-III respectively as given below:

Table 65: Plant Availability Factor as approved by the Commission

Particulars	UoM	MYT	Petition	Approved
Unit-II				
NAPAF	%	85.00	85.00	85.00
Estimated Plant Availability	%	-	93.34	93.34
Unit-III				
NAPAF	%	85.00	85.00	85.00
Estimated Plant Availability	%	-	86.44	86.44

Auxiliary Consumption

Petitioner's Submission

6.10 The Petitioner has estimated the Auxiliary Consumption as 9.04% and 9.13% for Unit-II and Unit-III respectively based on actuals till October 2023 and projected as normative value of 10.00% for remaining months of FY 2023-24.

Commission's Analysis

6.11 In accordance with **clause 16.1** of JSERC Generation Tariff (1st Amendment), Regulation 2023, the Commission approves the normative auxiliary consumption of 10.00%.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

6.12 On scrutinizing and analyzing the actual till October FY 2023 and estimate for remaining month of FY 2023-24 and on prudent check, the Commission approves the estimated auxiliary consumption for FY 2023-24 as 9.04% and 9.13% for Unit-II and Unit-III respectively as given below:

Table 66: Auxiliary Consumptions as approved by the Commission

Particulars	UoM	MYT	Petition	Approved
UNIT-II				
Normative Auxiliary Consumption	%	9.00	10.00	10.00
Estimated Auxiliary Consumption	%	-	9.04	9.04
UNIT-III				
Normative Auxiliary Consumption	%	9.00	10.00	10.00
Estimated Auxiliary Consumption	%	-	9.13	9.13

Plant Load Factor and Generation

Petitioner's Submission

6.13 The Petitioner has estimated Plant Load Factor (PLF) as 84.31% and 81.53% for Unit-II & Unit-III respectively, which is lower than the normative PLF of 85.00% for both Unit-II and Unit-III respectively as approved by the Commission in MYT Order dated November 04, 2022.

6.14 The Petitioner has further submitted that the estimated gross generation for both the Units is lower than that approved in MYT Order dated November 04, 2022 as based on demand projected by the Beneficiary.

Commission's Analysis

6.15 On scrutinizing and analyzing the actual till October FY 2023 and estimate for remaining month of FY 2023-24 and on prudent check, the Commission approves the Gross Generation, Net Generation, and Plant Load Factor for FY 2023-24 for Unit-II and Unit-III respectively as given below:



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 67: Plant Load Factor and Generation as approved by the Commission

Particulars	UoM	MYT	Petition	Approved
UNIT-II				
Gross Generation	MU	895.97	888.68	888.68
Net Generation	MU	815.33	808.36	808.36
Estimated PLF	%	85.00%	84.31%	84.31%
UNIT-III				
Gross Generation	MU	895.97	859.35	859.35
Net Generation	MU	815.33	780.89	780.89
Estimated PLF	%	85.00%	81.53%	81.53%

Gross Station Heat Rate (GHR)

Petitioner's Submission

6.16 The Petitioner has submitted the estimated Gross Station Heat Rate (GHR) as 2567 kCal/kWh for Unit-II and 2577 kCal/kWh for Unit-III as specified in JSERC Generation Tariff Regulation (1st Amendment) Regulation 2023.

Commission's Analysis

6.17 In accordance with **clause 16.1** of JSERC Generation Tariff (1st Amendment), Regulation 2023, the Commission approves the Normative GHR as 2567.00 kCal/kWh for Unit-II and 2577.00 for Unit-III.

6.18 On scrutinizing and analyzing the actual till October FY 2023 and estimate for remaining month of FY 2023-24 and on prudent check, the Commission approves the estimated station Heat Rate for FY 2023-24 for Unit-II and Unit-III respectively as given below:

Table 68: Gross Station Heat Rate (GHR) as approved by the Commission

Particulars	UoM	MYT	Petition	Approved
UNIT-II				
Normative Station Heat Rate	kCal/kWh	2525.00	2567.00	2567.00
Estimated Station Heat Rate	kCal/kWh		2567.00	2567.00
UNIT-III				
Normative Station Heat Rate	kCal/kWh	2525.00	2577.00	2577.00



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	UoM	MYT	Petition	Approved
Estimated Station Heat Rate	kCal/kWh		2577.00	2577.00

Specific Fuel Oil Consumption

Petitioner's Submission

6.19 In accordance with **clause 16.1** of JSERC Generation Tariff (1st Amendment), Regulation 2023, the Petitioner has claimed the specific fuel oil consumption as 0.50 ml/kWh for both the Units.

Commission's Analysis

6.20 In accordance with **clause 16.1** of JSERC Generation Tariff Regulation (1st amendment) 2023, the Commission approves the normative specific fuel oil consumption as 0.50 ml/kWh for both the Units.

Table 69: Specific Fuel Oil Consumption as approved by the Commission

Particulars	UoM	MYT	Petition	Approved
UNIT-II				
Specific Fuel Oil Consumption	ml/kWh	0.50	0.50	0.50
UNIT-III				
Specific Fuel Oil Consumption	ml/kWh	0.50	0.50	0.50

Fuel Cost Parameter

Coal Mix and Gross Calorific Value (GCV) of Primary Fuel

Petitioner's Submission

6.21 The Petitioner has submitted that for the purpose of projecting the fuel mix for FY 2023-24, actual coal consumption up to month of October 2023 has been taken. Further, Coal Consumption for the balance months has been worked out considering the projected generation, normative operational performance level, considering available fuel supply from SHAKTI coal and Trailing road. The balance coal requirement over and above the supply from the SHAKTI Coal and Trailing Coal has been estimated to be met preferably from E-Auction Route and in case of



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

exigencies/constraint it will be sourced from available sources.

- 6.22 The Petitioner has further submitted that the reason of variation in coal mix proposed in the instant petition for the APR of FY 2023-34 are depicted below:
- (a) Restriction in FSA coal supply/ Supply of CCL allocations under RCR mode due to nationwide coal scarcity.
 - (b) No supply of middling coal from West Bokaro Collieries in view of non-availability of surplus coal beyond their own captive consumption.
- 6.23 The Petitioner has further submitted that there is a nation-wide scarcity of coal mainly due to higher demand of electricity vis-à-vis inadequate coal production in the country to meet such demand coupled with logistic congestion. Because of above, subsidiaries of Coal India Limited, viz., CCL, MCL, ECL are not able to maintain steady supply of coal under FSA resulting into critical stocks of coal at Jojobera Power Plant. Accordingly, the Petitioner, to manage the crisis has sourced coal other than middling coal from West Bokaro Collieries and coal from e-Auction Route which is transparent as it is organized/facilitated by Government entity and is the cheapest route compared to any other sources viz, private coal or imported coal.
- 6.24 Further, the Petitioner has submitted that, to manage the crisis it has sourced coal from e-Auction Route which is transparent as it is organized/facilitated by Government entity and is the cheapest route compared to any other sources viz, private coal or imported coal.
- 6.25 That the Petitioner has submitted that, in order to meet the excess demand of TSL and to bridge the gap of non-availability of middling coal in the remaining months i.e. November 23 to March-24, the Petitioner in addition to the linkage sources has further projected to source the balance coal requirement through Trailing Coal from west Bokaro collieries of TSL and through e-Auction Route to the extent possible. Only as a last resort, it has envisaged/planned to source coal through Private

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Washeries/Imported coal to meet the deficit. As an alternative, other coals from TSL West Bokaro Mines can also be sourced depending upon its availability to meet the coal requirement in balance months of FY 2023-24.

- 6.26 The Petitioner further submitted that due to above uncontrollable factor, it had to depend on source approved in the MYT Order for meeting the deficit and accordingly the coal mixed is projected.
- 6.27 That the Petitioner in its quarterly reports had already apprised the Hon'ble Commission on such minor deviations and overall impact on ECR.
- 6.28 Accordingly, the Petitioner has submitted the revised the fuel mix, detail of weighted average GCV and Landed Price of all types of coal received are summarized for FY 2023-24 in the table below.

