

Jharkhand State Electricity Regulatory Commission



Order on
True-up for FY 2020-21
for
Inland Power Limited (IPL)
MAY 22, 2023



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List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
ARR	Aggregate Revenue Requirement
CEA	Central Electricity Authority
COD	Commercial Operation Date
CFBC	Circulating Fluidized Bed Combustion
CCL	Central Coalfield Limited
CIL	Coal India Limited
ECR	Energy Charge Rate
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GHR	Gross Station Heat Rate
GoI	Government of India
GoJ	Government of Jharkhand
IoWC	Interest on Working Capital
IPL	Inland Power Limited
JBVNL	Jharkhand Bijli Vitran Nigam Limited
JSEB	Jharkhand State Electricity Board
JSERC	Jharkhand State Electricity Regulatory Commission
JUVNL	Jharkhand Urja Vikas Nigam Limited
kCal	Kilocalorie
kg	Kilogram
kWh	Kilowatt-hour
MAT	Minimum Alternative Tax
ML	Millilitre
MOU	Memorandum of Understanding
MT	Million Tonnes
MU	Million Units
MW	Megawatt
MYT	Multi-Year Tariff
NAPAF	Normative Annual Plant Availability Factor
O&M	Operations 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
SLDC	State Load Dispatch Centre
SLM	Straight Line Method



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Before
Jharkhand State Electricity Regulatory Commission, Ranchi

Case (Tariff) No.: 09 of 2022

In the matter of:

Petition for
True-up for FY 2020-21

In the matter:

Inland Power Limited (IPL).....**Petitioner**

PRESENT

Hon'ble Justice Amitav Kumar Gupta
Shri Mahendra Prasad
Shri Atul Kumar

Chairperson
Member (Legal)
Member (Technical)

Order dated May 22, 2023

Inland Power Limited (hereinafter referred to as 'IPL' or the 'Petitioner') filed a Petition dated December 30, 2021 for True-up of FY 2020-21 for its business of generation of electricity in the State of Jharkhand.



A 1 Introduction

Jharkhand State Electricity Regulatory Commission

- 1.1 The Jharkhand State Electricity Regulatory Commission (hereinafter referred to as “JSERC” or “the Commission”) was established by the Government of Jharkhand under Section 17 of the Electricity Regulatory Commission Act, 1998 on August 22, 2002. The Commission became operational with effect from April 24, 2003.
- 1.2 The Government of Jharkhand vide its notification dated August 22, 2002 had defined the functions of JSERC as per Section 22 of the Electricity Regulatory Commission Act, 1998 to be the following, namely: -
- a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case maybe, 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 JSERC is discharging its functions as prescribed in Section 86 of the Act.
- 1.4 In accordance with provisions of the said Act, the JSERC discharges the following functions: -
- a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:
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 considered, necessary;
 - k) discharge such other functions as may be assigned to it under this Act.
- 1.5 The Commission advises the State Government 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) reorganisation and restructuring of electricity industry in the State;
 - d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.
- 1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.



- 1.7 In discharge of its functions, the State Commission is guided by the National Tariff Policy framed and published by Government of India under the provisions of Section 3 of the Act. The objectives of the present 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.

The Petitioner – Inland Power Limited (IPL)

- 1.8 Inland Power Limited is a company incorporated under the provisions of the Indian Companies Act, 1956. IPL was originally incorporated on June 22, 1993 as a Private Limited Company and was subsequently converted to a Public Limited Company on April 3, 2008.
- 1.9 The Petitioner signed a Memorandum of Understanding (MoU) with Government of Jharkhand to develop a 126 MW (2x63 MW) thermal power plant based on CFBC technology in two stages in Gola, District Ramgarh, Jharkhand on October, 2011. The Petitioner commissioned its 1st Unit (1x63MW) on May 21, 2014.
- 1.10 As per the provisions of the MoU, the Government of Jharkhand (GoJ) or Distribution Licensees authorized by it, will have the first right of claim on a purchase up to 25% of the power delivered to the system by the proposed power plant. Further, the MoU stipulates that out of the 25% under the first right of refusal to the State, the rate of 12% share will be on variable cost. Pursuant to the MoU signed between GoJ and IPL, IPL signed a Power Purchase Agreement (PPA) with Jharkhand State Electricity Board (now Jharkhand Bijli Vitran Nigam Limited or JBVNL) on February 23, 2012 for supplying 35 MW of 63 MW from 1st Unit of the project on long term basis. Subsequently, IPL signed a supplementary PPA with JSEB (now JBVNL) on April 22, 2013 for purchase and sale of the entire quantity of 63 MW power

from the 1st Unit of 63 MW inclusive of quantity mentioned in earlier Principal PPA.

The Petitioner's Prayers

- 1.11 The Petitioner in these Petitions have made the following prayers: -
- a) Accept the Petition for True-up of FY 2020-21;
 - b) The Hon'ble APTEL vide its judgment dated 17-07-2019 has put a stay order on the 88% basis used by the JSERC. The Petitioner requests the Hon'ble JSERC to consider full 100% basis for the fixed cost recovery in the computations of True-up;
 - c) Approve the numbers for the True-up of FY 2020-21 as discussed in this Petition
 - d) Condone any inadvertent omissions/errors/rounding off differences/shortcomings and permit IPL to add/change/modify this filing and make further submission as may be at a future date; and
 - e) 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.

Scope of the Present Order

- 1.12 The Petitioner filed the current Petitions for truing up of FY 2020-21, based on audited accounts. The Commission in this Order has therefore approved the truing up of FY 2020-21.
- 1.13 While approving this Order, the Commission has taken into consideration: -
- (a) Material placed on record by the Petitioner;
 - (b) Provisions of the Electricity Act, 2003;
 - (c) Principles laid down in the National Electricity Policy;
 - (d) Principles laid down in the National Tariff Policy;
 - (e) JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015;
- 1.14 Accordingly, the Commission had scrutinized the Petition in detail and hereby issues the Order on the truing up FY 2020-21.



A 2 Procedural History

Background

- 2.1 The Commission had approved the provisional tariff for FY 2014-15 to FY 2015-16 in its MYT Order for FY 2014-15 to FY 2015-16 dated May 27, 2014 based on submission of the anticipated date of Commercial Operation Date (COD) of the plant as May 2014.
- 2.2 Subsequently, the Commission on May 16, 2017 issued a Tariff Order on approval of Capital cost of Unit-1 (1x63MW), True-up of the ARR for the year FY 2014-15, Annual Performance Review for the year FY 2015-16 and Multi Year Tariff for the 2nd Control period from FY 2016-17 to FY 2020-21.
- 2.3 The Commission had issued the True-up Order for FY 2015-16 for Unit-1 (1x63MW) on March 19, 2018 based on audited accounts submitted by the Petitioner.
- 2.4 The Petitioner had filed the review Petition on True-up Order for FY 2015-16 which was disposed of by the Commission on May 13, 2019.
- 2.5 Later, on October 01, 2019, the Commission had issued the True-up Order for FY 2016-17 and FY 2017-18 based on the audited accounts of the respective financial year and methodology adopted in earlier Orders.
- 2.6 Subsequently, the Commission also approved the Annual Performance Review for FY 2018-19 vide its Order dated December 26, 2019.
- 2.7 The Commission had issued the True-up Order for FY 2018-19 on September 22, 2020 based on audited accounts submitted by the Petitioner.
- 2.8 Later on November 04, 2022, the Commission had issued the Order on True-up for FY 2019-20 & APR for FY 2020-21 based on audited accounts submitted by the Petitioner.
- 2.9 The Petitioner in the current Petition has sought for True-up for FY 2020-21.



Disclaimer: Relevant information provided herein regarding the Commission, the Petitioner, and the Procedural History have been extracted/reproduced from the previous Orders of the Commission. This is for information purposes only and does not in any matter reflect opinion or analysis thereon.

Information Gaps in the Petition

- 2.10 As part of tariff determination exercise, several deficiencies/information gaps were observed in the Petitions submitted by the Petitioner. The information gaps were pointed out and communicated to the Petitioner vide letter no. JSERC/Case (Tariff) No. 09 of 2022/208 dated October 14, 2022; email dated November 28, 2022 and; letter no. JSERC/Case (Tariff) No. 09 of 2022/303 dated December 02, 2022.
- 2.11 The Petitioner submitted its response to the aforesaid letter and furnished additional data/information vide letter dated November 04, 2022; letter dated November 12, 2022; letter dated December 12, 2022; letter dated January 24, 2023 and; letter dated February 03, 2023.
- 2.12 The Commission has scrutinized the additional data/information submitted by the Petitioner, in response to the discrepancies pointed out and has considered the same while passing this Order.
- 2.13 In order to provide adequate opportunity to all stakeholders and general public as mandated under Section 64 (3) of the Electricity Act 2003 and in relevant provisions of Regulation(s) framed by the Commission and further, in order to ensure transparency in the process of tariff determination, the Commission decided to conduct public hearings on April 15, 2023 in the Meeting Hall of Raso Hotel at Ranchi for inviting comments/suggestion/objection.

Inviting Public Comments/ Suggestions

- 2.14 The Commission directed the Petitioner to make available copies of the Petition to the members of general public on request, and also issued a public notice inviting comments/ suggestions on the above said Petition.

2.15 The aforesaid public notice was issued by the Petitioner in various newspapers and a period of twenty-one (21) days was given to the members of the general public for submitting their comments/suggestions.

