

Jharkhand State Electricity Regulatory Commission



Order on
True-up for FY 2019-20
and
Annual Performance Review for FY 2020-21
for
Inland Power Limited (IPL)

Ranchi
November 04, 2022



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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.: 07 of 2020 & 08 of 2020

In the matter of:

**Petition for
True-up for FY 2019-20
and
Annual Performance Review for FY 2020-21**

In the matter:

Inland Power Limited (IPL)
3A Auckland Place, Suite No. 5A, 5th Floor, Kolkata- 700017..... **Petitioner**

PRESENT

Shri. Atul Kumar

Member (Technical)

Shri. Mahendra Prasad

Member (Law)

Order dated November 04, 2022

Inland Power Limited (hereinafter referred to as 'IPL' or the 'Petitioner') filed Petition dated December 01, 2020 for True up of FY 2019-20 and dated December 01, 2020 for APR for FY 2020-21. In this Petitions, Inland Power Limited (hereinafter referred to as IPL or the Petitioner)



IPL True up for FY 2019-20 & APR for FY 2020-21

has prayed for approval of True-up Petition for FY 2019-20 & Annual Performance Review for FY 2020-21.



A 1: INTRODUCTION

Jharkhand State Electricity Regulatory Commission

- 1.1 The Jharkhand State Electricity Regulatory Commission (hereinafter referred to as the JSERC or the Commission) was established by the Government of Jharkhand under Section 17 of the Electricity Regulatory Commission Act, 1998 on August 22, 2002. The Commission became operational with effect from April 24, 2003.
- 1.2 The Government of Jharkhand vide its notification dated August 22, 2002 had defined the functions of JSERC as per Section 22 of the Electricity Regulatory Commission Act, 1998 to be the following, namely:
 - (a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in section 29;
 - (b) to determine the tariff payable for the use of the transmission facilities in the manner provided in section 29;
 - (c) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
 - (d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.
- 1.3 After the Electricity Act, 2003 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 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 licences 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 shall 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) 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 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 as brought out by GoI 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.

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 (hereinafter referred to as the MoU) with Government of Jharkhand to develop a 126 MW (+20%) (2x63 MW) thermal power plant based on CFBC technology in two stages in Gola, District Ramgarh, Jharkhand in 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 (hereinafter also referred to as the 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 had made the following Prayers.

Case no. 07 of 2020

- *Accept the petition for True up of FY 2019-20;*
- *The Hon'ble APTEL vide its judgement 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.*
- *Approve the numbers for the True up of FY 2019-20 as discussed in this Petition;*



- *Condone any inadvertent omissions/errors/rounding off differences/shortcomings and permit IPL to add/change/modify this filing and make a further submission as may be at a future date; and*
- *Pass such further and other Orders, as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case.*

Case no. 08 of 2020

- *Approve the numbers for APR Petition for FY 2020-21 as discussed in this Petition;*
- *Condone any inadvertent omissions/errors/rounding off differences/shortcomings and permit IPL to add/change/modify this filing and make a further submission as may be at a future date; and*
- *Pass such further and other Orders, as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case.*

Scope of the Present Order

- 1.12 Though the Petitioner has filed two separate Petitions seeking True up for FY 2019-20 and APR for FY 2020-21, the Commission in this Order has considered both the Petitions and has carried out truing-up for FY 2019-20 & Annual Performance Review for FY 2020-21.
- 1.13 While approving this Order, the Commission has taken into consideration:
- a) Materials placed on record by the Petitioner including Annual Audited Account for FY 2019-20;
 - 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) Provisions of the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 (hereinafter referred to as JSERC Generation Tariff Regulations, 2015).
- 1.14 Accordingly, the Commission has scrutinized the Petition in detail and hereby issues the Order on approval of True-up for FY 2019-20 & Annual Performance Review for 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 The Petitioner in the current Petitions has sought for Truing-up for FY 2019-20 & APR for FY 2020-21.

Information Gaps in the Petition

- 2.9 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.: 7 & 8 of 2020/380 dated January 11, 2021.
- 2.10 The Petitioner submitted its response to the aforesaid letter and furnished additional data/information vide email dated February 25, 2021.



2.11 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.

Inviting Public Comments/Suggestions

2.12 The Commission directed the Petitioner to make available copies of the petitions to the members of the general public on request, and also to issue a public notice inviting comments/suggestions on the Petitions for approval of True-up for FY 2019-20 & APR for FY 2020-21.