Table 70: Coal Mix and GCV for Unit-II as submitted by the Petitioner

Particulars	Fuel Mix (%)		GCV (kCal/kg)	
	MYT	Petition	MYT	Petition
Middling Coal	21.25%	7.43%	3860.75	3870.51
2P Coal				
WB Reject Coal		0.25%		1904.80
CCL [Shakti 3] Coal	43.64%	42.16%	3837.53	3702.02
BCCL [e-auction] Coal				
E Auction				
Tailing (Road) Coal		4.12%		4200.10
CCL [Shakti 2] WIV Coal		11.23%		3997.13
ECL [Shakti 2] Coal	6.47%	6.64%	5109.27	4741.04
CCL [Shakti 2] Coal	14.59%	10.80%	3837.53	3682.41
MCL [Shakti 2] Coal	14.05%	16.66%	3129.71	2895.87
CCL SFA		0.70%		3475.02
Wtg. Avg. GCV			3825.24	3825.24

Table 71: Coal Mix and GCV for Unit-III as submitted by the Petitioner.

Particulars	Fuel Mix (%)		GCV (kCal/kg)	
	MYT	Petition	MYT	Petition
Middling Coal	21.25%	10.10%	3860.75	3926.27
2P Coal				
WB Reject Coal		0.20%		1904.80

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	Fuel Mix (%)		GCV (kCal/kg)	
	MYT	Petition	MYT	Petition
CCL [Shakti 3] Coal	43.64%	43.11%	3837.53	3681.82
BCCL [e-auction] Coal				
E Auction				
Tailing (Road) Coal		3.48%		4202.71
CCL [Shakti 2] WIV Coal		7.47%		4031.85
ECL [Shakti 2] Coal	6.47%	6.82%	5109.27	4661.51
CCL [Shakti 2] Coal	14.59%	12.53%	3837.53	3695.49
MCL [Shakti 2] Coal	14.05%	15.55%	3129.71	2902.25
CCL SFA		0.75%		3675.04
Wtg. Avg. GCV			3694.58	3694.58

Commission's Analysis

- 6.29 The Commission has observed that the Petitioner has procured coal from other sources in addition to sources that are approved by the Commission in its MYT Order dated November 04, 2022 owing to different reasons.
- 6.30 The Commission has computed the GCV for each type of coal by considering the actual weighted average GCV after scrutinizing the actual for first six-month and estimated for remaining for next six month of FY 2023-24. The Petitioner is directed to bring to the notice of the Commission any such changes and shortage in supply of coal on quarterly basis and should ensure the cost effectiveness of such purchase.
- 6.31 Considering the submission and the facts and circumstances and on due diligence, the Commission approves the coal mix and weighted average GCV of coal for Unit-II and Unit-III of Jojobera Generation station as given below.

Table 72: Coal Mix and GCV for Unit-II as approved by the Commission

Particulars	Fuel Mix (%)			GCV (kCal/kg)		
	MYT	Petition	Approved	MYT	Petition	Approved
Middling Coal	21.25%	7.43%	7.43%	3860.75	3870.51	3870.51
WB Reject Coal		0.25%	0.25%		1904.80	1904.80
CCL [Shakti 3] Coal	43.64%	42.16%	42.16%	3837.53	3702.02	3702.02
Tailing (Road) Coal		4.12%	4.12%		4200.10	4200.10

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	Fuel Mix (%)			GCV (kCal/kg)		
	MYT	Petition	Approved	MYT	Petition	Approved
CCL [Shakti 2] WIV Coal		11.23%	11.23%		3997.13	3997.13
ECL [Shakti 2] Coal	6.47%	6.64%	6.64%	5109.27	4741.04	4741.04
CCL [Shakti 2] Coal	14.59%	10.80%	10.80%	3837.53	3682.41	3682.41
MCL [Shakti 2] Coal	14.05%	16.66%	16.66%	3129.71	2895.87	2895.87
CCL SFA		0.70%	0.70%		3475.02	3475.02
Wtg. Avg. GCV					3694.79	3694.80

Table 73: Coal Mix and GCV for Unit-III as approved by the Commission

Particulars	Fuel Mix (%)			GCV (kCal/kg)		
	MYT	Petition	Approved	MYT	Petition	Approved
Middling Coal	21.25%	10.10%	10.10%	3860.75	3926.27	3926.27
WB Reject Coal		0.20%	0.20%		1904.80	1904.80
CCL [Shakti 3] Coal	43.64%	43.11%	43.11%	3837.53	3681.82	3681.82
Tailing (Road) Coal		3.48%	3.48%		4202.71	4202.71
CCL [Shakti 2] WIV Coal		7.47%	7.47%		4031.85	4031.85
ECL [Shakti 2] Coal	6.47%	6.82%	6.82%	5109.27	4661.51	4661.51
CCL [Shakti 2] Coal	14.59%	12.53%	12.53%	3837.53	3695.49	3695.49
MCL [Shakti 2] Coal	14.05%	15.55%	15.55%	3129.71	2902.25	2902.25
CCL SFA		0.75%	0.75%		3675.04	3675.04
Wtg. Avg. GCV					3694.58	3694.58

Transit Loss

Petitioner's Submission

6.32 The Petitioner has projected the transit loss on normative basis for each source of coal for FY 2023-24 in accordance with **Clause 17.11** of the Generation Tariff Regulations 2020.



Commission's Analysis

6.33 The Commission has observed that the actual transit loss of coal depends on various factors like category of coal, foreign particles content, moisture content, distance from mines etc. Considering all the factors, in accordance with **clause 17.11** of JSERC Generation Tariff Regulations, 2020, the Commission stipulated the weighted average normative transit loss of 0.8% for all categories of coal.

Landed Cost of Coal

Petitioner's Submission

6.34 The Petitioner has submitted the source-wise actual landed price of coal from each source. However, normative transit loss has been considered for other categories of coal as per JSERC Generation Tariff Regulations, 2020.

Commission's Analysis

6.35 The Commission has considered following figures for the approval of the weighted average landed cost of coal: -

- Actual figures up to October 2023 and projected for remaining months of the Base price of coal including sizing charges, applicable tax, transportation charges, handling charges and provisional adjustment/stock adjustment (if any);
- Normative Transit loss as approved by the Commission;
- Actual consumption of various types of coal.

6.36 On scrutinizing and analyzing the material, information, and actual figure for first six months and estimated for the remaining six month submitted by the Petitioner and on prudent check the Commission approves the landed price of primary fuel for FY 2023-24 as tabulated hereunder.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 74: Landed Price of Primary Fuel for Unit-II as approved by the Commission

Particulars	Rs./Ton		
	MYT	Petition	Approved
Middling Coal	4222.58	5225.54	5225.54
WB Reject Coal		4519.00	4519.00
CCL [Shakti 3] Coal	3653.69	3230.48	3230.48
Tailing (Road) Coal		7402.97	7402.97
CCL [Shakti 2] WIV Coal	5328.00	4827.95	4827.95
ECL [Shakti 2] Coal	3653.69	5603.70	5603.70
CCL [Shakti 2] Coal	2506.65	3716.48	3716.48
MCL [Shakti 2] Coal		2792.79	2792.79
CCL SFA		4268.32	4268.32
Wtg. Avg. Landed Price of Primary Fuel	3721.69	3877.83	3877.83

Table 75: Landed Price of Primary Fuel for Unit- III as approved by the Commission

Particulars	Rs./Ton		
	MYT	Petition	Approved
Middling Coal	4222.58	5494.51	5494.51
WB Reject Coal		4519.00	4519.00
CCL [Shakti 3] Coal	3653.69	3248.26	3248.26
Tailing (Road) Coal		7384.00	7384.00
CCL [Shakti 2] WIV Coal		4819.87	4819.87
ECL [Shakti 2] Coal	5328.00	5549.38	5549.38
CCL [Shakti 2] Coal	3653.69	3647.87	3647.87
MCL [Shakti 2] Coal	2506.65	2789.07	2789.07
CCL SFA		4842.05	4842.05
Wtg. Avg. Landed Price of Primary Fuel	3821.92	3886.35	3886.35

Calorific value and Cost of Secondary Fuel

Petitioner's Submission

6.37 The Petitioner has submitted the weighted average calorific value and landed price of secondary fuel i.e., LDO is 8843.41 kCal/L and Rs.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

77855.08 /kL for Unit-II and 8849.58 kCal/L and Rs. 77980.00 /kL for Unit-III respectively.