TABLE 1: LIST OF NEWSPAPERS AND DATES OF PUBLICATION OF PUBLIC NOTICE BY THE PETITIONER

Sl. No.	Newspaper	Version	Date of Publication
1.	Sanmarg	Hindi	31.12.2022 & 01.01.2023
2.	Ranchi Express	Hindi	31.12.2022 & 01.01.2023
3.	Hindustan Times	English	31.12.2022 & 01.01.2023
4.	Morning India	English	31.12.2022 & 01.01.2023

2.16 Subsequently, the Commission also issued a notice on its website www.jserc.org and in various newspapers for conducting the public hearing on the Petition filed by the Petitioner. The newspapers wherein the notice for public hearing was issued by the Commission are detailed hereunder:

TABLE 2: LIST OF NEWSPAPERS AND DATES OF PUBLICATION OF PUBLIC NOTICE BY THE COMMISSION

Sl. No.	Newspaper	Version	Date of Publication
1.	Prabhat Khabar	Hindi	02.04.2023 & 14.04.2023
2.	Dainik Bhaskar	Hindi	02.04.2023 & 14.04.2023
4.	Times of India	English	02.04.2023 & 14.04.2023
5.	The Hindustan Times	English	02.04.2023 & 14.04.2023

Submission of Comments/ Suggestions and Conduct of Public Hearing

2.17 The public hearing was held on April 15, 2023 in the Meeting Hall of the Rasoh Hotel at Ranchi.

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

A 3 Brief Facts of the Petition

True-up for FY 2020-21

a) Operational Parameters of Plant

3.1 The summary of operational parameters by the Commission in its MYT order dated May 16, 2017 vis-à-vis actuals as submitted by the Petitioner is provided in the table below:

TABLE 3: OPERATIONAL PARAMETERS AS SUBMITTED BY THE PETITIONER

Particulars	Unit	MYT	Actual
Gross Station Heat Rate	kcal/kWh	2902	3069
Annual Plant Availability Factor	%	82.50%	86.59%
Auxiliary Energy Consumption	%	10.50%	11.18%
Secondary fuel oil consumption	ml/kWh	1.00	1.00

b) Annual Revenue Requirement (ARR)

3.2 The Annual Revenue Requirement as approved by the Commission in its MYT order dated May 16, 2017 vis-à-vis actuals as submitted by the Petitioner is provided in the table below:

**TABLE 4: ANNUAL REVENUE REQUIREMENT AS SUBMITTED BY THE PETITIONER
(RS. CR.)**

Particulars	MYT	Actual
Depreciation	15.60	17.22
Interest on Loan	17.37	12.02
Return on Equity	19.84	15.43
Interest on Working Capital	6.11	6.43
O&M Expenses	21.72	24.79
Water charge	-	1.49
Annual Fixed Cost	80.64	77.38
ARR Publication & fee Expenses	-	0.30
Tax Paid	-	4.67
Revenue from fly ash brick	-	0.69
Energy Cost	85.01	103.20
Energy Charge Rate	2.09	2.82
Annual Revenue Requirement	165.64	185.55

c) Adjustment of Deficit amount

3.3 The Petitioner submitted that the tariff already recovered from JBVNL is less than the tariff approved by the Commission vide its order in Case No. 06 and



11 of 2016 dated 16th May 2017. In view of the above, the Petitioner is entitled to recover the under-recovered amount from JBVNL as per Regulation 6.17 & 6.18 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015.

TABLE 5: ADJUSTMENT OF DEFICIT AMOUNT FOR FY 2020-21 (RS. CR.)

Particulars	Petition
Annual Fixed Cost	77.38
Total Energy charges	103.20
Total Other Expenses	4.97
Net Annual Revenue Requirement	185.55
Total amount billed by IPL to JBVNL	177.54
Net Revenue Earned from Sale of Fly Ash Brick	0.69
Gap/(Surplus) for the Year	7.33
Bank Rate for calculating carrying cost	11.65%
Carrying cost	0.85
Total amount to be recovered from JBVNL	8.18



A 4 Public Consultation Process

4.1 The Petition filed by the Petitioner evoked responses from several Stakeholders. The Public Hearing held at the Meeting hall of Raso Hotel was held on April 15, 2023 to ensure maximum Public participation and transparency wherein Stakeholders put forth their comments and suggestions before the Commission in the presence of the Petitioner. The list of the attendees is attached as **Annexure-I** to this Order.

4.2 The Comments/Suggestion of the members of the Public along with the response thereon of the Petitioner and the views of the Commission are detailed hereunder:

Auxiliary Consumption

Public Comments/Suggestions

4.3 JBVNL has commented that the auxiliary energy consumption as claimed is 11.18% against the approved consumption one as 10.50%, as such the excess auxiliary consumption should be disallowed.

Petitioner's Response

4.4 IPL humbly submits that the Hon'ble Commission had set an Auxiliary consumption target of 10.50% for FY 2020-21 as per its order in Case No. 06 and 11 of 2016 dated 16th May, 2017. The auxiliary consumption is higher than the approved auxiliary consumption in FY 2020-21 due to several restrictions being imposed by SLDC on a daily basis on the plants.

4.5 IPL humbly submits that during the FY 2020-21 there were 398 restrictions from the SLDC, the date wise restrictions details have already been submitted before this Hon'ble Commission vide reply dated 04-11-2022 to the Queries raised by the Hon'ble Commission on True-up of FY 2020-21 for IPL.

4.6 IPL submits that during the commissioning period of the power plant, as per the prevailing CERC Regulations, for lignite fired stations using CFBC technology, the auxiliary energy consumption norms was 1.50% more than the auxiliary energy consumption norms of coal-based generating stations. Hence the CERC norm for auxiliary consumption of lignite based CFBC plants, up to



200 MW with induced draft cooling tower was 10.50%.

4.7 IPL also submits that CFBC boilers involve higher auxiliary consumption due to higher pressure drops & consequently higher fan power as compared to the pulverized fuel fired units.

4.8 IPL also humbly submits that CEA has in principle recommended higher auxiliary consumption in 'Recommendations on Operation Norms for Thermal Power Stations for Tariff Period beginning 1st April, 2009. It is also to be noted that following Auxiliary Consumption has been allowed by various Commissions on CFBC technology,

- In case of Raj West Power Ltd., RERC has allowed an Auxiliary Consumption of 11.50%.
- In case of Gujarat Industries Power Company Ltd., GERC has allowed an Auxiliary Consumption of 12.50% for 3 years and 11.50% from the 4th year.
- In case of Bajaj Energy Pvt. Ltd., UPERC has allowed an Auxiliary Consumption of 11.50% during stabilization and 11.00% - post stabilization period.

4.9 Thus, IPL humbly submits that the actual Auxiliary Consumption was higher than the approved values due to uncontrollable circumstances due to restrictions imposed by SLDC.

Views of the Commission

4.10 The Commission has considered the submissions of the Stakeholder and reply by the Petitioner, and has appropriately treated the auxiliary consumption as detailed in later sections of this Order.

GVC, Ratio and Price of Primary Fuel

Public Comments/Suggestions

4.11 JBVNL has observed the following,

1. GCV of coal as claimed is Rs. 3628.50 Kcal/kg against the approved one of 4078.68 Kcal/kg.
2. Coal used is 33.60% against the approved one of 54.00%.
3. Rejects used is 66.40% against the approved one of 43.00%.
4. Price of coal is 2727.54 Rs./MT against the approved one of 2830.52 Rs./MT.
5. Price of Rejects is 1686.51 Rs./MT against the approved one as 851.02 Rs./MT.

4.12 JBVNL has commented as follows,

1. Lower GCV of coal should not be approved.
2. Coal is used much lesser than the approved usage and on the other hand rejects used is much higher than the approved one. In parallel to that, the cost of rejects is almost double of the approved cost.
3. The petitioner should produce a cost-effective plan for the purchase of fuel and any excess cost due to unplanned procurement of fuel should be disallowed.

Petitioner Response

4.13 IPL humbly submits that it acquired its primary ROM for Coal from CIL e-auctions and Shakti Scheme. The coal prices and the GCV of coal provided in the e-auctions and Shakti scheme are as per CIL notifications. Thus, IPL has no control over the coal offered in the e-auctions and Shakti Scheme.

4.14 IPL humbly submits that it has made earnest efforts to ensure optimum coal supply at the most optimal costs. Apart from its contracted capacities, IPL has also tried to source coal from Special Forward and Spot E-Auctions. During the FY2020-21 CCL conducted only 2 special forward auctions and 1 special forward auctions respectively in which IPL purchased coal in both the auctions.



4.15 CCL also conducted various spot e-auctions in FY2020-21 but the price of coal was very high compared to the special forward auctions. IPL further submits the auction conditions mandate 10% EMD and 100% advance payment of the coal procured in the e-auctions of CCL against “cash and carry” model offered by other coal sources. As IPL has been facing delayed payments by JBVNL, it has to arrange fund on its own sources which makes the advance payment criteria difficult to fulfil. The details of price discovery of various special forward auctions and Spot e-Auctions have been submitted to the Hon’ble Commission vide reply to the Queries raised by the Hon’ble Commission on True-up of FY 2020-21 for IPL.

Views of the Commission

4.16 The Commission has considered the submissions of the Stakeholder and reply by the Petitioner, and has taken appropriate action as detailed in later sections of this Order.

Plant Load Factor & Cost of Primary Fuel

Public Comments/Suggestions

4.17 JBVNL has observed that the PLF shown is as 74.55% against the approved one of 82.50%. Cost of primary fuel is shown as Rs. 100.14 Cr against the approved one as Rs. 82.85 Cr.