2.13 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

Newspaper	Date of Publication
Ranchi Express	27.02.2021
Morning India	27.02.2021, 28.02.2021, 02.03.2021
Hindustan Times	27.02.2021, 28.02.2021
Sanmarg	28.02.2021, 02.03.2021

2.14 Subsequently, the Commission also issued a notice on its website www.jserc.org and various newspapers for conducting the public hearing on the Petition. The details of the newspapers publishing the notice by the Commission are as under:

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

Newspaper	Date of Publication
Prabhat Khabar	28.08.2022
Dainik Jagran	28.08.2022
The Times of India	28.08.2022
The Pioneer	28.08.2022
Prabhat Khabar	11.09.2022
Dainik Jagran	11.09.2022
The Times of India	11.09.2022
The Pioneer	11.09.2022



Submission of Comments/Suggestions and Conduct of Public Hearing

- 2.15 In order to provide adequate opportunities to all the Stakeholders and to ensure transparency in the process of tariff determination, the Commission held Public Hearing on September 12, 2022 in Ranchi.
- 2.16 Comments/Suggestions on the Petitions were received. The Comments/Suggestions of the Public, Petitioner's responses and Commission's views thereon are detailed in **Section A4** of this Order.



A 3: BRIEF FACTS OF THE PETITION

- 3.1 The following sub-section presents a summary of True up petition for FY 2019-20 & APR Petition for FY 2020-21 as filed by the Petitioner.

True up for FY 2019-20

Operational Parameters of Plant

- 3.2 The summary of operational parameters approved by the Commission in the 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	3113
Annual Plant Availability Factor	%	82.50%	80.54%
Auxiliary Energy Consumption	%	10.50%	10.86%
Secondary fuel oil consumption	ml/kWh	1.00	1.00

Aggregate Revenue Requirement (ARR)

- 3.3 The summary of the actual Annual Revenue Requirement (ARR) as submitted by the Petitioner for FY 2019-20 vis-à-vis as approved by the Commission in its MYT Order dated May 16, 2017, is tabulated below.

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

Particulars	MYT Order	Petition
Depreciation	15.60	17.20
Interest on Loan	19.28	16.24
Return on Equity	19.84	15.43
Interest on Working Capital	6.07	2.82
O&M Expenses	20.43	29.39
Water charge	0.00	1.46
Annual Fixed Cost	81.22	82.55
Plant Availability	82.50%	80.54%
Fixed charge after PAF adjustment	81.22	80.59
ARR Publication & fee Expenses		0.24
88% of Fixed Cost		
Tax Paid		3.15
Revenue from fly ash brick ARR		0.93
Energy Cost	85.01	121.47
Energy Charge Rate	2.09	3.14
Aggregate Revenue Requirement	166.23	205.45

- 3.4 The Petitioner had computed the carrying cost as Rs. 1.65 Crore on the gap of Rs. 13.14 Crore resulting to the total gap of Rs. 14.79 Crore to be recovered from Beneficiary as shown in the table below and has requested the Commission to approve the same while truing up for FY 2019-20.

Table 5: Gap as submitted by the Petitioner (Rs. Crore)

Particulars	Petition
Annual Fixed Cost	80.59
Total Energy charges	121.47
Total Other Expenses	3.39
Net Annual Revenue Requirement	205.45
Total amount billed by IPL to JBVNL	191.38
Net Revenue Earned from Sale of Fly Ash Brick	0.93
Gap for the Year	13.14
Bank Rate for calculating carrying cost	12.55%
Carrying cost	1.65
Total amount to be recovered from JBVNL	14.79

Annual Performance Review for FY 2020-21

Operational Parameters of Plant

- 3.5 The summary of operational parameters approved by the Commission in the MYT Order dated May 16, 2017 vis-à-vis revised estimated as submitted by the Petitioner is provided in the table below.

Table 6: Operational Parameters as submitted by the Petitioner

Particulars	UoM	FY 2020-21	
		MYT Order	Petition
Annual Plant Availability Factor	%	82.50	88.14
Auxiliary Energy Consumption	%	10.50	10.86
Gross Station Heat Rate	kCal/kWh	2902	3005.99
Secondary Fuel Oil Consumption	ml/kWh	1.00	1.00

Aggregate Revenue Requirement (ARR)



3.6 The summary of actual Annual Revenue Requirement (ARR) as approved by Commission in its MYT Order dated May 16, 2017 vis-à-vis actuals as submitted by the Petitioner for FY 2020-21 is tabulated below.

Table 7: Annual Revenue Requirement as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2020-21	
	MYT Order	Petition
Depreciation	15.60	17.20
Interest on Loan	17.37	16.09
Return on Equity	19.84	15.43
Interest on Working Capital	6.11	6.55
O&M Expenses	21.72	26.45
Annual Fixed Cost	80.64	81.73
Plant Availability	82.50%	88.14%
Fixed Cost after PAF adjustment	80.64	81.73
ARR Publication & fee Expenses	-	-
88% of Fixed Cost (Entitlement of IPL)	-	-
Tax Paid	-	-
Energy Cost	85.01	105.29
Energy Charge Rate	2.09	2.89
Aggregate Revenue Requirement	165.65	187.02



A 4: PUBLIC CONSULTATION PROCESS

- 4.1 The Public Hearing was held on September 12, 2022 to ensure the maximum public participation and transparency wherein Stakeholders put forth their comments and suggestions before the Commission. The list of the attendees is attached as **Annexure-1** to this Order.
- 4.2 The comments and suggestion of the members of the Public/Stakeholders along with the response thereon of the Petitioner and the views of the Commission are detailed hereunder.