Commission's Analysis

- 6.38 On scrutinizing and analyzing the data, information and submission made by the Petitioner and on prudent check, the Commission has observed that the landed price of secondary fuel had increased drastically as compared to the previous years. Accordingly, the Commission directs the Petitioner to ensure price discipline while purchasing the secondary fuel and also provide the auditor's certificate at the time of true up.
- 6.39 Considering the fact that the landed price of secondary fuel is volatile and depend on the market supply and demand. Hence, the Commission in the instant order, approves the calorific value and landed price of Secondary Fuel as submitted by the Petitioner as given below.

Table 76: Calorific value & Landed Price of Secondary fuel as approved by the Commission

Particulars	Calorific Value (kcal/L)			Landed Price (Rs./kL)		
	MYT	Petition	Approved	MYT	Petition	Approved
UNIT-II	9100.00	8843.41	8843.41	45197.95	77855.08	77855.08
UNIT-III	9100.00	8849.58	8849.58	45195.83	78156.00	78156.00

Energy Charge Rate (ECR)

Petitioner's Submission

- 6.40 The Petitioner has estimated the Energy Charge Rate (ECR) for FY 2023-24 as Rs. 3.102/kWh and Rs. 3.121/kWh for Unit-II and Unit-III respectively before taking into account the discount of Shakti Coal.
- 6.41 Further, the Petitioner has passed on the discount of Rs. 0.04/kWh and Rs 0.07/kWh to its beneficiaries on the Units generation corresponding to Shakti Coal allocated under round#2 & round #3 auction as per the methodology approved by the Commission in the amended Power Purchase Agreement (PPA) between the Petitioner and Beneficiary for

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Jojobera Plant Unit-II and Unit-III.

- 6.42 In accordance with JSERC (Generation Tariff Regulation) (1st Amendment) 2023 the Petitioner has considered a margin of 85.00 kCal/kg in GCV for both Unit-II & Unit-III for computation of ECR.
- 6.43 Further, in accordance with JSERC (Generation Tariff Regulation) (1st Amendment) 2023 the Petitioner has considered normative Gross Station Heat Rate as 2567.00 kCal/kWh for Unit-II & 2577 kcal/kWh for Unit-III, Normative Auxiliary Consumption of 10.00% and Normative secondary fuel oil of 0.5 ml/kWh for both the Unit for FY 2023-24 for computation of the Energy Charge rate.

Commission's Analysis

- 6.44 The Commission has outlined **clause 17.7, clause 17.8** of JSERC Generation Tariff Regulation, 2020 in True-up chapter of this order for approval of the Energy Charge Rate (ECR).
- 6.45 Accordingly, the Commission compute the ECR based on actual coal mix (for first six months and estimated for next six months of FY 2022-23 for), normative transit loss, normative Secondary Fuel Oil consumption, normative SHR, normative Auxiliary, landed price of primary & secondary fuel, weightage average of primary & secondary fuel as approved earlier in this order.

Table 77: Energy Charge Rate (ECR) for Unit-II as approved by the Commission.

Particulars	UoM	MYT	Petition	Approved
Normative Auxiliary Consumption (AUX)	%	9.00%	10.00%	10.00%
Normative Gross Station Heat Rate (SHR)	kCal/kWh	2,525.00	2567.00	2,567.00
Specific fuel Oil Consumption (SFC)	mL/kWh	0.50	0.50	0.50
Calorific Value of Oil (CVSF)	kCal/ml	9.10	8.84	8.84
GCV of Primary Fuel (CVPF)	kCal/kg	3,825.24	3,609.79	3,609.80
Landed Price of Primary Fuel (LPPF)	Rs./kg	3.72	3.88	3.88
Landed Price of Secondary Fuel (LPSFi)	Rs./ml	0.05	0.08	0.08
Energy Charge Rate (ECR)	Rs/kWh	2.720	3.102	3.102



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 78: Energy Charge Rate (ECR) for Unit-III as approved by the Commission.

Particulars	UoM	MYT	Petition	Approved
Normative Auxiliary Consumption (AUX)	%	9.00%	10.00%	10.00%
Normative Gross Station Heat Rate (SHR)	kCal/kWh	2,525.00	2577.00	2,577.00
Specific fuel Oil Consumption (SFC)	mL/kWh	0.50	0.50	0.50
Calorific Value of Oil (CVSF)	kCal/ml	9.10	8.85	8.85
GCV of Primary Fuel (CVPF)	kCal/kg	3,825.24	3,609.58	3,609.58
Landed Price of Primary Fuel (LPPF)	Rs./kg	3.82	3.89	3.89
Landed Price of Secondary Fuel (LPSFi)	Rs./ml	0.05	0.08	0.08
Energy Charge Rate (ECR)	Rs/kWh	2.792	3.121	3.121

6.46 The Commission has observed that due to discount of Rs. 0.04/kWh on sale of SHAKTI round #2 and Rs 0.07/kWh on sale of SHAKTI round #3 scheme coal, there will be reduction in energy cost by Rs. 4.09 Crore and Rs. 2.76 Crore in Unit-II and Unit-III respectively for FY 2023-24.

6.47 The Commission has scrutinized the submission of the Petitioner and approved the reduction as submitted by the Petitioner as shown below and shall be subject to prudence check at the time of truing up.

Table 79: Total Shakti discount for FY 2023-24 as approved by the Commission after considering the impact of Discounting on SHAKTI Scheme Coal.

Particulars	UoM	Unit-II		Unit-III	
		Petition	Approved	Petition	Approved
Fuel Charge Before Discount	Rs. Cr.	250.75	250.75	243.71	243.72
Sales due to ECL (Shakti 2) Coal	MU	67.09	68.31	65.25	66.46
Sales due to CCL (Shakti 2) Coal	MU	84.29	86.28	94.53	96.76
Sales due to CCL (Shakti 2) WIV Coal	MU	95.27	97.34	61.63	62.96
Sales due to MCL (Shakti 2) Coal	MU	101.55	104.62	91.52	94.28
Discount Amount (@ Rs. 0.04/kWh)	Rs. Cr.	1.18	1.04	1.17	1.03
Sales due to CCL Coal (Shakti 3)	MU	330.74	338.51	324.01	331.67
Discount Amount (@ Rs. 0.07/kWh)	Rs. Cr.	2.69	3.05	2.42	2.76
Total Shakti Discount	Rs. Cr.	3.87	4.09	3.58	3.79

Summary of Fuel Cost

6.48 On consideration of the submission and details furnished by the Petitioner, the Commission approves the Fuel Cost for both the unit as summarized below:

Table 80: Fuel Cost for Unit-II as approved by the Commission

Particulars	UoM	MYT	Petition	Approved
Primary Fuel Cost	Rs. Cr.	219.71	247.26	247.26
Secondary Fuel Cost	Rs. Cr.	2.02	3.50	3.50
Energy Cost	Rs. Cr.	221.74	250.75	250.75

Table 81: Fuel Cost for Unit-III as approved by the Commission

Particulars	UoM	MYT	Petition	Approved
Primary Fuel Cost	Rs. Cr.	225.63	240.33	240.33
Secondary Fuel Cost	Rs. Cr.	2.02	3.38	3.39
Energy Cost	Rs. Cr.	227.60	243.71	243.72

Determination of Fixed Cost

Additional Capitalization

Petitioner's Submission

6.49 The Petitioner has submitted the actual capitalization for Unit-II and Unit-III for FY 2023-24 which is broadly categorized under two heads:

- **Capitalization-Standalone:** This category includes the capitalized costs incurred for assets/schemes exclusively for Unit-II or Unit-III.
- **Capitalization-Common Facilities:** This category includes the assets/schemes which are common to all the Units at the Jojobera Power Plant i.e. Unit-I, Unit-II, Unit-III, Unit-IV of Tata Power and Unit-V of Industrial Energy Limited (IEL). These assets/schemes provide facilities to all the above Units and therefore the capitalized cost of such assets/schemes are apportioned to derive the GFA

part of Unit-II and Unit-III appropriately.