4.18 JBVNL has comment that the plant is running at low PLF than the approved one. The petitioner should produce the justification for the same. And any excess cost due to low PLF should be disallowed. The cost of primary fuel is much higher than the approved one. The excess cost on primary fuel should be disallowed

Petitioner’s Response

4.19 IPL would like to reiterate that the Plant Load Factor in FY 2020-21 was adversely affected due to several restrictions being imposed by SLDC on a daily basis on the plants. IPL humbly submits that during the FY 2020-21 there were 398 restrictions from the SLDC, the date wise restrictions details have already been submitted before this Hon’ble Commission.

4.20 Further IPL humbly submits before this Hon'ble Commission that;

1. The relaxation of PLF for CFBC boilers was also provided in CERC Tariff Regulations 2009-14. Relevant portion of the regulation is reproduced below:

“26.(i). Normative Annual Plant Availability Factor (NAPAF)....

(f) Lignite-fired Generating Stations using Circulatory Fluidized Bed Combustion (CFBC) Technology -

1. First three years from COD - 75%
2. From next year after completion of 3 years of COD - 80%”

2. The reasons for this relaxation are further elaborated in the Statement of Objects and Reasons for CERC Tariff Regulations (2009-14).

“28.6..... With regard to lignite fired stations using CFBC technology are concerned, we found that the availability in initial years was of the order of 76% in case of surat lignite fired station and gradually picked up thereafter. In view of this we are providing for a norm of 75% during first three years of COD and thereafter, retaining a norm of 80%. In respect of the new lignite power stations with PF Boilers, availability norms have been combined with the coal power fire stations at 85%”

3. It is further submitted that other State ERCs also, provided relaxation in PLF for CFBC boilers. For instance, in Rajasthan, as per RERC Tariff Regulations, 2009 PLF for CFBC Plants is gradually increased to 80% during a period of five years -

“46.1. Target Availability for recovery of full Capacity (Fixed) charges for thermal power stations ... (a)

(iii) Lignite fired thermal power stations using CFBC technology:

- For the first year of operation 70%*
For second year of operation 72.5%
For third year of operation 75.0%
For fourth year of operation 77.5%
Fifth year and onwards 80.0%”

It is pertinent to note that APTEL in its judgement on “Appeal No. 182 of 2010” has clarified that the relaxation in PLF for CFBC will be applicable to both coal based and lignite based Stations as the relaxation is for the technology being used, not the fuel.”

4. The Petitioner would like to further submit that the relaxation of PLF for CFBC boilers is provided in CERC Tariff Regulations 2019-24. The extract of the same is reproduced below:

“49. Norms of operation for thermal generating station

.....

Normative Annual Plant Availability Factor (NAPAF)

.....

(e) For Lignite fired Generating Stations using Circulatory Fluidized Bed Combustion (CFBC) Technology and Generating stations based on coal rejects:

*First Three years from the date of commercial operation - 75%
For next year after completion of three years of the date of commercial operation
- 80%
.....”*

5. This Hon’ble Commission also had set a NAPAF target of 82.5% for FY 2016-17 to FY 2020-21 as per its order in Case No. 06 and 11 of 2016 dated 16th May 2017. Relevant portion of the order is reproduced below:

“.....
8.53. *After considering the above, the Commission finds the submission of the Petitioner appropriate and has considered the same for approving the NAPAF for the current MYT period.”*

- 4.21 IPL humbly submits request this Hon’ble Commission to allow PLF of 82.50% in line with the Commission’s approved figures as per its order in Case No. 06 and 11 of 2016 dated 16th May.
- 4.22 Further it is submitted that IPL has always strived to assure most optimum coal supply. However, the coal prices are uncontrollable for IPL. Thus, the JBVNL’s contentions in this regard is misconstrued. IPL humbly prays to the Hon’ble Commission to approve the cost of primary fuel incurred by IPL as claimed.

Views of the Commission

- 4.23 The Commission has considered the submissions of the Stakeholder and reply by the Petitioner, and has taken appropriate action as detailed in later sections of this Order.

Cost of Secondary Fuel Oil

Public Comments/Suggestions

- 4.24 JBVNL has observed that the Base price of Oil is claimed as 74460.20 Rs./KL against the approved one as 47472 Rs./KL.
- 4.25 Cost of secondary fuel oil is claimed as Rs. 3.06 Cr. against the approved one as Rs. 2.16 Cr. In its reply, IPL submitted that basis the projected timeframe for proposed capex of conversion of LDO to HSD, the power plant was initially envisaged to run on HSD from 1st April 2021 for 150 Days till LDO system is installed. Then 30 Days shutdown would be required till switch over of SS APH Tubes was completed. Then for next 185 days, it will run on LDO for 95 days



and HSD for 90 days (during cold season). From 1st April 2022 onwards, plant will run on LDO except for Rainy and Winter seasons 5 months) as HSD is recommended during that time for boiler life. Rate of oil thus for the FY21-22 comes out to be INR 74197 per KL. And then the projected figure for rest of the MYT control period is Rs 66422 per KL.

- 4.26 First of all, the variation between LDO and HSD for oil could not be ascertained, the days claimed on the basis of reasons provided could not be verified.
- 4.27 On that basis, the excess system rate hike for fuel oil cannot be passed on to the consumers. Hence, the excess price of oil should not be allowed. The petitioner should produce cost effective plan purchase the secondary oil. The total capital cost will run on for switchover of INR 19 crores shouldn't be passed onto the consumer that unnecessarily increase the per unit rate of electricity. Consequent increase in cost of secondary oil should not be approved.

Petitioner's Response

- 4.28 IPL humbly submits before this Hon'ble Commission that IPL has already submitted documents based on directions of this Hon'ble Commission. As per the directives issued by the Hon'ble Commission, JSERC vide order dated 22nd September 2020, IPL has submitted the capex plan for installation of LDO System as an alternate light up fuel. Further IPL submits that the prices of HSD and LDO are market determined and IPL has no role in determination of the prices of the secondary fuel. IPL submits that the prices of HSD and LDO are determined by Oil Marketing Companies who increase / decrease the prices as per market prevalent conditions. These are applicable to all fuel procurers from them.
- 4.29 IPL further humbly submits that the analysis for substitution of HSD with LDO has already been submitted to the Hon'ble Commission vide letter dated 29.12.2020. Considering that more than 28 months have passed since the report on substitution of HSD with LDO had been submitted there has been a high variation in the fuel prices globally as well as probable impact on the estimated capital expenditure for the proposed project. IPL humbly submits to the Hon'ble Commission that as per the latter's order on True-up for FY 2019-

20 dated 04 November 2022, IPL has been directed to submit the detail proposal for the proposed project before the Commission for approval within two months from the date of this Order. IPL has already submitted the same to the Hon'ble Commission as reply on 24-01-2023 to the queries pertaining to MYT 2022-26.

Views of the Commission

4.30 The Commission has considered the submissions of the Stakeholder and reply by the Petitioner, and will deal with this matter while approving the MYT Order for the Petitioner for the Control Period FY 2021-22 to FY 2025-26.

Energy Charge Rate

Public Comments/Suggestions

4.31 JBVNL has observed that the total energy charge per unit claimed is Rs. 2.82 kWh against the approved one of Rs. 2.09/kWh.

4.32 The per unit claimed energy cost is almost 35 % higher than the approved one. This increase in energy cost is due to low PLF, Low generation, more auxiliary consumption, high cost of primary and secondary fuel. The increased energy should not be approved and petitioner should be directed to enhance their efficiency.

Petitioner's Response

4.33 IPL humbly submits before this Hon'ble Commission that IPL has already clarified above that IPL has no control over the coal offered in the e-auctions and Shakti Scheme. Further, auxiliary consumption is higher than the approved auxiliary consumption in FY 2020-21 due to several restrictions being imposed by SLDC on a daily basis on the plants. Further as described in reply to query above, the price of secondary fuel is determined by OMCs and IPL has no control over them. IPL humbly prays before this Hon'ble Commission to allow per unit energy cost as claimed in this instant petition.

Views of the Commission

4.34 The Commission has considered the submissions of the Stakeholder and reply by the Petitioner, and has taken appropriate action as detailed in later sections of this Order.



Income Tax

Public Comments/Suggestions

4.35 JBVNL has observed that the actual tax paid is claimed as 4.67 Rs. Cr. As per Tariff Regulation 2020 The income tax actually payable or paid limited to the tax on allowed return on equity and Tax on the other income streams of the Generating Company shall not be recovered from the Beneficiaries. Also return on equity shall be computed on post-tax basis at the base rate of 14.00% for thermal generating stations. The petitioner should compute the ROE on post tax basis in accordance to the regulation as stipulated above. Also the tax claimed should match with the tax incurred on the ROE. Thus, petitioner should produce the detailed computation of tax component and any excess tax should not be approved.

Petitioner's Response

4.36 IPL humbly submits before this Hon'ble Commission that ROE has been grossed up by applicable MAT rate in order to account for the tax liability to be incurred during the ensuing period. However, IPL petitions the Commission to allow IPL to claim ROE as per actual tax paid during true-up of subsequent years.

4.37 Further, this Hon'ble Commission has allowed IPL's claim towards the actual tax paid separately in earlier Petitions. Hence, IPL humbly requests that the Hon'ble Commission allow actual tax paid during True-up of respective years and allow the tax computed as per MAT as claimed in this Petition for the purpose of tariff determination.

Views of the Commission

4.38 The Commission has considered the submissions of the Stakeholder and reply by the Petitioner, and has taken appropriate action as detailed in later sections of this Order.