Depreciation

Public Comments/Suggestion

- 4.3 The Petitioner has claimed actual depreciation of Rs. 17.2 Crores on average GFA of Rs. 334 Crores in FY 2019-20 as against the approved values of Rs. 15.6 Crores on average approved GFA of Rs. 341 Crores. The Petitioner has again claimed depreciation of Rs. 17.2 crores in FY 2020-21 on average GFA of Rs. 335.11 crores as against approved values of Rs. 15.6 Crore for FY 2020-21. Further submitted that it may be observed that although the actual GFA value claimed is less than approved figures the claimed depreciation is higher. Hence, the increased depreciation on a lower asset base, seems to be an inadvertent and apparent error. Stakeholder submitted that the Petitioner has also failed to submit the detailed calculation of actual depreciation along with the reasons for difference from the approved values. Stakeholder submitted that the depreciation allowed should be equal to the approved values except any changes in value of assets due to new assets added or removed.

Petitioner Submission

- 4.4 *True up for FY 2019-20:* The Petitioner submitted that the Opening and closing Gross Block of Assets and the Depreciation for FY 2019-20 has been considered based on the closing Block of Assets and Depreciation for FY 2018-19 as approved by the Hon'ble Commission vide its order dated September 22, 2020.

The Petitioner has also purchased various assets for Rs. 70 lakhs in FY 2019-20 which were necessary for efficient and successful operation of the generating station. The detailed list has been submitted to the Hon'ble Commission as part of the response to Additional data requirement pertaining to deficiencies observed in the Petition for True-up of FY2019-20 and APR of FY2020-21 dated 11.01.2021.



The purchases of assets were done from internal funds. The additional capitalization was done as per Regulation 7.6 (iv) of the JSERC regulations 2015.

- The capital expenditure incurred on the following counts after the cut-off date may, at its discretion, be admitted by the Commission, subject to prudence check:
- 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

4.5 ***APR for FY2020-21:*** The Petitioner submitted that the Opening & Closing Gross Block of Assets and the depreciation for FY2020-21 has been considered based on the Closing Block of Assets and depreciation for FY2019-20 as submitted in the True Up Petition for FY2019-20.

The Hon'ble Commission in its Regulations, 2015 has considered following principals for determination of depreciation in sections 7.28, 7.31 & 7.32.

“The depreciation has been computed as per the depreciation rates provided in JSERC Tariff Regulations, 2015.”

4.6 The Petitioner submitted that the actual depreciation was higher than the approved values to ensure efficient and successful operation of generating station and requests Hon'ble Commission to approve the depreciation values for FY2019-20 and FY2020-21

Commission Analysis

4.7 The Commission has dealt with the issue and has approved depreciation in Section A 5 of this Order

Operation and Maintenance Expenses

Public Comments/Suggestion

4.8 The Petitioner has claimed actual O&M expenses of Rs. 29.39 crores against the approved values of Rs. 20.43 crores in FY 2019-20. Similarly, the Petitioner has claimed O&M expenses of Rs. 26.45 crores as against the approved value of Rs. 21.72 crores in FY 2020-21. Stakeholder submitted that the actual O&M claimed in true up is around 50% higher than the approved figures. Since O&M expenses are controllable in nature as per clause no. 6.11 (e) of JSERC Tariff Regulation 2015, no change in normative or approved figure should be considered. Also, the Petitioner has not given suitable justification or break up



of O&M expenses to justify such a high increase in O&M expenses. The Petitioner has also not been able to control the performance of this controllable parameter. Thus, there is no merit in the contention and should be outrightly rejected.

Petitioner Reply

4.9 *True Up for FY 2019-20:* The Petitioner submitted that it has claimed O&M expenses as per its audited accounts. The O&M has increased due to change in the primary fuel mix which led to higher use of coal rejects with high ash content. The Blending ratio changed from approved of 54:43:3 to 38: 62:0 in FY 2019-20 for Coal-Rejects -Dolochar with the weighted average GCV of Fuel decreased from approved 3061 to actual 2786 kCal/kg in FY 2019-20. Thus, the quantity of ash produced increased due to change in fuel mix and decrease in GCV of fuel. The Petitioner has claimed O&M expenses considering the ground challenges faced by him and considering uncontrollable change in fuel mix leading to quality variance on GCV and ash content, compliances and statutory norms.

4.10 *APR for FY 2020-21:* The Petitioner has submitted that it has claimed O&M expenses as per its audited accounts. The O&M cost has increased due to change in the primary fuel mix, increase in ash handling and disposal charges due to high ash generated due to change in fuel mix. The Blending ratio changed from approved of 54:43:3 to 29:71:0 in FY 2020-21 for coal-Rejects-Dolochar with the weighted average GCV of fuel decreased from approved of 3061 to actual of 2604 kCal/kg in 2020-21.

The Petitioner has claimed O&M expenses considering the ground challenges faced by him considering uncontrollable change in fuel mix leading to quality variances on GCV and ash content, compliances and statutory norms.