6.50 The Petitioner has further submitted that the apportionment ratio was worked out individually for Unit-II and Unit-III and combined based on the installed capacity of these Units with respect to the installed capacity of Unit-I, Unit-II, Unit-III, Unit-IV and IEL Unit-V of Jojobera Power Plant. The methodology of such apportionment is given below.

Table 82: Apportionment ratio as submitted by the Petitioner

Particulars	UoM	MYT
Installed Capacity (Unit-I)	MW	67.5
Installed Capacity (Unit-II)	MW	120
Installed Capacity (Unit-III)	MW	120
Installed Capacity (Unit-IV)	MW	120
Installed Capacity (Unit-V-IEL)	MW	120
Installed Capacity of Jojobera Power Plant	MW	547.5
Contribution of Unit-II	%	21.92
Contribution of Unit-III	%	21.92
Combined Contribution (Unit-II+ Unit-III)	%	43.84

6.51 The Petitioner has submitted scheme like Hydraulic Auger for CHP scheme at its facility for reduction in human error or bias, time required for Coal sample collection and risk to the safety of the personnel collecting coal sample from wagon top. The Petitioner after COVID-19 initiated detailed engineering, designing and procurement for the above stated scheme. The Petitioner while doing so experienced various engineering and operational challenges on engineering and accordingly to feedback from other Generating Stations. The Petitioner engineers also visited other Generating Companies to enquire about their experience of maintaining facility for automatic sampling. It was noticed that online samplers with crusher are widely being used in place of Hydraulic augur for representative coal sampling at unloading circuit. After the series of deliberations, research and considering all the feedbacks, Management recommended for online belt sampling system. Accordingly, the Petitioner most humbly wishes to propose online belt sampling system to be implemented at its CHP, instead of earlier scheme. Further, Online Coal Sampler does not lead to any cost escalation and is well within the cost approved by the Hon'ble Commission for the earlier approved cost for

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

"Hydraulic Auger" and also meets the objective as envisaged earlier.

6.52 Further, the Petitioner has proposed that new scheme like sampling system will help in sample preparation, the sample drawn from the sampling system will be sent to existing laboratory to do necessary analysis of critical parameter such as moisture and general-purpose analysis like ash content, chemical tests, calorific value etc.

6.53 The table summarizes the scheme wise projected additional capitalization for Unit-II and Unit-III for FY 2023-24.

Table 83: Asset wise Capitalization (Rs. Crore) as submitted by the Petitioner.

Particulars	Petition
Unit II & Unit III Common	
Replacement of Dead Tank CT with Live Tank (Carry Forward)	0.2661
P&M in Generating Station	6.2195
Air Conditioning Plants (Static)	6.335
Self-propelled Vehicles	3.1781
Net- Capitalization	16.384

Table 84: Capitalization and Decapitalization (Rs. Crore) as submitted by the Petitioner.

Particulars	Unit-II		Unit-III	
	MYT	Petition	MYT	Petition
Capitalization	0.08	8.19	0.11	8.19
Decapitalization	0.03	1.72	0.03	1.72

Commission's Analysis

6.54 The Commission has outlined **clause 14.1 to clause 14.6** of JSERC Generation Tariff Regulation, 2020 in Truing Chapter of this Order for approval of any additional capitalization for a generating station.

6.55 The Commission has observed that the Petitioner has submitted the revised Capitalization phasing for Unit-II & Unit-III for entire control period.

6.56 In regard to revision in capitalization phasing for FY 2023-24, the

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Commission has scrutinized the detail and reasoning for cost overrun submitted by the Petitioner and on prudent check the Commission approves Hydraulic Auger, sampling system and other capitalization phasing for FY 2023-24.

6.57 The Commission has directed the Petitioner to bring the actual capitalization for each year of the control period. Further, in case there is a need to review/revise any scheme or change in the Scope of Work, the same need to be submitted before the Commission with proper justification.

6.58 The table below summaries the asset wise capitalization as submitted by Petitioner vis-à-vis approved by the Commission for FY 2023-24 is given below.

Table 85: Asset wise Capitalization as approved by the Commission (Rs. Crore)

Particulars	Petition	Approved
Unit II & Unit III Common		
Replacement of Dead Tank CT with Live Tank CT (Carry forward)	0.2661	0.2661
P&M in Generating station	6.2195	6.2195
Air Conditioning Plants (Static)	6.335	6.335
Self-propelled vehicles	3.1781	3.1781
Net- Capitalization	16.384	16.384

6.59 On scrutinizing and analyzing the data, information, material on record and on prudent check, the Commission approves the de-capitalization phasing for FY 2023-24 and direct the Petitioner to bring the actual de-capitalization each year of the control period.

Table 86: Capitalization as approved by the Commission (Rs. Crore)

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Capitalization	0.08	8.19	8.19	0.11	8.19	8.19
Decapitalization	0.03	1.72	1.72	0.03	1.72	1.72

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 87: Gross Fixed Assets (Rs. Crore) for Unit II as approved by the Commission

Particular	MYT	Petition	Approved
Opening GFA	504.76	491.27	491.27
Additional Capitalisation	0.08	8.19	8.19
Decapitalisation	0.03	1.72	1.72
Closing GFA	504.80	497.74	497.74

Table 88: Gross Fixed Assets (Rs. Cr) for Unit III as approved by the Commission.

Particulars	MYT	Petition	Approved
Opening GFA	490.47	475.67	475.66
Additional Capitalisation	0.11	8.19	8.19
Decapitalisation	0.03	1.72	1.72
Closing GFA	490.55	482.14	482.13

Depreciation

Petitioner's Submission

6.60 The Petitioner has submitted the depreciation for FY 2023-24 as summation of depreciation incurred on the following assets:

- Original Project Cost;
- Additional Capitalization approved for FY 2011-12 to FY 2015-16;
- Additional Capitalization approved for FY 2016-17 to FY 2020-21;
- Additional Capitalization approved for FY 2021-22 to FY 2022-23;
- Additional Capitalization projected for FY 2023-24;

6.61 The Petitioner has proposed the recovery of remaining depreciable value on original project cost as per depreciation rate specified in the Regulations, in case the cumulative depreciation of asset is less than 70%, else, by spreading it equally in the remaining Useful life i.e. 25 years.

6.62 The Petitioner has submitted that the cumulative depreciation on total assets [i.e. GFA (Including Additional Capitalization)] up to FY 2022-23 has crossed 70% for both the Units-II and Unit-III, the Petitioner as per



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

clause 15.30, has spread the balance depreciable value (i.e. 90% of the Capital Cost minus Cumulative depreciation recovered for assets in service up to 2022-23) over the balance useful life (taking useful life of 25 years specified in Regulations) of the Plant

Table 89: Depreciation (Rs. Crore) as submitted by the Petitioner

Particulars	Unit-II		Unit-III	
	MYT	Petition	MYT	Petition
Depreciation	8.53	16.73	9.01	16.05

Commission's Analysis

- 6.63 In Truing up chapter, the Commission has outlined **clause 15.28 to clause 15.34** of JSERC Generation Tariff Regulation, 2020 for approval Depreciation for a generating station.
- 6.64 The Commission has observed that the Petitioner has adopted different methodology for calculation of depreciation vis-à-vis the method approved by the Commission.
- 6.65 On scrutinizing and analyzing the data, information submitted by the Petitioner, the Commission observes that the Plant is in fag end of its life and overall depreciation of the generating stations had reached 70% for both the Units. Accordingly, in accordance with **clause 15.30** GTR 2020, the Commission is of the view to spread equally the remaining depreciable amount.
- 6.66 In accordance with **clause 3.1 (65)** of Generation Tariff Regulation 2020, the Useful life of the generating station is 25 years, however, the Petitioner had executed the Power Purchase Agreement (PPA) with the Beneficiary for 30 years. Such signing of PPA, clearly infer that both the Petitioner and Beneficiary are aware that the existing plant is able to stand even after 25 years. Further, depreciating the legitimate depreciable amount in 25 years will defeat the purpose of reliability and economical power which is an attribute of long term PPA.
- 6.67 Accordingly, the Commission taking into account the PPA tenure and

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

clause 15.30 of Generation Tariff Regulation 2020, has spread the remaining depreciable amount in PPA life (30 years) which shall also economize the power cost, and therefore approves the depreciation taking into PPA life instead of Useful life.