Fuel Price Adjustment

Public Comments/Suggestions

4.39 Petitioner has claimed per unit energy charge for FY 20-21 as Rs. 2.82 against the approved as Rs. 2.09. Also, the invoice raised by Inland Power was Rs. 4.30



per unit for FY 20-21 excluding Fuel Price Adjustment (FPA). The bill of Fuel Price Adjustment raised by Inland Power on JBVNL is Rs. 0.57 per unit on an average for FY 20-21.

- 4.40 The petitioner has not claimed FPA charge in its true-up figure of FY 20-21, which depicts that, the total energy cost incurred by the petitioner for FY 20-21 was Rs. 2.82 per unit. We understand that Rs. 0.57 Per unit as claimed for FPA has been charged in excess to the actual energy charge incurred by the petitioner. IPL should clarify where it has adjusted the FPA amount claimed in the bills for JBVNL.

Petitioner's Response

- 4.41 IPL humbly submits that IPL has claimed as per the tariff rate of the MYT petition for the control period FY 2016-17 to FY 2020-21. The energy rate has already been revised due to changing coal prices. The same has also been also communicated to JSERC and JBVNL. IPL humbly submits that Fuel Price Adjustment has been done as per the Regulation and Order published by the Hon'ble Commission.
- 4.42 IPL also humbly confirms that it submits quarterly billing reports to Hon'ble JSERC and the same have also been provided to JBVNL for the verification. After review, JBVNL pays the amount due to IPL and there have been no additional billings.

Views of the Commission

- 4.43 The Commission has considered the submissions of the Stakeholder and reply by the Petitioner, and has taken appropriate action as detailed in later sections of this Order.

Note: The public hearing for True-up of FY 2020-21 and the MYT for the Control Period FY 2021-22 to FY 2025-26 was held together at the same time at the Meeting hall of Raso Hotel on April 15, 2023, as such Comments/Suggestion on both petitions were raised by stakeholders and answered by the Petitioner at the same time. However, in this Order, only comments/suggestions of the stakeholders, replies of the Petitioner, and the Commission's views on the same for the Petition for True-up of FY 2020-21 has been shown.



A 5 True Up for FY 2020-21

- 5.1 The Petitioner has submitted the True-up Petition for FY 2020-21 based on the audited accounts, taking into consideration the provisions of JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015, and the methodology adopted by the Commission in the previous Orders.
- 5.2 The Commission has carried out True-up for FY 2020-21 taking into consideration: -
- a) Audited (Statutory) Accounts for FY 2020-21 and additional details submitted by the Petitioner;
 - b) JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015; and;
 - c) Methodology adopted by the Commission in the earlier order.

Operational Performance

Plant Availability Factor (PAF)

Petitioner's Submission

- 5.3 The Petitioner has submitted the actual plant availability of Unit-I as 86.59% for FY 2020-21 against the approved value of 82.50% in MYT Order dated May 16, 2017 and requested the Commission to approve the same. The Petitioner has submitted the State Load Despatch Centre certificate, certifying the actual plant availability factor for FY 2020-21.

Commission's Analysis

- 5.4 The Commission in its MYT Order dated May 27, 2014, provisionally approved the Normative Annual Plant Availability Factor as 75% for FY 2014-15 & FY 2015-16, subject to be reviewed at the time of truing up after considering the actual performance of Unit-I of the generation station.
- 5.5 The Commission in the MYT Order dated May 16, 2017 had carried out the True-up for FY 2014-15 (COD: May 21, 2014) with actual availability as



- 67.66%. In the same Order, the Commission had approved the Normative Annual Plant Availability Factor (NAPAF) as 82.50% for 2nd Control period (FY 2016-17 to FY 2020-21) as proposed by the Petitioner, since the True-up for 1st complete financial year was yet to be carried out for the plant.
- 5.6 The Commission in its Order dated March 19, 2018 had carried a due prudent check at the time of truing up for FY 2015-16 and based on the facts and actual values of availability revised the Normative Plant Availability Factor (NAPAF) from 75.00% to 85.00% for FY 2015-16.
- 5.7 In line with above methodology adopted during truing up for FY 2015-16, the Commission approved the normative plant availability as 85.00% while carrying out the True-up for FY 2016-17 and FY 2017-18 vide its Order dated October 01, 2019 and True-up for FY 2018-19 vide its Order dated September 22, 2020. The Commission vide letter No. JSERC/Case (Tariff) no.: 7 & 8 of 2020/380 dated January 11, 2021 directed the Petitioner to submit the reason for lower plant availability factor. The Petitioner vide letter dated February 25, 2021 replied that the plant was under shutdown from November 16, 2019 to December 12, 2019 due to maintenance activity.
- 5.8 Further, the Petitioner has filed an Appeal before the Hon'ble APTEL against the Commission's Order for True-up of FY 2016-17 & FY 2017-18 dated October 01, 2019 in which the Commission had considered NAPAF as 85.00% based on the actual operational parameters submitted by the Petitioner while truing up for FY 2015-16.
- 5.9 As the Appeal is still pending before the Hon'ble APTEL, therefore, the Commission has adopted the same approach as adopted in truing up Order dated September 22, 2020 and approves the NAPAF for FY 2020-21 as 85.00% subject to the final outcome of the pending case before the Hon'ble APTEL. The Commission approves the actual plant availability for FY 2020-21 based on the State SLDC certificate as shown below.

TABLE 6: PLANT AVAILABILITY AS APPROVED BY THE COMMISSION

Particulars	MYT	Actual	Approved
Normative Plant Availability Factor	82.50%	-	85.00%
Actual Plant Availability Factor	-	86.59%	86.59%

Auxiliary Consumption

Petitioner's Submission

- 5.10 The Petitioner has submitted the actual auxiliary consumption for FY 2020-21 as 11.18% against the approved value of 10.50% in the MYT Order dated May 16, 2017.
- 5.11 The Petitioner has also mentioned that the plant runs on CFBC based technology and therefore consumes more auxiliary power than other thermal power plants.

Commission's Analysis

- 5.12 The Commission vide JSERC/Case (Tariff) No. 09 of 2022/208 dated October 14, 2022 directed the Petitioner to submit the reason for deviation from normative value in auxiliary consumption as approved in MYT Order dated May 16, 2017. The Petitioner vide letter dated November 04, 2022 replied that higher auxiliary consumption is due to higher consumption prevalent in CFBC technology plants.
- 5.13 Additionally, the Petitioner highlighted that other State Electricity Regulatory Commissions (SERCs) have allowed higher auxiliary consumption for plants operating on Circulating Fluidized-bed Combustion Technology (CFBC) as shown below.
- i. In the case of Rajasthan West Power Ltd., Rajasthan Electricity Regulatory Commission had allowed the auxiliary consumption as 11.50%.
 - ii. In the case of Gujarat Industries Power Company Ltd., Gujarat Electricity Regulatory Commission had allowed an auxiliary consumption of 12.5% for 3 years and 11.5% from the 4th year onwards.
 - iii. In the case of Bajaj Energy Pvt. Ltd., Uttar Pradesh Electricity Regulatory Commission had allowed an auxiliary consumption of 11.50% during stabilization and 11.00% post stabilization period.

- 5.14 Commission while dealing with the matter of approving the auxiliary



consumption in the provisional MYT Order dated May 27, 2014 for the first control period i.e., from FY 2010-11 to FY 2015-16 had relied on the technology specific norms in CERC (Terms and Conditions of Tariff) Regulations, 2014 and the recommendations of CEA and accordingly approved Normative Auxiliary Consumption at 10.50%. Further, the Commission in the second control period i.e., from FY 2016-17 to FY 2020-21 had retained the auxiliary consumption norm as 10.50%.

- 5.15 Later, during truing up exercise for FY 2015-16, the Commission had scrutinized the Detailed Project Report (DPR) of the plant submitted by the Petitioner and accordingly approved the auxiliary consumption as 10.00% in Tariff Order dated March 19, 2018.
- 5.16 Adopting the same approach, the Commission had approved the normative auxiliary consumption as 10.00% while carrying out the True-up for FY 2016-17, FY 2017-18, FY 2018-19 and FY 2019-20.
- 5.17 The Petitioner has filed an Appeal before the Hon'ble APTEL against the Commission's Order dated October 01, 2019 in which the Commission had considered auxiliary consumption as 10.00% based on the Detail Project Report (DPR) submitted by the Petitioner while truing up for FY 2015-16.
- 5.18 As the Appeal is still pending before the Hon'ble APTEL, therefore, the Commission has adopted the same approach as adopted in truing up Order dated October 01, 2019 and approves the auxiliary consumption for FY 2020-21 as 10.00% subject to final outcome of the pending case before the Hon'ble APTEL. Further, the normative auxiliary consumption has been used to calculate the energy charges for FY 2020-21.

TABLE 7: AUXILIARY CONSUMPTION AS APPROVED BY THE COMMISSION

Particulars	MYT	Actual	Approved
Normative Auxiliary Consumption	10.50%	-	10.00%
Actual Auxiliary Consumption	-	11.18%	11.18%

Plant Load Factor and Generation

Petitioner's Submission

- 5.19 The Petitioner has submitted the actual Plant Load Factor (PLF) as 74.55% for FY 2020-21 against the target of 82.50% approved by the Commission in the MYT Order dated May 16, 2017.
- 5.20 The Petitioner further submitted the gross generation of Unit-I as 411.42 MU for FY 2020-21 which is lower than the approved value of 455.30 MU in the MYT Order dated May 16, 2017.