The Petitioner has prayed the Commission to allow the actual operations & maintenance expenses as the change in fuel mix was beyond the control of the Petitioner.

Commission Analysis

4.11 The Commission has dealt with the issue in Section A 5 of this Order.

Gross Station Heat Rate (GSHR)

Public Comments/Suggestion

4.12 The Petitioner has claimed actual Gross Station Heat Rate of 3113 kCal/kWh against the approved values of 2902 kCal/kWh. Similarly, the Petitioner has estimated GSHR of 3055.99 kCal/kWh as against the approved value of 2902 kCal/kWh in FY 2020-21.



Stakeholder submitted that the actual SHR claimed is much higher than the approved figures and since Station heat rate is controllable and a performance parameter as per JSERC Regulations 2015, no change in normative or approved figures should be considered. Also, the petitioner has not given suitable justification of increase in GHSR values and hence, it should be outrightly rejected.

Petitioner Submission

4.13 *True up for FY 2019-20:* The Petitioner submitted that the Blending ratio of its Primary Fuel Mix changed from approved of 54:43:3 to 38:62:0 in FY 2019-20 for Coal-Rejects-Dolochar with the weighted average GCV of fuel decreased from approved of 3061 to actual 2786 kCal/kg in FY 2019-20. This led to a higher quantity of ash produced which affected the GSHR of the plant. This led to a higher than approved GSHR of 2,902 kCal/kWh with the actual GSHR for FY 2019-20 being 3,113 kCal/kWh.

Thus, the Petitioner submitted that the actual SHR was higher than the approved SHR due to uncontrollable change in primary fuel mix.

4.14 *APR for FY 2020-21:* The Petitioner submitted that the Blending ratio of its Primary Fuel mix changed from approved of 54:43:3 to 29:71:0 in FY 2020-21 for Coal – Rejects – Dolochar with the weighted average GCV of fuel decreased from approved of 3061 to actual of 2604 Kcal/Kg in FY 2020-21. This led to a higher quantity of ash produced which affected the GSHR of the plant. This led to a higher than approved GSHR of 2,902 Kcal / kWh with the actual GSHR for FY2020-21 being 3,056 Kcal / kWh.

4.15 Thus, the Petitioner submitted that the actual SHR was higher than the approved SHR due to uncontrollable change in primary fuel mix.

Commission Analysis

4.16 The Commission has dealt with the issue in Section A 5 of this Order.

Auxiliary Consumption

Public Comments/Suggestion

4.17 The Petitioner has claimed actual Auxiliary consumption of 10.86% in FY 2019-20 as against the approved values of 10.50% for FY 2019-20. Also, the Petitioner has estimated the auxiliary consumption to be 10.86% again for FY 2020-21 as against the approved values of 10.5% for FY 2020-21. It may be observed that the actual auxiliary consumption claimed is much higher than the approved figures resulting in higher energy charge rate.



Since Auxiliary consumption is a controllable and a performance parameter as per JSERC Tariff Regulations 2015, no change in normative or approved figures should be considered.

Petitioner Submission

4.18 *True up for FY2019-20:* The Petitioner submitted that the Hon'ble Commission had set an auxiliary consumption target of 10.5% for FY 2019-20 as per its order in Case No. 06 and 11 of 2016 dated 16th May 2017. The Auxiliary consumption is 10.86 % for FY 2019-20 is better than previous years on account of better dispatch profile of the power plant and rigorous monitoring of Balance of Plant equipment.

Further, the Petitioner submitted 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 Limited, RERC has allowed an Auxiliary Consumption of 11.5%
- In case of Gujarat Industries Power Company Ltd, GERC has allowed an Auxiliary Consumption of 12.5% for 3 years and 11.5% from the 4th year
- In case of Bajaj Energy Pvt Ltd, UPERC has allowed an Auxiliary Consumption of 11.5% during stabilization and 11% - post stabilization period.

4.19 *APR for FY2020-21:* Petitioner submitted that the Hon'ble Commission had set an auxiliary consumption target of 10.5% 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 in first six months of FY 2020-21 due to several restrictions being imposed by SLDC on a daily basis on the plants.

The Petitioner submitted 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 Limited, RERC has allowed an Auxiliary Consumption of 11.5%
- In case of Gujarat Industries Power Company Ltd, GERC has allowed an Auxiliary Consumption of 12.5% for 3 years and 11.5% from the 4th year



- In case of Bajaj Energy Pvt Ltd, UPERC has allowed an Auxiliary Consumption of 11.5% during stabilization and 11% - post stabilization period.

4.20 Thus, the Petitioner submitted that the actual Auxiliary Consumption was higher than the approved values due to uncontrollable circumstances due to restrictions imposed by SLDC.