Table 90: Depreciation (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Depreciation	8.53	16.73	7.36	9.01	16.05	7.98

Operation & Maintenance Expenses

Petitioner's Submission

6.68 The Petitioner has claimed the Operation and Maintenance (O&M) expenses under the following broad categories: -

- Projected O&M Expenses for the Control Period FY 2021-22 to 2025-26;
 - Employee Expenses without Terminal Liabilities;
 - Repairs & Maintenance (R&M) Expenses;
 - Administrative and General (A&G) Expenses;
- Ash Disposal Expenses;
- Petition Application Fee & Publication Expenses
- Raw water Expenses;
- Terminal Benefits
- Legal Expenses:

6.69 Employee Expenses: As elaborated in True-up chapter of this order growth factor G_n and inflation factor, as specified in GTR 2020 has been revised/undergone a change. Accordingly, the revised Employee Expenses for FY 23-24 claimed for the purpose of APR FY 23-24 are summarized below.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 91: Normative Employee Expenses (Rs. Crore) as submitted by the Petitioner

Particulars	FY-21 (Base Year)	FY-22	FY-23	FY-24	FY-25	FY-26
Unit-II						
Employee Expenses	7.74	9.07	9.86	10.20	10.55	10.92
Unit-III						
Employee Expenses	7.74	9.07	9.86	10.20	10.55	10.92

6.70 The Petitioner has claimed the R&M expenses, other Admin & General Expenses, Head Office Expenses & legal Expenses FY 2023-24 the approved expenses in the MYT Order for FY 2023-24 is multiplied with the factor $(1+7.56\%)/(1+3.47\%)$ i.e., inflation of 3.47% of FY 23 has removed and in place of it, the actual inflation of 7.56% has been factored to arrive at the revised Normative Expenses as Normative expenses for FY 23 shall be base for arriving at the Normative Expenses for FY 24. With actual inflation factor the Normative R&M Expenses, Other A&G Expenses, HO Expenses, Legal Expenses for FY 2023-24 works out to following for Unit 2&3 and the same has been considered for the purpose of APR of FY 2023-24 as per normative approved in the MYT Order dated November 04, 2022 for the purpose of APR for FY 2023-24.

Table 92: Normative O&M Expenses (Rs. Crore) as submitted by the Petitioner

Particulars	Unit 2		Unit 3	
	Approved in the MYT Order	Revised	Approved in the MYT Order	Revised
	FY 24	FY 24	FY 24	FY 24
R&M Expenses	17.86	18.57	16.55	17.21
A&G Expenses	6.81	7.08	6.39	6.64
Legal Expenses	0.01	0.01	0.01	0.01
HO Expenses	13.62	14.16	13.58	14.12

6.71 The Petitioner has estimated raw water expenses by considering the projected computation and raw water charge rate applicable for the year. Further it was submitted that the projection has been worked out considering the actual consumption till Oct 2023 and thereafter considering the weighted average consumption for remaining months.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

6.72 Further, it was submitted that the GOJ has issued the revised water notification which is applicable from 1st of April 2023. In terms of the revised notification, there are separate classifications for supply for industrial usage and supply for municipal. Tata Steel vide its email dated 05.07.2023 informed Tata Power that they agreed to the rates for supply of water for industrial usage (Rs 13.00 per KL) and have started paying the same in its entirety to GoJ and further requested Tata Power to also make full payment in terms of invoices raised from 01.04.2023. Copy of the revised Notification and email dated 05.07.2023 have been enclosed and marked as **ANNEXURE P27** of main petition.

6.73 Accordingly, the Petitioner has considered 100% of the base water charge and 100% of the water tax component, since no dispute is pending before any court for the period April 01, 2023 and the projection summarizes in the table are subject to true-up later based on actual.

Table 93: Water Charges (Rs. Crore) as submitted by the Petitioner

Particulars	Unit wise Water Consumption allocated based on generation (in m ³)		Effective Water Rate for FY 2023-24 (in Rs./m ³)	Water Charges (in Rs. Cr.)	
	Unit 2 (a)	Unit 3 (b)		Unit 2	Unit 3
Base water charge rate	2082428	2011893	15.23	3.17	3.06
Water tax			13.00	2.71	2.62
Total			28.23	5.88	5.68
Claim of Water Charges in Unit 2	100% base waer charges+@100% for Water Tax as per new Notification on Water Tax which has been accepted by TSL			5.88	
Claim of Water Charges in Unit 3				5.68	

6.74 In regard to ash disposal expenses the Petitioner have been claimed as per projection approved in the MYT Order dated November 04, 2022.

6.75 Based on above, the detailed component-wise summary of Operation & maintenance expenses for Unit-II and Unit-III is shown below.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 94: O&M Expenses (Rs. Crore) as submitted by the Petitioner

Particulars	UoM	UNIT-II		UNIT-III	
		MYT	Petition	MYT	Petition
Employee Expenses	Rs. Cr.	9.00	10.20	9.00	10.20
Terminal Liabilities	Rs. Cr.	0.92	0.92	0.92	0.92
R&M Expenses	Rs. Cr.	17.86	21.11	16.55	19.57
Ash Disposal Expenses	Rs. Cr.	4.59	4.59	4.92	4.92
Raw Water	Rs. Cr.	5.80	5.88	5.76	5.68
HO Expenses	Rs. Cr.	13.62	14.16	13.58	14.12
Application & Publication Fee	Rs. Cr.	0.13	0.13	0.13	0.13
Other A&G Expenses	Rs. Cr.	6.81	7.08	6.39	6.64
Legal Expenses	Rs. Cr.	0.01	0.01	0.01	0.01
O&M Expenses	Rs. Cr.	58.74	64.08	57.26	62.18

Commission's Analysis

6.76 In True-up chapter, the Commission outlines **clause 15.35 and clause 15.40** of JSERC Generation Tariff Regulation, 2020 for approval Operation & Maintenance Charges for a generating station.

6.77 Based on facts and circumstance of the petition, the Commission approves the normative Employee Expenses for FY 2023-24 by taking the inflation factor 5.98% (average value of last 3 Year inflation) and growth factor (1.04%).

Table 95: Normative Employee Expenses (Rs Crore) as approved by the Commission.

Particulars	UoM	Unit-II	Unit-III
		Approved	Approved
Employee Cost of Previous Year	Rs. Cr.	9.38	9.38
Inflation Factor	%	5.98%	5.98%
Growth Factor	%	1.04%	1.04%
Normative Employee Expenses	Rs. Cr.	10.04	10.04

6.78 Likewise, the Commission approves the normative A&G Expenses for FY 2023-24 based on the approved normative A&G Expenses for FY 2022-23 (excluding petition filing fee and CGRF expenses) by multiplying the actual inflation factor 5.98%.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 96: Normative A&G Expenses (Rs Crore) as approved by the Commission.

Particulars	UoM	Unit-II	Unit-III
		Approved	Approved
A&G (n-1) Year	Rs Cr.	6.80	6.38
Inflation Factor	%	5.98%	5.98%
Normative A&G Expenses	Rs Cr.	7.20	6.76

6.79 For the purpose of evaluating the normative R&M Expenses, the Commission has taken the approved opening value of GFA for FY 2023-24 and multiplied it with the “K” factor of as approved in the MYT Order and actual inflation factor for FY 2023-24 as 5.98%.

Table 97: Normative R&M Expenses (Rs Crore) as approved by the Commission.