Commission's Analysis

- 5.21 The Commission observed that the Petitioner has wrongly calculated the Plant Load Factor (PLF) based on 'Actual' Auxiliary Consumption, while Clause No. 2.1 (43) of the JSERC (Terms & Conditions for Determination of Generation Tariff) Regulations, 2015 prescribes the Plant Load Factor to be computed based on the 'Normative' Auxiliary Consumption. Therefore, the Commission has recalculated the PLF as per the Regulations which works out to be 73.57%. Further, the Commission has approved the Gross Generation as submitted by the Petitioner.
- 5.22 The Plant Load Factor and Gross Generation as approved by the Commission in the MYT Order, as submitted by the Petitioner, and as approved now by the Commission are summarized in the table below.

TABLE 8: PLANT LOAD FACTOR AND GENERATION AS APPROVED BY THE COMMISSION

Particulars	Units	MYT	Petition	Approved
Plant Load Factor	%	82.50%	74.55%	73.57%
Gross Generation	MU	455.30	411.42	411.42



Gross Station Heat Rate (GHR)

Petitioner's Submission

5.23 The Petitioner has claimed the Gross Station Heat Rate (GHR) as 3069.00 kCal/kWh against the approved value of 2902.00 kCal/kWh in the MYT Order dated May 16, 2017.

Commission's Analysis

5.24 The Commission vide JSERC/Case (Tariff) No. 09 of 2022/208 dated October 14, 2022 directed the Petitioner to submit the reason for deviation from normative value in Gross Station Heat Rate. The Petitioner vide letter dated November 04, 2022 replied that higher Gross Station Heat Rate is due to variance in the fuel mix affecting Gross Calorific Value and ash content.

5.25 The Commission in its True-up Order dated March 19, 2018 for FY 2015-16 had approved the Gross Station Heat Rate (GHR) as 2765 kCal/kWh based on the Detailed Project Report (DPR) of the plant as submitted by the Petitioner. Considering the same approach, the Commission had approved the Gross Station Heat Rate as 2765 kCal/kWh while carrying out True-up for FY 2016-17, FY 2017-18, FY 2018-19, and FY 2019-20.

5.26 The Petitioner has filed an Appeal before the Hon'ble APTEL against the Commission's Order dated October 01, 2019 in which the Commission had considered SHR as 2765 kCal/kWh based on the Detail Project Report (DPR) submitted by the Petitioner while truing up for FY 2015-16.

5.27 As the Appeal is still pending before the Hon'ble APTEL, therefore, the Commission has adopted the same approach as adopted in truing up Order dated October 01, 2019 and approves the SHR for FY 2020-21 as 2765 kCal/kWh subject to final outcome of the pending case before the Hon'ble APTEL.

TABLE 9: GROSS STATION HEAT RATE AS APPROVED BY THE COMMISSION

Particulars	Units	MYT	Petition	Approved
Gross Station Heat Rate	kcal/kWh	2902.00	3069.00	2765.00

Specific Fuel Oil Consumption

Petitioner Submission

5.28 The Petitioner had submitted the specific fuel oil consumption as 1.00 ml/kWh in line to JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015.

Commission's Analysis

5.29 The Commission observes that the submission made by the Petitioner is in line with the Commission's MYT Order dated May 16, 2017 and JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015. Hence, the Commission approves the secondary fuel oil consumption as submitted by the Petitioner.

TABLE 10: SPECIFIC FUEL OIL CONSUMPTION AS APPROVED BY THE COMMISSION

Particulars	Units	MYT	Petition	Approved
Specific Fuel Oil Consumption	ml/kWh	1.00	1.00	1.00

Fuel Cost Parameters

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

Petitioner's Submission

5.30 The Petitioner had submitted that the coal is procured from various sources as mentioned below.

- E-Auction of Coal India Ltd./ Central Coalfield Ltd.;
- Coal from Forward Auctions;
- FSA with Central Coalfield Ltd. under SHAKTI Scheme;
- Rejects from Tata Steel.

5.31 The Petitioner further submitted that based on the availability of coal, the blending ratio of coal and coal rejects deviates significantly from that approved in the MYT Order dated May 16, 2017.

Commission's Analysis

- 5.32 The Commission observed significant deviation in the blending ratio, Gross Calorific Value (GCV) of primary fuel-mix and its price as compared to the approved values in MYT Order dated May 16, 2017.
- 5.33 The Commission in the MYT Order dated May 16, 2017 and also in Tariff Order dated March 19, 2018 had directed the Petitioner to prioritize the procurement of primary fuel from the least cost source.
- 5.34 Further, the Commission in its Order dated December 26, 2019 directed the Petitioner to bring to the notice of the Commission any change in fuel mix on a quarterly basis and consolidated report during the next Petition filing by the Petitioner. In compliance to the above directive, the Petitioner filed the desired report before the Commission.
- 5.35 The Commission has considered the submission made by the Petitioner, including supporting documents certified by the auditor while approving the same. The Commission has scrutinized monthly source-wise coal consumption, duly certified by the auditor, as submitted by the Petitioner and has recalculated the Weighted average GCV of Primary Fuel and approves the coal mix and Gross Calorific Value as shown below.

TABLE 11: COAL MIX AND GCV AS APPROVED BY THE COMMISSION

Particulars	Units	MYT Order	Petition	Approved
Coal	%	54.00%	33.60%	33.60%
Coal Rejects	%	43.00%	66.40%	66.40%
Dolochar	%	3.00%	-	-
GCV of Coal	kCal/kg	4078.68	3628.50	3628.50
GCV of Coal Reject	kCal/kg	1937.31	2049.14	2049.14
GCV of Dolochar	kCal/kg	855.39	-	-
Weighted average GCV of Primary Fuel	kCal/kg	3061.19	2579.80	2579.81

Transit Loss

Petitioner's Submission

5.36 The Petitioner has considered the transit loss on normative basis *i.e.*, 0.80% inline to MYT Order dated May 16, 2017 and as per JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015.

Commission's Analysis

5.37 The Commission has scrutinized the detail along with auditor certificate certifying the transit loss as submitted by the Petitioner and approves the transit loss at a normative value of 0.80% as per Clause 8.21 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015.

TABLE 12: TRANSIT LOSS AS APPROVED BY THE COMMISSION

Particulars	Units	MYT Order	Petition	Approved
Transit Loss	%	0.80%	0.80%	0.80%

Landed Cost of Primary Fuel

Petitioner's Submission

5.38 The Petitioner had submitted the certified true copy from its auditor for landed cost of primary fuel consumed from different sources for Unit-I. The landed price of primary fuel includes base price of coal, royalty, taxes and duties, transport cost, Clean Energy Cess etc.

Commission's Analysis

5.39 As per Clause 8.21 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015;

“8.21 The landed fuel cost of primary fuel and secondary fuel for tariff determination shall be based on actual weighted average cost of primary fuel and secondary fuel of the three preceding months, and in the absence of landed costs for the three preceding months, latest procurement price of

primary fuel and secondary fuel for the generating station, before the start of the tariff period for existing stations and immediately preceding three months in case of new generating stations shall be taken into account.

The landed cost of fuel for the month shall include price of fuel corresponding to the grade and quality of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail / road or any other means, and, for the purpose of computation of energy charge, and in case of coal/lignite shall be arrived at after considering normative transit and handling losses as percentage of the quantity of coal or lignite dispatched by the coal or lignite supply company during the month as given below:

Pithead generating stations: 0.2%

Non-pithead generating stations: 0.8%

Provided that in case of pit head stations if coal or lignite is procured from sources other than the pit head mines which is transported to the station through rail, transit loss of 0.8% shall be applicable:

Provided further that in case of imported coal, the transit and handling losses shall be 0.2%.”

- 5.40 The Petitioner in the Petition has provided month wise fuel procurement and rate of primary fuel procured, duly certified by the auditor for FY 2020-21.
- 5.41 Further, the Commission in its Order dated December 26, 2019 directed the Petitioner to bring to the notice of the Commission any change in fuel mix, which leads to price variation on quarterly basis and consolidated report during the next Petition filing by the Petitioner. In compliance to above, the Petitioner has submitted the quarterly reports before the Commission.
- 5.42 The Petitioner submitted that it acquired its primary fuel *i.e.*, Coal from the CIL e-auctions and Shakti Scheme. The Coal prices and GCV of coal provided in the e-auctions and SHAKTI scheme are as per the CIL Notification. Thus, the Petitioner has no control over the coal offered in the e-auction and SHAKTI Scheme. Furthermore, the Petitioner submitted that the Rate of Coal offered

in CCL e-auctions for power producers has been continuously increasing since the last 2 years. Further, the e-auctions are conducted sporadically leading IPL to depend on other sources of coal to ensure a reliable and consistent supply for smooth functioning of the of the power plant.

- 5.43 Considering, the Petitioner's submission and after a due prudent check, the Commission approves the landed cost of primary fuel as given in the table below.

TABLE 13: WEIGHTED AVERAGE LANDED PRICE OF COAL AS APPROVED BY THE COMMISSION (RS./ TON)

Particulars	MYT Order	Petition	Approved
Price of Coal	2830.32	2727.54	2727.63
Price of Coal Reject	851.02	1686.51	1686.51
Price of Dolochar	543.40	-	-
Transit Loss	0.80%	0.80%	0.80%
Landed Price of Primary Fuel	1926.02	2052.72	2052.75

Calorific value and Landed price of Secondary Fuel

Petitioner's Submission

- 5.44 The Petitioner had submitted the landed price of secondary fuel as Rs. 74460.20/kL, based on the secondary fuel consumed for FY 2020-21 duly certified by the auditor. The Petitioner had considered the calorific value as 10,000 kCal/L as approved in the MYT Order dated May 16, 2017.

Commission's Analysis

- 5.45 The Commission has scrutinized the documents submitted by the Petitioner and worked out the weighted average landed price of secondary fuel.