Commission Analysis

4.21 The Commission has dealt with the issue in Section A 5 of this Order.

Change in Fuel Mix

Public Comments/Suggestion

4.22 The Petitioner has claimed a huge variation in its fuel mix for the plant. It has claimed 38% coal, 62% coal rejects and 0% dolochar in FY 2019-20 as against the approved ratio 54:43:03 for coal, coal rejects and dolochar. Also, it has considered a fuel mix of around 29:71:0 for coal, coal rejects, and dolochar for FY 2020-21 as against the approved ratios of 54:43:03 for FY 2020-21. The huge variation of fuel mix has resulted in increase in other factors such as auxiliary power consumption, O&M and the station heat rate. Overall, this results in lower efficiency of the power plant as it results in lower average GCV. The Petitioner has not been able to control the fuel mix portion for the reasons best known to them. However, such inefficiencies at the petitioner end inadvertently increases the overall cost for the Discom procuring power. The Petitioner should be directed to strictly maintain an optimum mix of the fuel so as not incur any additional cost. Hence, it should be rejected so as not to burden the consumer.

Petitioner Submission

4.23 The Petitioner submitted that the Blending ratio of its Primary Fuel Mix changed from approved of 54:43:3 to 38:62:0 in FY 2019-20 for Coal – Rejects – Dolochar with the weighted average GCV of fuel decreased from approved of 3061 to actual of 2786 Kcal/Kg in FY 2019-20 whereas the Blending ratio of its Primary Fuel Mix changed from approved of 54:43:3 to 29:71:0 in FY 2020-21 for Coal – Rejects – Dolochar with the weighted average GCV of fuel decreased from approved of 3061 to actual of 2604 Kcal/Kg in FY 2020-21.

4.24 The petitioner further submitted 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, the Petitioner has no control over the coal offered in the e-auctions and Shakti Scheme. Furthermore, the Petitioner submitted that it has made earnest efforts to ensure optimum coal supply at the most optimal costs. Apart from its contracted capacities, the Petitioner has also tried to source coal from Special Forward and Spot E-Auctions. During the year FY2019-20 and FY2020-21 CCL conducted only 2 special forward auctions and 1 special forward auctions respectively in which Petitioner purchased coal in both the auctions. CCL also conducted various spot e-auctions during FY2019-20 and FY2020-21 but the price of coal was very high compared to the special forward auctions. Furthermore, 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.

- 4.25 Furthermore, the Petitioner also submitted that it has informed JBVNL on the changing fuel parameters and its impact on the fuel price to the latter on a monthly basis as part of the FPA Bills that the Petitioner has submitted to JBVNL along with the supporting documents. The fuel supply scenario and increase in coal prices which are beyond the reasonable control of the Petitioner is a well-known fact to JBVNL. JBVNL also has been prudently checking the bills and making payments accordingly to IPL.
- 4.26 The Petitioner also submitted that as part of the Compliance requirements, it has been submitting quarterly report to JSERC on the fuel mix, price and GCV for the fuel.

Commission Analysis

- 4.27 The Commission has dealt with the issue in Section A 5 of this Order.

Primary Fuel Cost

Public Comments/Suggestion

- 4.28 The Petitioner has claimed actual primary fuel cost of Rs. 118.55 crores in FY 19-20 against the approved values of Rs. 82.65 crore. Also, for FY 2020-21, it has considered a value of Rs. 102.41 crore as against the approved values of Rs. 82.85 Crore. As such, it may be observed that the actual fuel cost has been calculated on the approved/normative values of station heat rate and auxiliary consumption but on the actual values which are higher than the approved figures thereby resulting in higher fuel cost. As per JSERC Tariff



Regulations 2015, only the change in price/rate of fuel and change in PLF is pass through and the normative values should be considered for the performance parameters of Station heat rate and auxiliary consumption. There is a major deviation of more than Rs. 37 crores in fuel cost which is primarily due to inefficiency in performance which if passed to the consumers will result in undue burden on distribution company as well as its consumers.

Petitioner Submission

- 4.29 The Petitioner submitted 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. As also detailed in IPL's response to Query No. 5 above, IPL submitted the details of the Special Forward Auctions, Spot E-Auctions conducted during FY2019-20 and FY2020-21 and IPL's participation in the same.
- 4.30 The Petitioner also further submitted that 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 the Petitioner 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. Considering, the sporadic auctions by CCL and the higher cost associated with its sourcing, The Petitioner has been sourcing coal in a manner that optimises the total coal cost and concomitant energy charges. The Petitioner has also sourced its coal as per the Shakti Scheme Agreement. It also passed on the benefits of lower cost of coal to its beneficiary.
- 4.31 The Petitioner, also submitted that it has informed JBVNL on the changing fuel parameters and its impact on the fuel price to the latter on a monthly basis as part of the FPA Bills that the petitioner submits to JBVNL along with the supporting documents. The fuel supply scenario and increase in coal prices which are beyond the reasonable control of the Petitioner is a well-known fact to JBVNL. JBVNL also has been prudently checking the bills and making payments accordingly to the Petitioner.

Commission Analysis

- 4.32 The Commission has dealt with the issue in Section A 5 of this Order.

Other Expenses

Public Comments/Suggestion



4.33 The Petitioner has claimed tax on return on equity and appointment fee and other publication expenses separately from annual fixed cost. As per JSERC Regulations 2015, tax on return on equity is part of Return on equity that it is to be limited to the normative return on equity as applicable as per statutory tax rate. Similarly, application fee and other publication expenses are part of Administrative Expenses which in turn are part of O&M expenses have already been allowed, then separate treatment of other expenses should not be treated under O&M expenses in totality.