Particulars	UoM	Unit-II	Unit-III
		Approved	Approved
Opening GFA	Rs. Cr.	491.27	491.27
Inflation Factor	%	5.98%	5.98%
K-Factor	%	3.46%	3.30%
Normative R&M Expenses	Rs. Cr.	18.01	17.18

6.80 Furthermore, the Commission approves the HO Expenses for FY 2023-24 based on the approved value HO Expenses for FY 2022-23 by multiplying the actual inflation factor as 5.98%.

6.81 The Commission approves the legal expenses, application & publication fee as per the MYT Order Dated November 22, 2022.

6.82 The Commission approves the ash disposal equal to true-up year value as Rs 2.70 cr and Rs 2.80 cr for unit –II & III respectively for FY 2023-24 subject to trued-up on actual basis.

6.83 As per **clause 15.42 (Note-3)** of JSERC Generation Tariff Regulation 2020, the Commission does not approve terminal liabilities in the instant case. However, the Commission will allow the terminal liabilities in the true-up process based on the actuals submitted by the generating company, supported by documentary evidence such as actuarial studies.

6.84 The O&M expense projected by the Petitioner vis-à-vis as approved by the Commission for FY 2023-24 as given below.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Table 98: Normative O&M Expenses (Rs. Cr.) as approved by the Commission

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Employee Cost	9.00	10.20	10.04	9.00	10.20	10.04
R&M Expenses	17.86	21.11	18.01	16.55	19.57	17.18
HO & SS Expenses	13.62	14.16	14.41	13.58	14.12	14.36
Other A&G Expenses	6.81	7.08	7.20	6.39	6.64	6.76

Table 99: O&M Expenses (Variable Component) as approved by the Commission (Rs. Cr)

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Terminal Liabilities	0.92	0.92	-	0.92	0.92	-
Ash Disposal Expenses	4.59	4.59	2.70	4.92	4.92	2.80
Application & Publication Expenses	0.13	0.13	0.13	0.13	0.13	0.13
Legal Expenses	0.01	0.01	0.01	0.01	0.01	0.01

Table 100: Net O&M Expenses (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Employee Cost	9.00	10.20	10.04	9.00	10.20	10.04
R&M Expenses	17.86	21.11	18.01	16.55	19.57	17.18
HO & SS Expenses	13.62	14.16	14.41	13.58	14.12	14.36
Other A&G Expenses	6.81	7.08	7.20	6.39	6.64	6.76
Terminal Liabilities	0.92	0.92	-	0.92	0.92	-
Ash Disposal Expenses	4.59	4.59	2.70	4.92	4.92	2.80
Application & Publication Expenses	0.13	0.13	0.13	0.13	0.13	0.13
Legal Expenses	0.01	0.01	0.01	0.01	0.01	0.01
Water Charges	5.80	5.88	-	5.76	5.68	
O&M Expenses	58.74	64.08	52.50	57.26	62.18	51.28

Water Charges, Capital Spare

Commission Analysis

6.85 The Commission has outlined **clause 9.1** of JSERC Generation Tariff (1st Amendment), Regulation 2023, for approval Water Charges, capital spare for a generating station as reproduced below:

“The Water Charges, Security Deposit, and Capital Spare for thermal

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

generating stations shall be allowed separately after prudent check”.

6.86 The Commission has observed that the Government of Jharkhand has issued the revised water notification, where a separate classification for the supply of industrial usage and supply for municipal. In this regard, the Tata Steel vide email dated 05.07.2023 informed TPCL that they agreed to the rates for supplying of water for industrial usage (Rs 13.00 per KL) and have started paying the same in its entirety to GOJ and further requested Tata Power to also make full payment in terms of invoices raised from 01.04.2023 as annexed in the **annexure P27**.

6.87 The table below summarizes the water charges as claimed by the Petitioner and as approved by the Commission for FY 2023-24.

Table 101: Water charges and capital expenses (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Raw Water Expenses	5.80	5.88	5.88	5.76	5.68	5.68
Capital Spare	-	-	-	-	-	-

Interest on Loan

Petitioner's Submission

6.88 The Petitioner has submitted that the repayment of the long-term loan on Original Project Cost of Unit-II & Unit-III had been completed in the FY 2009-10 and FY 2010-11 respectively.

6.89 Further, the Petitioner has submitted that all subsequent Additional Capitalization have been done through internal accruals, 70% of the same is considered as Normative Loan for FY 2023-24. The present computation is limited to computation of interest on loan on Normative Loan arising on account of Additional Capitalizations undertaken from 2011-12 onwards.

6.90 The Petitioner had considered the normative repayment of debt equal to the depreciation of the additional capitalization only citing the reason that

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

the interest payment on original project cost is already completed in year FY 2009-10 and FY 2010-11 respectively for Unit- II and Unit-III and hence depreciation part on original cost is not considered as part of normative repayment of debt.

6.91 Furthermore, the Petitioner has submitted that the closing loan for FY 2022-23 has been considered as the Opening loan for 2023-24. Further, interest Rate has been considered as Bank Rate plus 200 basis points as on 01.04.2023 i.e. 1st April of respective year of the Control Period i.e. at 8.50% for Unit-II and Unit-III in accordance with **clause 15.18** of the JSERC Generation Tariff Regulations 2020 for working out the interest on loan on Additional Capitalization.

6.92 The Interest on loan computed by the Petitioner for FY 2023-24 is given below.

Table 102: Interest on Loan as submitted by the Petitioner (Rs. Crore)

Particulars	UoM	Unit-II		Unit-III	
		MYT	Petition	MYT	Petition
Opening Loan	Rs. Cr.	24.44	16.77	17.75	19.00
Deemed Loan Addition	Rs. Cr.	0.08	5.73	0.08	5.73
Deemed Loan Repayment	Rs. Cr.	8.53	12.04	9.01	9.49
Closing Loan	Rs. Cr.	15.99	10.47	8.81	15.24
Average loan Balance	Rs. Cr.	20.22	13.62	13.28	17.12
Interest Rate	%	9.00%	10.50%	9.00%	10.50%
Interest on Loan	Rs. Cr.	1.82	1.43	1.20	1.80

Commission's Analysis

6.93 In True-up chapter, the Commission has outlined **clause 15.6 to clause 15.8** of JSERC Generation Tariff Regulation 2020, for the approval Debt: Equity ratio for a generating station.

6.94 The Commission has scrutinized the details submitted by the Petitioner and observed that the actual loan on the assets capitalized as on Commercial Date of Operation is entirely repaid by the Petitioner. Since the normative loan value approved by the Commission is on the additional capitalization from FY 2011-12, the normative opening loan for FY 2023-24 is considered equal to closing normative loan amount

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

of FY 2022-23 as approved in the True-up chapter of this Order.

- 6.95 In accordance with **clause 15.15**, the Commission approves the deemed loan repayment equal to approved depreciation (Additional Capitalization) for FY 2023-24.
- 6.96 In accordance with **clause 15.18** of JSERC Generation Tariff Regulations, 2020 and as approved in MYT Order dated November 04, 2022, the Commission has approved the interest rate as 10.50% (SBI MCLR as on 01.04.2023 plus 200 bp) for both the Unit and Unit as shown below.

Table 103: Interest on Loan as approved by the Commission (Rs. Crore)

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Opening Loan	24.44	16.77	22.74	17.75	19.00	23.24
Deemed Loan Addition	0.08	5.73	5.73	0.08	5.73	5.73
Deemed Loan Repayment	8.53	12.04	5.26	9.01	9.49	4.69
Closing Loan	15.99	10.47	23.21	8.81	15.24	24.29
Average Loan	20.22	13.62	22.97	13.28	17.12	23.76
Interest Rate	9.00%	10.50%	10.50%	9.00%	10.50%	10.50%
Interest on Loan	1.82	1.43	2.41	1.20	1.80	2.50

Interest on Working Capital (IOWC)

Petitioner's Submission

- 6.97 The Petitioner has estimated the Interest on Working Capital (IOWC) requirement in accordance with **clause 15.23, clause 15.26** of JSERC Generation Tariff Regulations, 2020, as tabulated hereunder.