TABLE 14: CALORIFIC VALUE & LANDED PRICE OF SECONDARY FUEL AS APPROVED BY THE COMMISSION

Particulars	Units	MYT Order	Petition	Approved
Calorific Value of Secondary Fuel	kCal/L	10000.00	10000.00	10000.00
Landed Price of Secondary Fuel	Rs./kL	47472.00	74460.20	74460.20

Energy Charge Rate (ECR)

Petitioner's Submission

5.46 The Petitioner had submitted the Energy Charge Rate (ECR) as Rs. 2.82/kWh against the approved value of Rs. 2.09/kWh for FY 2020-21.

Commission's Analysis

5.47 As per JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 the energy (variable) charge shall cover primary fuel and secondary fuel costs and limestone consumption cost (where applicable), shall be payable by Beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on an ex-power plant basis, at the specified energy charge rate of the month (with fuel price adjustment and limestone adjustment).

5.48 The formula for calculation of energy charge payable to a Generating Company is specified in JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 as quoted below:

"8.17 The energy (variable) charge shall cover primary fuel and secondary fuel costs and limestone consumption cost (where applicable), shall be payable by every Beneficiary for the total energy scheduled to be supplied to such Beneficiary during the calendar month on ex-power plant basis, at the specified energy charge rate of the month (with fuel price adjustment and limestone adjustment).

8.18 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.}

8.19 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 formula:

(a) For coal-based stations



$$ECR = \{(GHR - SFC \times CVSF) \times LPPF / CVPF + SFC \times LPSFi + LC \times LPL\} \times 100 / (100 - AUX)\}$$

.....

Where,

AUX - Normative auxiliary energy consumption in percentage

CVPF - Weighted Average GCV of coal as received, in KCal per kg, for coal-based stations.

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 sent out.

GHR - 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”.

8.21 *The landed fuel cost of primary fuel and secondary fuel for tariff determination shall be based on actual weighted average cost of primary fuel and secondary fuel of the three preceding months, and in the absence of landed costs for the three preceding months, latest procurement price of primary fuel and secondary fuel for the generating station, before the start of the tariff period for existing stations and immediately preceding three months in case of new generating stations shall be taken into account.*

The landed cost of fuel for the month shall include price of fuel corresponding to the grade and quality of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail / road or any other means, and, for the purpose of computation of energy charge, and in case of coal/lignite shall be arrived at after considering normative transit and handling losses as percentage of the quantity of coal or lignite dispatched by the coal or lignite supply company during the month as given below:

Pithead generating stations: 0.2%

Non-pithead generating stations: 0.8%

Provided that in case of pit head stations if coal or lignite is procured from sources other than the pit head mines which is transported to the station through rail, transit loss of 0.8% shall be applicable:

Provided further that in case of imported coal, the transit and handling losses shall be 0.2%.”

- 5.49 Accordingly, the Commission has calculated the Energy Charge Rate (ECR) to be charged by the Petitioner as per the formula specified in JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015. The table below details the ECR and Fuel Cost for True-up for FY 2020-21 as submitted by the Petitioner and as approved by the Commission.

TABLE 15: ENERGY CHARGE RATE AND TOTAL ENERGY COST AS APPROVED BY THE COMMISSION

Particulars	UoM	MYT Order	Petition	Approved
Net Generation	MU	407.49	365.43	365.43
Auxiliary Consumption	%	10.50	11.18	10.00
Gross Station Heat Rate	kcal/kWh	2902.00	3069.00	2765.00
Specific Oil Consumption	ml/kWh	1.00	1.00	1.00
Calorific Value of Oil	kcal/mL	10.00	10.00	10.00
GCV of Primary Fuel	kcal/kg	3061.19	2579.80	2579.81
Landed Price of Primary Fuel	Rs./Ton	1926.02	2052.72	2052.75
Landed Price of Secondary Fuel	Rs./kL	47472.00	74460.20	74460.20
Energy Charge Rate (ECR)	Rs./kWh	2.09	2.82	2.52
Primary Fuel Cost	Rs. Cr.	82.85	100.14	89.01
Secondary Fuel Cost	Rs. Cr.	2.16	3.06	3.02
Total Energy Cost	Rs. Cr.	85.01	103.20	92.03

Determination of Fixed Cost

Additional Capitalization

Petitioner's Submission

5.50 The Petitioner submits that it has purchased various assets for Rs. 27 lakhs in FY 2020-21 which were necessary for efficient and successful operation of the generating station. The purchase of assets was done from internal funds.

TABLE 16: ASSETS CAPITALIZED AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	Petition
Kia Car	0.151
Computer	0.005
Laptop	0.005
Soft Starter	0.024
VRLA Batteries with Cells	0.086
Total	0.270

Commission's Analysis

5.51 The additional capitalization as approved by the Commission in the MYT Order, as submitted by the Petitioner and as approved now by the Commission has been summarized in the table below.

TABLE 17: ADDITIONAL CAPITALIZATION AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	MYT Order	Petition	Approved
Capitalization	-	0.27	0.27

Depreciation

Petitioner's Submission

- 5.52 The Petitioner had submitted that depreciation had been calculated as per the depreciation rates provided in the Appendix-I of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015.
- 5.53 The Petitioner has calculated the depreciation taking into account the closing asset for FY 2019-20 and additional capitalization for FY 2020-21. The depreciation submitted by the Petitioner is given in the table below.

TABLE 18: DEPRECIATION AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	MYT Order	Petition
Opening Gross Block	341.24	335.11
Additional Capitalization	-	0.27
Closing Gross Block	341.24	335.38
Depreciation due to Additional Capitalization	-	0.02
Total Depreciation	15.60	17.22

Commission's Analysis

- 5.54 The Commission has calculated the depreciation for Unit-I by considering the approved capital cost, capitalization and the depreciation rates as specified in Appendix-I of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015. The following table shows the depreciation approved by the Commission.

TABLE 19: DEPRECIATION AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	MYT Order	Petition	Approved
Depreciation	15.60	17.22	17.21

Operation and Maintenance Expenses

Petitioner's Submission

- 5.55 The Petitioner submitted that the actual Operation and Maintenance (O&M) expenses varies from the number approved by the Commission. The reason cited by the Petitioner for the variation is fuel quality due to GCV, ash content and compliances with Statutory Norms.
- 5.56 The Petitioner has further claimed water charge as Rs. 1.49 Cr. based on actuals for FY 2020-21 in line with Clause 7.46 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015.
- 5.57 In view of the reasons stated above, the Petitioner has prayed to the Commission to allow the increase in the O&M expenses as shown below.

TABLE 20: O&M EXPENSES AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	MYT Order	Petition
O&M expenses	21.72	24.79
Water Charges	-	1.49
O&M Expenses including Water Charge	21.72	26.28

Commission's Analysis

- 5.58 Since, the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 do not specify norms specifically for 63 MW sets based on CFBC technology, the Commission had considered the O&M norms for 200/210/250 MW capacity CFBC Technology based thermal plants in the MYT Order dated May 16, 2017. Accordingly, the Commission had approved the O&M expenses based on the norms specified for 200/210/250 MW sets for MYT period FY 2016-17 to FY 2020-21.
- 5.59 The Commission has noted the submission of the Petitioner regarding the increase in the O&M costs and is of the opinion that the primary reason for the increase is change in the fuel mix of the primary fuel which had resulted in lowering of overall GCV, increase in ash output and subsequently led to increase in O&M Expenses.

- 5.60 The Commission observed that the Petitioner had claimed the O&M Expenses on actual basis instead of normative basis as per Regulations. The Petitioner submitted that they claim the O&M cost in line with its audited accounts.
- 5.61 The Commission is of the view that ensuring a reliable coal source at an economical price is the prime responsibility of the Generator and even after repetitive directions to the Petitioner, no substantial progress has been made in this regard. The Commission is of the view that the procurement of fuel is the responsibility of the Petitioner and therefore no commercial impact on account of any inefficiency in procurement of fuel can be passed on to the Beneficiary and hence approves the O&M expenses as considered in MYT Order dated May 16, 2017.
- 5.62 With regard to water charges claimed, the Petitioner submitted the month wise water consumption and rate of water charge to derive the total water charge for FY 2020-21. The Petitioner further submitted the water bills to substantiate the water consumption and water drawl rate. The amount as per the bills was found to be in consonance with the Auditor's certificate.
- 5.63 The Commission therefore approves the O&M Expenses including Water Charge as shown below.

TABLE 21: O&M EXPENSES AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	MYT Order	Petition	Approved
O&M expenses	21.72	24.79	21.72
Water Charges	-	1.49	1.49
O&M Expenses including Water Charge	21.72	26.28	23.21

Interest on Loan

Petitioner's Submission

- 5.64 The Petitioner, for computing interest on loan has considered the actual loan portfolio and repayment equal to the actual repayment by the Petitioner for estimating the interest and financing charges on loan for FY 2020-21. The Petitioner has submitted the Interest certificate issued by the Banks in support of interest rate and interest paid by the Petitioner in FY 2020-21.