Petitioner Submission

4.34 The Petitioner submitted that it has claimed the actual taxes paid to the tax authorities. The copy of the tax payment receipt was also submitted as part of Annexures to the Hon'ble Commission. The Petitioner also submitted that as per the Tariff Regulations, 2015, Application Fee & Publication Expenses are to be allowed by JSERC. The Hon'ble Commission has allowed the Application Filing & Publication Expenses separately on actual basis for JUSCO and TSL as follows:

- Jamshedpur Utilities & Services Company Limited (JUSCO) – True Up Order for FY2016-17 and FY2017-18 dated June 19, 2020
- Tata Steel - True Up Order for FY2016-17 and FY2017-18 dated June 19, 2020 dated May 26, 2020

Commission Analysis

4.35 The Commission has dealt with the issue in Section A 5 of this Order. In case of Application fees and publication expenses the Commission has allowed Rs. 023 Crore out of Rs. 0.25 Crore claimed by the Petitioner, since for the amount of Rs. 0.019 Crore bill is raised in July 06, 2020 and the Commission is of the view that payment of Rs. 0.019 Crore will be reflected in audited accounts of FY 2020-21.



A 5: TRUE UP FOR FY 2019-20

- 4.36 The Petitioner has submitted the True up petition for FY 2019-20 based on the audited accounts taking into consideration the provisions of the JSERC Generation Tariff Regulations, 2015.
- 4.37 The Commission has carried out the True up for FY 2019-20 taking into consideration:
- a) Audited (Statutory) accounts for the FY 2019-20;
 - b) JSERC Generation Tariff Regulations, 2015;
 - c) Methodology adopted by the Commission in its previous Orders.

Operational Performance

Plant Availability Factor (PAF)

Petitioner's Submission

- 4.38 The Petitioner has submitted the actual plant availability of Unit-I as 80.54% for FY 2019-20 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 2019-20.

Commission's Analysis

- 4.39 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.
- 4.40 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.
- 4.41 The Commission in its Order dated March 19, 2018 had carried out prudence 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% to 85% for FY 2015-16.

- 4.42 In line with above methodology adopted during truing up for FY 2015-16, the Commission approved the normative plant availability as 85% 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.
- 4.43 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. 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 2019-20 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 2019-20 based on the State SLDC certificate as shown below.

Table 8: Plant availability as approved by the Commission

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Normative Plant Availability Factor	82.50%	-	85.00%
Actual Plant Availability Factor	-	80.54%	80.54%

- 4.44 The Commission in accordance with the above approved availability has reduced fixed charges of the Petitioner for FY 2019-20 as the actual availability is lower than the normative availability (NAPAF).

Auxiliary Consumption

Petitioner's Submission

- 4.45 The Petitioner has submitted the actual auxiliary consumption for FY 2019-20 as 10.86% against the approved value of 10.50% in the MYT Order dated May 16, 2017.



4.46 The Petitioner has also mentioned that plant runs on CFBC based technology and therefore consumes more auxiliary power than other thermal power plant.

Commission's Analysis

4.47 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 deviation from normative value in auxiliary consumption as approved in MYT Order dated May 16, 2017. The Petitioner vide letter dated February 25, 2021 replied that higher auxiliary consumption is due to higher consumption prevalent in CFBC technology plants.

4.48 Additionally, the Petitioner highlighted that State Electricity Regulatory Commission (SERC) in other States 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 Limited, Rajasthan Electricity Regulatory Commission had allowed the auxiliary consumption as 11.50%.
- ii. In the case of Gujarat Industries Power Company Limited, 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. Limited, Uttar Pradesh Electricity Regulatory Commission had allowed an auxiliary consumption of 11.50% during stabilization and 11.00% post stabilization period.

4.49 The 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 Generation 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%.

4.50 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.

4.51 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 and FY 2018-19.



4.52 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. 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 2019-20 as 10.00% subject to final outcome of the pending case before the Hon’ble APTEL.

Table 9: Auxiliary Consumption as approved by the Commission

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Normative Auxiliary Consumption	10.50%	-	10.00%
Actual Auxiliary Consumption	-	10.86%	10.86%

4.53 The Commission has considered the normative auxiliary consumption of 10.00% while calculating the energy charge for FY 2019-20.

Plant Load Factor and Generation

Petitioner’s Submission

4.54 The Petitioner has submitted the actual Plant Load Factor (PLF) as 78.57% for FY 2019-20 against the target of 82.50% approved by the Commission in the MYT Order dated May 16, 2017.

4.55 The Petitioner had further submitted the gross generation of Unit-I as 433.61 MU for FY 2019-20 which is lower than that approved value of 455.30 MU in the MYT Order dated May 16, 2017.