Table 104: IOWC (Rs. Crore) as submitted by the Petitioner.

Particulars	Unit-II		Unit-III	
	MYT	Petition	MYT	Petition
Cost towards Coal for Generation 50 days	30.02	34.07	30.82	34.28
Cost of Oil for Generation (2 months)	0.34	0.59	0.34	0.59
Maintenance Spares (20% O&M)	11.75	12.82	11.45	12.44
O&M Expenses (1 month)	4.90	5.34	4.77	5.18
Receivables (45 days)	40.08	46.33	40.80	46.12



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	Unit-II		Unit-III	
	MYT	Petition	MYT	Petition
Total Working Capital	87.08	99.14	88.18	98.61
Interest Rate	10.50%	12.00%	10.50%	12.00%
Interest on Working Capital	9.14	11.90	9.26	11.83

Commission's Analysis

- 6.98 In True-up chapter, the Commission has outlined **clause 15.23 to clause 15.26** of JSERC Generation Tariff Regulation 2020 and **clause 6.1** of JSERC Generation Tariff (1st Amendment), Regulation 2023 for approval interest on working capital for a generating station.
- 6.99 Taking into account the above regulation, the Interest on Working capital has been calculated at an interest rate of 12.00% (Bank Rate plus 350 basis points) as specified in the **clause 15.26** JSERC Generation Tariff Regulation, 2020 is given below.

Table 105: IOWC (Rs. Crore) as approved by the Commission

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Cost of Coal (for 50 days)	30.02	34.07	33.69	30.82	34.28	33.90
Cost of Oil for Generation (2 months)	0.34	0.59	0.58	0.34	0.59	0.58
Maintenance Spares (20% O&M)	11.75	12.82	10.50	11.45	12.44	10.26
O&M Expenses (1 month)	4.90	5.34	4.87	4.77	5.18	4.75
Receivables (45 days)	40.08	46.33	43.48	40.80	46.12	43.51
Total Working Capital	87.08	99.14	93.12	88.18	98.61	93.00
Interest Rate	10.50%	12.00%	12.00%	10.50%	12.00%	12.00%
Interest on Working Capital	9.14	11.90	11.17	9.26	11.83	11.16

Return on Equity

Petitioner's Submission

- 6.100 The Petitioner has computed Return on Equity (Pre-tax) for FY 2023-24 in accordance with **clause 15.9, clause 15.10** of Generation Tariff Regulation, 2020 read with Clause 15.11 and considering the estimated Additional Capitalization and decapitalization during 2023-24.

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

6.101 While calculating the Return on Equity (post-tax), the Petitioner has taken Minimum Alternate Tax (MAT) rate of 25.17%. Accordingly, the Petitioner had calculated the Return on Equity for FY 2023-24 as given below.

Table 106: Return on Equity as submitted by the Petitioner (Rs. Crore)

Particulars	Unit-II		Unit-III	
	MYT	Petition	MYT	Petition
Opening Equity	151.43	147.38	147.14	142.70
Net Addition	0.02	1.94	0.02	1.94
Closing Equity	151.45	149.32	147.16	144.64
Average Equity	151.44	148.35	147.15	143.67
Rate of Return on Equity	14.00%	15.00%	14.00%	15.00%
ROE (Post-Tax)	18.71%	20.04%	18.71%	20.04%
MAT	25.17%	25.17%	25.17%	25.17%
ROE (Pre-Tax)	28.33	29.74	27.53	28.80

Commission's Analysis

6.102 In True-up chapter, the Commission has outlined **clause 15.6 to clause 15.8** of JSERC Generation Tariff Regulation 2020 and **clause 6.1** of JSERC Generation Tariff (1st Amendment), Regulation 2023 for approval Return on Equity for a generating station.

6.103 On scrutinizing and analyzing the data information and material on record submitted by the Petitioner, the Commission observed that the company has transitioned to the new tax regime effective from 01.04.2020. Accordingly, it approves the applicable Tax rate of 25.168% ($22\% \times 1.10 \times 1.04$) (i.e. 22% (with surcharge of 10% and cess of 4%) in accordance with Generation Tariff Regulations, 2020.

6.104 In accordance with the **clause 6.1** of JSERC Generation Tariff Regulation, (1st Amendment) 2023, the Commission approves the Rate of Return on Equity as 15.00% as given below.

Table 107: Return on Equity for Unit II as approved by the Commission (Rs. Crore)

Particulars	MYT	Petition	Approved
Opening Equity	151.43	147.38	147.38

True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	MYT	Petition	Approved
Net Addition	0.02	1.94	1.94
Closing Equity	151.45	149.32	149.32
Average Equity	151.44	148.35	148.35
Rate of Return on Equity	14.00%	15.00%	15.00%
ROE (Post-Tax)	18.71%	20.04%	20.04%
MAT	25.17%	25.17%	25.17%
ROE (Pre-Tax)	28.33	29.74	29.74

Table 108: Return on Equity for Unit III as approved by the Commission (Rs. Crore)

Particulars	MYT	Petition	Approved
Opening Equity	147.14	142.70	143.92
Net Addition	0.02	1.94	1.94
Closing Equity	147.16	144.64	145.86
Average Equity	147.15	143.67	144.89
Rate of Return on Equity	14.00%	15.00%	15.00%
ROE (Pre-Tax)	18.71%	20.04%	20.04%
MAT	25.17%	25.17%	25.17%
ROE (Pre-Tax)	27.53	28.80	29.04

Incentive (Pre-Tax) FY 2022-23

Petitioner Submission

6.105 The Petitioner has submitted that the incentive for FY 2023-24 as nil as of now and same shall be subjected to True-up as per Generation Tariff Regulation 2020.

Commission Analysis

6.106 Considering the facts and circumstances given in the petition, the Commission isn't incline to approves any incentive as for FY 2023-24 subject to true-up as per GTR 2020.

Summary of Annual Revenue Requirement

Commission's Analysis

6.107 On consideration of the submission and details furnished by the Petitioner, the Commission approves the Annual Fixed Cost (AFC) for FY 2023-24 as summaries below.

Table 109: Annual Fixed Cost (Rs. Crore) as approved by the Commission.

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
O&M Expenses	52.94	58.20	52.50	51.50	56.50	51.28
Depreciation	8.53	16.73	7.36	9.01	16.05	7.98
Interest on Loan	1.82	1.43	2.41	1.20	1.80	2.50
Int. on WC	9.14	11.90	11.17	9.26	11.83	11.16
Return on Equity	28.33	29.74	29.74	27.53	28.80	29.04
AFC	100.76	117.99	103.19	98.49	114.98	101.96
Water Charge	5.80	5.88	5.88	5.76	5.68	5.68
Capital Spare	0.00	0.00	0.00	0.00	0.00	0.00

6.108 The summary of Annual Fixed Charge after taking into account the availability Factor for FY 2023-24 as approved by the Commission is shown below.

Table 110: AFC (Rs. Crore) after availability as approved by the Commission

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Annual Fixed Cost	100.76	117.99	103.19	98.49	114.98	101.96
Availability	85.00%	93.34%	93.34%	99.22%	86.44%	86.44%
AFC after Availability	100.76	117.99	103.19	98.49	114.98	101.96

6.109 The summary of recoverable Annual Revenue Requirement (ARR) for FY 2023-24 as approved by the Commission is shown below.