TABLE 22: INTEREST ON LOAN AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	MYT Order	Petition
Opening Debt Balance	150.67	119.35
Net Additions	-	2.34
Repayment	15.6	31.99
Closing Debt Balance	135.08	89.7
Average	142.87	104.525
Rate of Interest (%)	12.16%	11.50%
Interest on Debt	17.37	12.02
Finance Charges	-	0.44
Interest & Finance Charges	17.37	12.46

Commission's Analysis

- 5.65 The Commission has considered the opening balance of normative debt for FY 2020-21 as closing balance for FY 2019-20 as per the True-up Order dated November 04, 2022.
- 5.66 The Commission observed that the Petitioner has considered the actual repayment against the norms which states that the repayment shall be equal to the depreciation allowed for that respective financial year. The Commission has approved the repayment equal to the approved depreciation in line with the methodology specified in JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 to arrive at the closing balance of normative debt component.
- 5.67 The Commission has computed the weighted average rate of interest based on the actual loan portfolio as submitted by the Petitioner. It is observed that the addition to loan as claimed by the Petitioner, far exceeds the actual capitalization as claimed. The Commission however, has considered the addition to loan based on a debt : equity ratio of 100 : 0 on the approved additional capitalization, as no addition to Equity has been claimed by the Petitioner.
- 5.68 In accordance with the methodology stated above, the Commission has computed the interest on loan as shown in the table below.

TABLE 23: INTEREST ON LOAN AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	MYT Order	Petition	Approved
Opening Debt Balance	150.67	119.35	146.46
Net Additions	-	2.34	0.27
Repayment	15.6	31.99	17.21
Closing Debt Balance	135.08	89.7	129.52
Average	142.87	104.525	137.99
Rate of Interest (%)	12.16%	11.50%	11.04%
Interest on Debt	17.37	12.02	15.24
Finance Charges	-	0.44	0.44
Interest & Finance Charges	17.37	12.46	15.68

Interest on Working Capital

Petitioner's Submission

5.69 The Petitioner has claimed the Interest on Working Capital based on Regulation 6.14 of JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 and requested the Commission to approve the same for FY 2020-21.

TABLE 24: INTEREST ON WORKING CAPITAL AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	MYT Order	Petition
Coal Cost for 2 Months	13.62	16.69
Cost of Secondary Fuel Oil for 2 Months	0.36	0.51
O&M Expenses for 1 month	1.81	2.07
Maintenance Spares (20% of O&M)	4.34	4.96
Receivables for 2 months	27.61	30.93
Total Working Capital	47.74	55.15
Rate of Interest	12.80%	11.65%
Interest on Working Capital	6.11	6.43

Commission's Analysis

5.70 The Commission observed that the Petitioner has received an amount of Rs. 3.22 Cr. as Delay Payment Surcharge from its Beneficiary in the FY 2020-21 based on the audited accounts. However, the Petitioner has not shown the same in the revenue for FY 2020-21. The Commission has considered the revenue received from Delay Payment Surcharge as per audited accounts and approves the expenses required to finance the same in calculating the Interest on Working Capital. The Commission has considered the rate for Delay Payment Surcharge as 1.25% per month in line with Clause 8.3.5 of the Principle PPA between Inland Power Limited & JSEB (now JBVNL), which is

equivalent to 15.00% per annum for the calculation of corresponding working capital against the Delay Payment Surcharge for the Period of Delay. The Commission has considered interest on Working Capital as 11.65% as per the 1st proviso of Regulation 7.38 of JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015.

**TABLE 25: INTEREST ON WORKING CAPITAL AS APPROVED BY THE COMMISSION
(RS. CR.)**

Particulars	MYT Order	Petition	Approved
Coal Cost for 2 Months	13.62	16.69	20.16
Cost of Secondary Fuel Oil for 2 Months	0.36	0.51	0.68
O&M Expenses for 1 month	1.81	2.07	1.93
Maintenance Spares (20% of O&M)	4.34	4.96	4.64
Receivables for 2 months	27.61	30.93	28.24
Total Working Capital	47.74	55.15	55.66
Rate of Interest	12.80%	11.65%	11.65%
Interest on Working Capital	6.11	6.43	6.48
Delayed Payment Surcharge	-	-	3.22
Working Capital for the Period of Delay	-	-	21.50
Interest on Working Capital for the Period of Delay	-	-	2.50
Total Interest on Working Capital	6.11	6.43	8.99

Return on Equity

Petitioner's Submission

5.71 The Petitioner has claimed the Return on Equity at 15.50% in accordance with the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 on opening equity base of Rs. 99.58 Cr. The Petitioner has claimed the income tax separately.

TABLE 26: RETURN ON EQUITY AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	MYT Order	Petition
Opening Equity	101.9	99.58
Addition during the Year	-	-
Closing Equity	101.9	99.58
Average Equity	101.9	99.58
Rate of ROE	19.47%	15.50%
Return on Equity	19.84	15.43

Commission's Analysis

- 5.72 The Commission observed that the closing equity base of Rs. 90.31 Cr. for FY 2019-20 as approved in its True-up Order dated November 04, 2022 is not matching with the opening base of FY 2020-21 as projected by the Petitioner.
- 5.73 The Petitioner submitted that they have considered the equity base of Rs. 101.90 Cr. as per approved MYT Order dated May 16, 2017 and deducted the common cost of Unit-II of Rs. 2.32 Cr. as recognized by the Commission in its Order dated October 01, 2019.
- 5.74 The Commission observes that the methodology adopted by the Petitioner is not in line with the Regulations. The adjustment of the common cost of Unit-II is already carried out during True-up for FY 2016-17 and therefore should not be repeated. The Commission has considered the opening equity for FY 2020-21 equal to closing equity approved by the Commission for FY 2019-20 vide Order dated November 04, 2022.
- 5.75 In accordance with Clause 7.16, Clause 7.17 and Clause 7.18 of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015, the Commission has approved the rate of return on equity as 15.50% as shown below.

TABLE 27: RETURN ON EQUITY AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	MYT Order	Petition	Approved
Opening Equity	101.9	99.58	90.31
Addition during the Year	-	-	-
Closing Equity	101.9	99.58	90.31
Average Equity	101.9	99.58	90.31
Rate of ROE	19.47%*	15.50%	15.50%
Return on Equity	19.84	15.43	14.00

*Including MAT Rate

Income Tax and ARR Publication & Fee Expenses

Petitioner's Submission

5.76 The Petitioner has claimed the Income Tax as Rs. 4.67 Cr., and ARR Publication & Fee as Rs. 0.30 Cr. based on actual and requested the Commission for approval.

Commission's Analysis

5.77 The Commission vide its Order dated November 04, 2022 noted as follows,

“4.136 The Commission observed that out of Rs. 0.25 Crore claimed as ARR Publication and Fee Expenses, it is observed that amount of Rs. 0.019 Crore is raised in July 06, 2020 and directed the Petitioner to provide the reason for considering such expenses in FY 2019-20. In compliance to above query, the Petitioner submitted that the date of invoice is July 06, 2020 but the actual publication was done on March 20, 2020 and March 21, 2020 and due to COVID, the invoice was raised in July.

4.137 The Commission is of the view that invoice raised in July, 2020 and payment of it will be reflected in audited accounts of FY 2020-21...”.

5.78 Further, the Commission scrutinized the ITR acknowledgement and the original receipt towards ARR Publication and Fee Expenses as submitted by the Petitioner and after a due prudent check approves them as tabulated below.

TABLE 28: INCOME TAX, ARR PUBLICATION & FEE EXPENSES AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	MYT Order	Petition	Approved
Income Tax	-	4.67	4.67
ARR Publication & Fee Expenses	-	0.30	0.32

Total Fixed Charges

Petitioner's Submission

5.79 The summary of Fixed Charge including Income Tax, ARR Publication & Fee Expenses as submitted by the Petitioner for FY 2020-21 is shown below.

TABLE 29: TOTAL FIXED CHARGES AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	MYT Order	Petition
O&M Expenses	21.72	24.79
Depreciation	15.60	17.22
Interest on Loan	17.37	12.02
Return on Equity without Tax	19.84	15.43
Interest on Working Capital	6.11	6.43
Water Charges	-	1.49
Income Tax	-	4.67
ARR Publication & Fee Expenses	-	0.30
Fixed Charges including Income Tax, ARR Publication & Fee Expenses	80.64	82.35

Commission's Analysis

5.80 The summary of Fixed Charge including Income Tax, ARR Publication & Fee Expenses as approved by the Commission for FY 2020-21 is shown below.

TABLE 30: TOTAL FIXED CHARGES AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	MYT Order	Petition	Approved
O&M Expenses	21.72	24.79	21.72
Depreciation	15.60	17.22	17.21
Interest on Loan	17.37	12.02	15.68
Return on Equity without Tax	19.84	15.43	14.00
Interest on Working Capital	6.11	6.43	8.93
Water Charges	-	1.49	1.49
Income Tax	-	4.67	4.67
ARR Publication & Fee Expenses	-	0.30	0.32
Fixed Charges including Income Tax, ARR Publication & Fee Expenses	80.64	82.35	84.08

Summary of ARR Components

Petitioner's Submission

5.81 The summary of ARR Components as submitted by the Petitioner for FY 2020-21 is shown below

TABLE 31: SUMMARY OF ARR COMPONENTS AS SUBMITTED BY THE PETITIONER
(RS. CR.)

Particulars	MYT Order	Petition
Depreciation	15.60	17.22
Interest on Loan	17.37	12.02
Return on Equity	19.84	15.43
Interest on Working Capital	6.11	6.43
O&M Expenses	21.72	24.79
Water Charges	-	1.49
Annual Fixed Cost	80.64	77.38
ARR Publication & fee Expenses	-	0.30
Tax Paid	-	4.67
Primary Fuel Cost	82.85	100.14
Secondary Fuel Cost	2.16	3.06
Energy Cost	85.01	103.20
Energy Charge Rate	2.09	2.82
Annual Revenue Requirement	165.65	185.55

Commission's Analysis

5.82 The summary of ARR Components as approved by the Commission for FY 2020-21 is shown below

TABLE 32: SUMMARY OF ARR COMPONENTS AS APPROVED BY THE COMMISSION
(RS. CR.)