Commission’s Analysis

4.56 The Commission observed that the Petitioner has wrongly calculated the Plant Load Factor (PLF) on gross generation and therefore Commission has recalculated the PLF as per Regulation which works out to be 77.53%. The Commission has approved the gross generation as submitted by the Petitioner for FY 2019-20.

4.57 The Plant Load Factor, Gross Generation as approved by the Commission in the MYT Order, as submitted by the Petitioner and as approved now by the Commission is summarized in the table below.

Table 10: Plant Load Factor and Generation as approved by the Commission



Particulars	UoM	FY 2019-20		
		MYT Order	Petition	Approved
Plant Load Factor	%	82.50	78.57	77.53
Gross Generation	MU	455.30	433.61	433.61

Gross Station Heat Rate (GHR)

Petitioner's Submission

4.58 The Petitioner has claimed the Gross Station Heat Rate (GHR) as 3113 kCal/kWh against the approved value of 2902 kCal/kWh in the MYT Order dated May 16, 2017.

Commission's Analysis

4.59 The Commission vide letter dated No. JSERC/Case (Tariff) no.: 7 & 8 of 2020/380 dated January 11, 2021 directed the Petitioner to submit the reason for deviation from normative value in Gross Station Heat Rate. The Petitioner vide letter dated February 25, 2021 replied that higher Gross Station Heat Rate is due to variance in the fuel mix affecting Gross Calorific Value and ash content.

4.60 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 as 2765 kCal/kWh while carrying out True-up for FY 2016-17, FY 2017-18 and FY 2018-19.

4.61 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. 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 2019-20 as 2765 kCal/kWh subject to final outcome of the pending case before the Hon'ble APTEL.

Table 11: Gross Station Heat Rate (GHR) as approved by the Commission

Particulars	UoM	FY 2019-20		
		MYT Order	Petition	Approved
Gross Station Heat Rate	kcal/kWh	2902	3113	2765



Specific Fuel Oil Consumption

Petitioner's Submission

4.62 The Petitioner had submitted the specific fuel oil consumption as 1.00 ml/kWh in line to JSERC Generation Tariff Regulations, 2015.

Commission's Analysis

4.63 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 Generation Tariff Regulations 2015. Hence, the Commission approves the secondary fuel oil consumption as submitted by the Petitioner.

Table 12: Specific Fuel Oil Consumption as approved by the Commission

Particulars	UoM	FY 2019-20		
		MYT Order	Petition	Approved
Secondary Fuel	ml/kWh	1.00	1.00	1.00

Fuel Cost Parameters

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

Petitioner's Submission

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

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

4.65 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

4.66 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.

- 4.67 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.
- 4.68 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 quarterly basis and consolidated report during the next petition filing by the Petitioner. In compliance to above directive, the Petitioner filed the desired report before the Commission.
- 4.69 The Commission has scrutinized monthly source wise coal consumption duly certified by auditor as submitted by the Petitioner and approves the coal mix and Gross Calorific Value as shown below.
- 4.70 The Commission has considered the submission made by the Petitioner including supporting documents certified by auditor while approving the same. Further, the Commission is of the view that securing proper fuel for operating the plant efficiently lies with the generator and therefore any in-efficiency arising out of poor coal quality cannot be passed on to the consumers.

Table 13: Coal Mix and GCV as approved by the Commission

Particulars	UoM	FY 2019-20		
		MYT Order	Petition	Approved
Coal	%	54.00	38.01	38.01
Coal Rejects	%	43.00	61.99	61.99
Dolochar	%	3.00	-	-
GCV of Coal	kCal/kg	4078.68	3602.07	3602.07
GCV of Coal Reject	kCal/kg	1937.31	2285.07	2285.07
GCV of Dolochar	kCal/kg	855.39	-	-
Weighted average GCV of Primary Fuel	kCal/kg	3061.19	2785.61	2785.61

Transit Loss

Petitioner's Submission

- 4.71 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 Generation Tariff Regulations, 2015.

Commission's Analysis

- 4.72 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 Generation Tariff Regulations, 2015.

Table 14: Transit Loss as approved by the Commission

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Transit Loss	0.80%	0.80%	0.80%

Landed Cost of Coal

Petitioner's Submission

4.73 The Petitioner had submitted the certified true copy from its auditor for landed cost of primary fuel consumed from different source 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

4.74 As per Clause 8.21 of the JSERC 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%.

- 4.75 The Petitioner in the petition has provided month wise fuel procurement and rate of primary fuel procured duly certified by the auditor for FY 2019-20.
- 4.76 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 submitted the quarterly report vide Reply dated 25.02.2021 before the Commission.
- 4.77 The Commission vide letter dated No. JSERC/Case (Tariff) no.: 7 & 8 of 2020/380 dated January 11, 2021 to the Petitioner to provide the reason of decrease in GCV of Primary fuel (2785.61 kCal/kg) than approved values (3061.19 kCal/kg) and increase in the weighted average landed price of Coal (Rs. 2434.43/ MT). In reply to the data gaps with letter dated 25.02.2021 the Petitioner submitted that it acquired its primary ROM for Coal from CIL e-auctions and Shakti Scheme. The Coal prices and GCV of coal provided in the e-auctions and SHAKTI scheme are as per 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 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 constant running operations of the of the power plant
- 4.78 Considering, the Petitioner's submission and after due prudence check, the Commission approves the landed cost of coal as given in the table below.