Table 111: Annual Revenue (Rs. Crore) as approved by the Commission

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
ARR after Availability	328.30	374.62	359.82	331.86	364.37	351.35



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Particulars	Unit-II			Unit-III		
	MYT	Petition	Approved	MYT	Petition	Approved
Less: Discount as per [SHAKTI 2&3]	3.63	3.87	4.09	3.63	3.58	3.79
Net ARR	324.67	370.76	355.73	328.22	360.78	347.56



Chapter 7: STATUS OF EARLIER DIRECTIVES

7.0 The directives issued by the Commission in its earlier Orders, its compliance by the Petitioner and further view of the Commission on compliance is tabulated below:

Directive	Status	View of the Commission
1. Transit Loss		
“The Commission directs the Petitioner to devise ways to control the expenses and maintain transit loss at the levels specified as per Generation Tariff Regulations 2015”	Tata Power deliberated with TSL West Boakro to minimize Transit Loss in Middling Coal. Team was formed to devise ways to minimize the Transit loss. A short note on various initiatives implemented in last few years is enclosed as ANNEXURE -P28 . Consequent to implementation of initiatives, Tata Power has been able to reduce transit loss in middling coal and same has also been acknowledged by TSL. TSL Acknowledgement is enclosed as ANNEXURE-P29 It is pertinent to mention here that since quantity of washery Coal (Washed coal from mines of TSL West Boakro) is getting lower in current financial year and for balance year of the control period, this issue will have much lower impact. Further, since Tata Power is	The Commission has noted the status of compliance and direct the petitioner to continue submitting the same.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Directive	Status	View of the Commission
	claiming Transit Loss in the present Petition at normative levels specified in the Regulations, this issue does not survive for present Petition. Inherently, moisture loss is high in washed coal on which the Petitioner has no control. In compliance with the direction of the Hon'ble Commission, the Petitioner submits the actions taken on this issue in the instant Petition.	
2. Start Ups		
The Commission had directed to submit monthly details of a number of unit-wise start-ups taken after shutdown. Also, details should include the monthly quantity of secondary fuel consumed during plant start up and flame support if required. The same should be submitted with subsequent APR and True-up Petitions.”	Submitted in instant Petition as ANNEXURE P30.	The Commission has noted the status of compliance. In this regard the Commission direct the Petitioner to continue submitting the same.
3. DPR of Scheme		
The Commission had directed to submit DPR of schemes that have been proposed	This directive is compiled in MYT Petition for FY 2021-22 to FY 2025-26, wherein	The Commission direct the Petitioner to continue with this practice, whenever



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Directive	Status	View of the Commission
along with the petition.	capitalization plan for Third Control Period has been given along with Detailed Project Report for each Scheme and also acknowledged by the Hon'ble Commission in the MYT Order. Also, for new schemes submitted in last Petition detailed project report has been enclosed.	they submit the DPR of the Scheme for the approval.
4. Notice to the Commission		
The Petitioner had hereby directed that during the execution of work pertaining to any preapproved schemes, any increase in the scope of work, procurement, services, price/cost etc. should be brought to the notice of commission immediately.”	For FY 23, and for current years as well, All Add Cap Reports have been submitted to Hon'ble Commission.	The Commission directs the Petitioner to continue with the same Practice in the future also.
5. Ash Disposal		
The Petitioner had directed to submit status report of actions taken for disposal of ashes generated from the plant as per the statutory guidelines specified by MoEF and JSPCB and submit quarterly	This Directive is being complied through submission of quarterly ash utilization reports. All reports of FY 2022-23 including Q 1 of FY 2023-24 have been submitted.	The Commission directs the Petitioner to continue with the same Practice in the future also.



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Directive	Status	View of the Commission
<p>reports to the Commission. Such reports should also form part of the subsequent APR and True-up Petitions."</p>		
6. Energy Charge Optimization		
<p>The Commission had observed that due to various reasons like primary fuel mix, GCV and Landed price the energy charge rate is too high. The Petitioner is required to prepare its strategy for coal procurement plan to optimize its energy charge.</p>	<p>This is to submit that this directive is being complied through Quarterly Directive Reports submitted to Hon'ble Commission and the same has been acknowledged by the Hon'ble Commission in the MYT Order. Revised Fuel Mix Plan has been also submitted along with the instant Petition.</p>	<p>The Commission is of view that the Energy Charge increase drastically in last years. Therefore, the Commission re-direct to the Petitioner to prepare its strategy for reduction in energy charge rate.</p>
7. Capex Planning		
<p>The Commission had directed the Petitioner to ensure that proper planning should be carried out before finalization and submission of Capex plan before the Commission for approval. Further, in case there is need to review/revise any scheme or change in the Scope of Work, the same is required to be submitted before the Commission with proper justification</p>	<p>Revised Phasing of Capex has been submitted in instant Petition.</p>	<p>The Commission directs the Petitioner to submit capital expenditure in accordance with clause 14.15 of JSERC Generation Tariff Regulations 2020 before re-phasing the capital expenditure plan.</p>



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Directive	Status	View of the Commission
for approval.		
8. Residual Life Study		
<p>The Commission had observed that both the Units (Unit-II & Unit-III) have a remaining useful life of less than ten years as per regulations. The Petitioner is required to carry out residual life study before any additional capitalization in the plant and justify its operational and financial benefits.</p>	<p>Tata power is Planning for this activity in the ensuing annual shutdown and the Petitioner shall ,accordingly, intimate Hon'ble Commission as soon as the scope of the RLA is finalized.</p>	<p>The Commission direct the Petitioner to carry out a residual life Assessment (RLA) study as soon as possible before any additional capitalization in the plant and justify its operational and financial benefits. However, before undertaking this study, the Petitioner to submit the complete scope of work to be carried under RLA for Commission's approval.</p>



Chapter 8: DIRECTIVES

Primary Fuel

8.1 The Commission has observed that due to various reasons like primary fuel mix, GCV and Landed price the energy charge rate is too high. The Petitioner is required to prepare its strategy for coal procurement plan to optimize its energy charge.

Residual Life Study

8.2 The Commission has observed that both the Units (Unit-II & Unit-III) have remaining useful life less than 10 years as per regulations. Accordingly, the Commission directs the Petitioner to carry out residual life study before any additional capitalization in the plant and justify its operational and financial benefits. However, before undertaking this study, the Petitioner is to submit the complete scope of work to be carried under RLA for Commission's approval.

Compliance of directives issued in earlier Orders

8.3 In addition to above, the Petitioner is also directed to submit the compliance to the directives issued by the Commission in its earlier Orders.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on June 06, 2024.

Date: 06.06.2024

Place: Ranchi

Mr. Atul Kumar

Member (Technical)

Mr. Mahendra Prasad

Member (Law)



Chapter 9: List of Participant

Table 112: List of participant who attend Public Hearing

Sl. No.	Name S/Shri	Address / Organization if any
1	R. S. Bhadoriya	Tata Power, Jamshedpur
2	Golak B. Saha	Tata Power
3	Nidhi Vartak	Tata power
4	Mukul Kr. Singh	Tata Power
5	Basudev Hansdah	Tata Power
6	Priya Kumari	TELCO, Jamshedpur
7	Shishir Kr. Singh	Tata Power
8	Rakesh Gupta	Tata Power
9	Manmohan Singh	Jamshedpur
10	D. K. Singh	Baridih, Jamshedpur
11	Pintu Srivastava	Tata Power
12	Anshu	Tata Power
13	Prabhakar Kumar	Tata Power
14	Chandershekhar Singh	Tata Power
15	Ajay Kumar	Tata Steel Limited
16	Satyajeet Singh Chouhan	Tata Power
17	Tushar Raj	Tata Steel
18	Pankaj Kr. Roy	Tata Power
19	Kush Kumar	Tata Steel Ltd.
20	Harpreet Kumar Bhairava	Tata Steel Limited
21	Shoab Ahmad	Tata Steel Limited
22	V. P. Singh	Tata Steel Limited
23	Ranjan Kumar	Tata Steel Limited
24	Anni Amrita	Adityapur



True-up for FY 2022-23 & Annual Performance Review for FY 2023-24

Sl. No.	Name S/Shri	Address / Organization if any
25	Jawahar lal Sharma	Sonari, Jamshedpur
26	Suman Mandal	Tata Steel USIL
27	Sanjay Gautam	Tata Steel USIL
28	Rajesh Kumar	Sonarai
29	Sonav Vishnu	Dinna, Jamshedpur
30	Bijendra Kumar	Danik Bhaskar
31	Lalit Dubey	Danik Bhaskar
32	Nirmal Prasad	Danik Jagaran