Particulars	MYT Order	Petition	Approved
Depreciation	15.60	17.22	17.21
Interest on Loan	17.37	12.02	15.68
Return on Equity	19.84	15.43	14.00
Interest on Working Capital	6.11	6.43	8.99
O&M Expenses	21.72	24.79	21.72
Water Charges	-	1.49	1.49
Annual Fixed Cost	80.64	77.38	79.09
ARR Publication & fee Expenses	-	0.30	0.32
Tax Paid	-	4.67	4.67
Primary Fuel Cost	82.85	100.14	84.08
Secondary Fuel Cost	2.16	3.06	3.02
Energy Cost	85.01	103.20	92.03
Energy Charge Rate	2.09	2.82	2.52
Annual Revenue Requirement	165.65	185.55	176.11

Revenue & Gap/(Surplus) for the Year

Petitioner's Submission

5.83 The Petitioner has submitted that it has earned Rs. 177.54 Cr. as revenue from sale of power to its beneficiary JBVNL and has earned Rs. 0.69 Cr. as additional revenue from the sale of Fly Ash Bricks.

TABLE 33: REVENUE & (SURPLUS)/GAP AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	Petition
Annual Revenue Requirement	185.55
Revenue from sales	177.54
Revenue from sale of Fly ash brick	0.69
Revenue from Delay Payment Surcharge	-
Gap/(Surplus)	7.33

Commission's Analysis

5.84 The Commission observed that the Petitioner had not considered the income generated from Delay Payment Surcharge. The Commission has considered the income of Rs. 3.22 Cr. from Delay Payment Surcharge as per 'Note 19' of the Audited Accounts while calculating the net revenue as the same has already been considered while calculating its impact on the working capital. Additionally, the Commission has also considered Other Non-tariff Income as per 'Note 19' of the Audited Accounts.

5.85 The Commission after a due prudent check approves the revenue for FY 2020-21 including Delay Payment Surcharge as tabulated below.

TABLE 34: REVENUE & (SURPLUS)/GAP AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	Petition	Approved
Annual Revenue Requirement	185.55	176.11
Revenue from sales	177.54	177.87
Revenue from sale of Fly ash brick	0.69	0.69
Revenue from Delay Payment Surcharge	-	3.22
Other Non-tariff Income*	-	0.75
Gap/(Surplus)	7.33	(6.42)

* Other Non-tariff Income includes 'Interest on Fixed Deposit', 'Unspent liabilities no longer required written back', and 'Income of Foreign Exchange Fluctuation' as per 'Note 19' of the Audited Accounts

Revenue (Surplus)/Gap including Carrying Cost

Petitioner's Submission

5.86 Petitioner had claimed the gap of Rs. 8.18 Cr. for FY 2020-21 and requested the Commission to approve the same along with carrying cost of Rs. 0.85 Cr. as shown below.

TABLE 35: (SURPLUS)/GAP INCLUDING CARRYING COST AS SUBMITTED BY THE PETITIONER (RS. CR.)

Particulars	Petition
Annual Revenue Requirement	185.55
Revenue from sales	177.54
Revenue from sale of Fly ash brick	0.69
Revenue from Delay Payment Surcharge	-
Gap/(Surplus)	7.33
Bank rate for calculating carrying cost	11.65%
Carrying cost	0.85
Total amount to be recovered from JBVNL	8.18

Commission's Analysis

5.87 The Commission has approved the Gap/ (Surplus) based in the ARR and Revenue for the Petitioner as approved by the Commission in this Order. The Gap/ (Surplus) for FY 2020-21 including carrying cost is shown below.

TABLE 36: CARRYING COST AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23
Opening Gap/(Surplus)	-	(6.42)	(6.42)
Addition during the FY	(6.42)	-	-
Adjustment during the Year	-	-	-
Closing Gap/(Surplus)	(6.42)	(6.42)	(6.42)
Interest Rate	11.65%	10.50%	10.50%
Gap/(Surplus) for respective Financial Year	(0.37)	(0.67)	(0.67)

TABLE 37: (SURPLUS)/GAP INCLUDING CARRYING COST AS APPROVED BY THE COMMISSION (RS. CR.)

Particulars	Approved
Opening Gap/(Surplus) for FY 2020-21	-
Gap/(Surplus) addition during the FY 2020-21	(6.42)
Closing Gap/(Surplus) for FY 2020-21	(6.42)
Carrying Cost of FY 2020-21	(0.37)
Carrying Cost of FY 2021-22	(0.67)



Particulars	Approved
Carrying Cost of FY 2022-23	(0.67)
Net Gap/(Surplus)	(8.14)

5.88 The Commission has carried out the True-up for FY 2020-21 and directs the Petitioner to refund the above surplus to its Beneficiary as per Clause 6.18 of JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015.

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

A 6 Status of Earlier Directives

6.1 The Commission has time and again issued various directives in order to improve the functioning of the Petitioner. The compliance submitted by the Petitioner to the Commission earlier directions is tabulated below:

Directives	Status	Views of the Commission
Direction in Tariff Order dated November 04, 2022		
Fuel Procurement Plan: The Commission directs the Petitioner to develop a fuel procurement plan & explore options with its suppliers in order to reduce the cost of coal. The Commission is further directing the Petitioner to prioritize its primary fuel procurement from the least cost source. In addition to above, the Commission also directs the Petitioner to bring to the notice of the Commission any changes in fuel mix on quarterly basis. The Petitioner also directed to submit the fuel Procurement plan along with MYT Business Plan.	The Petitioner submitted that they have participated in the e-action of Shakti Scheme in order to develop a fuel procurement plan. Further, the Petitioner has been submitting quarterly reports on the changes in fuel mix.	The Commission noted the compliance of the Petitioner.
Use of LDO as Secondary fuel: The Commission directs the Petitioner to the submit the Detail Project Report on use of LDO in Place of HSD outlining capital cost estimates, technical aspects, implementation plan including modalities for O&M and safe operation of the plant with LDO	The Petitioner in compliance has submitted the requisite data.	The Commission has considered the submissions of the Petitioner, and is scrutinizing the matter in its MYT Order for the Control Period FY 21-22 to FY 25-26.
Ash Disposal & Brick Plant: The Commission directs the Petitioner to submit detailed report of its Plan to enhance its Brick plant capacity along with the ash disposed from the plant to the Commission	The Petitioner has submitted a detailed report of its Plan to enhance its Brick plant capacity. The Petitioner further added that a separate petition will be submitted before the Commission for approval of the capex of the Brick plant in January, 2020.	The Commission noted the compliance of the Petitioner.



A 7 Directives

Ratio of Fuel Mix

7.1 The Commission directs the Petitioner to keep consistency in its ratio of fuel mix, as the inconsistency in fuel mix creates variation in GCV and the Quantity of Primary Fuel procured, which in-turn causes variation in the ECR of the plant.

Enhancement of Associated Transmission System

7.2 The Commission directs the Petitioner to develop a plan for enhancement of the associated Transmission System with the transmission licensee, in order to reduce the tripping of the power plant, which in-turn will help in reducing SFC and increasing availability of the plant.

Timeliness and Data Adequacy in the Next Tariff Petition

7.3 The Commission directs the Petitioner to file the next tariff Petition, after removing deficiencies highlighted in this Tariff Order. The Petitioner should ensure that the data submitted to the Commission is accurate and justified with adequate certification. The Commission also directs the licensee to ensure submission of the next tariff petition within the time frame as stipulated in the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2020.

This order is signed and issued by the Jharkhand State Electricity Regulatory Commission on **May 22, 2023**.

Date: 22.05.2023

Place: Ranchi

Sd/-	Sd/-	Sd/-
(Atul Kumar)	(Mahendra Prasad)	(Justice Amitav Kumar Gupta)
Member (Technical)	Member (Legal)	Chairperson

ANNEXURE - I

List of participating members in the Public Hearing

Sl. No	Name	Address/Organization
1.	Mr. Dhiresk Kumar	8/H, New Telephone Ex. Jhumri Telayiya, Koderma Present: Kokar, Ranchi
2.	Mr. Giriraj Kumar Jhavar	C 218, Ashok Nagar, Road No. 02, Ranchi
3.	Mr. Amit Kumar Chaudhary	101 A, Ratnawali Appt, Lalpur, Ranchi
4.	Mr. Ortan Tirkey	A.G. Collony, Doranda, Ranchi
5.	Dr. Brnnu Kumar	280, Magistrate Colony, Doranda, Ranchi
6.	Mr. Rajesh Kumar	Bariatu, Green Park, Appartment, Bariatu, Ranchi
7.	Mr. Pawan Kr. Thakur	Ranchi, Bariatu
8.	Mr. Saket Upadhyay	Advocate
9.	Mr. Anand Bardia	Inland Power Ltd.
10.	Mr. Shailendra Sinha	Inland Power Ltd.
11.	Mr. Sanjay Kr. Singh	Inland Power Ltd.
12.	Mr. A. Sengupta	Inland Power Ltd.
13.	Mrs. Shivani	Inland Power Ltd.
14.	Mr. Sujoy Kumar Das	Inland Power Ltd. (Consultant, Deloitte)
15.	Mrs. Anita Prasad	JBVNL
16.	Mr. Birendra Kisku	JBVNL
17.	Mrs. Veebha Kumari	JBVNL
18.	Mr. Sharat Kumar	JBVNL
19.	Mr. R.K. Tripathy	JBVNL (Consultant, PWC)