Table 15: Weighted Average Landed Price of Coal as approved by the Commission (Rs. /Ton)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Price of Coal	2830.32	3030.26	3030.26
Price of Coal Reject	851.02	2069.16	2069.16
Price of Dolochar	543.40	-	-
Transit Loss	0.80%	0.80%	0.80%
Landed Price of Primary Fuel	1926.02	2454.07	2454.07

Calorific value and Landed price of Secondary Fuel

Petitioner's Submission



4.79 The Petitioner had submitted the landed price of secondary fuel as Rs. 67403.30/kL based on the secondary fuel consumed for FY 2019-20 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

4.80 The Commission observed that the price of secondary fuel increased drastically as compared to the approved value and directed the Petitioner vide letter dated No. JSERC/Case (Tariff) no.: 7 & 8 of 2020/380 dated January 11, 2021 to furnish the reason for such price surge. The Petitioner vide letter dated February 25, 2021 submitted that the price of secondary fuel oil is controlled by the Oil Marketing Companies (OMC) and the Petitioner has to pay as per market rate. In support of the reply, the Petitioner has submitted the fuel bills duly certified for FY 2019-20.

4.81 The Commission further observed that the Petitioner procure secondary fuel from Nilkanth Kisan Sewa Kendra instead of renowned oil companies like IOCL, BPCL etc. The Commission vide its letter dated No. JSERC/Case (Tariff) no.: 7 & 8 of 2020/380 dated January 11, 2021 directed the Petitioner to provide the methodology adopted for selection. The Petitioner vide its reply dated February 25, 2021 submitted that the secondary fuel is being supplied by Nilkanth Kisan Seva Kendra by 4kL capacity small tankers as and when required basis. The Petitioner submitted that it is getting discount of Rs.1,000/ kL on the Secondary fuel from the supplier against the rate of Oil marketing companies and also if the Petitioner procure Secondary fuel from Oil marketing companies, they need to procure minimum 12kL because Oil Companies do not supply small quantity and the location is also 60 km from Petitioner’s plant.

4.82 The Petitioner further added that the analysis for substitution of HSD with LDO has already submitted to the Commission and the plan for shifting to LDO as secondary fuel will be a part of MYT Petition for FY 2022-2026,

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

Table 16: Calorific value & Landed price of Secondary Fuel as approved by the Commission

Particulars	UoM	FY 2019-20		
		MYT Order	Petition	Approved
Calorific Value	kCal/L	10000.00	10000.00	10000.00
Landed Price	Rs. /kL	47472.00	67403.30	67403.30

Energy Charge Rate (ECR)

Petitioner's Submission

4.84 The Petitioner had submitted the Energy Charge Rate (ECR) as Rs. 3.143/kWh against the approved value of Rs. 2.090/kWh for FY 2019-20.

Commission's Analysis

4.85 As per JSERC Generation Tariff Regulation, 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).

4.86 The formula for calculation of energy charge payable to a Generating Company is specified in JSERC Generation Tariff Regulation, 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%.



4.87 Accordingly, the Commission has calculated the Energy Charge Rate (ECR) to be charged by the Petitioner as per the formula specified in JSERC Generation Tariff Regulations, 2015. The table below details the ECR and Fuel Cost for True up for FY 2019-20 as submitted by the Petitioner and as approved by the Commission.

Table 17: Energy Charge Rate (ECR) as approved by the Commission

Particulars	UoM	FY 2019-20		
		MYT Order	Petition	Approved
Net Generation	MU	407.49	386.12	386.12
Auxiliary Consumption	%	10.50	10.86	10.00
Gross Station Heat Rate	kcal/kWh	2902.00	3113.00	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	2785.61	2785.61
Landed Price of Primary Fuel	Rs. /Ton	1926.02	2454.07	2454.07
Landed Price of Secondary Fuel	Rs. /kL	47472	67403.30	67403.30
Energy Charge Rate (ECR)	Rs//kWh	2.090	3.143	2.772
Primary Fuel Cost	Rs. Cr.	82.84	118.55	104.13
Secondary Fuel Cost	Rs. Cr.	2.16	2.92	2.89

Determination of Fixed Cost

Additional Capitalization

Petitioner's Submission

4.88 The Petitioner has claimed additional capitalization of Rs. 0.70 Crore for FY 2019-20 substantiating that the same were necessary for efficient and successful operation of the Generating Station.

Table 18: Details of the Additional Capitalization as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Capitalization	-	0.70

Commission's Analysis

4.89 The Commission vide its letter directed the Petitioner to clarify the reason for such deviation from MYT Order dated May 16, 2017. The Petitioner was also required to provide the detail requirement of major assets added in FY 2019-20. Further, the Commission observes that there is no change in the equity and loan structure of the Petitioner and directed the Petitioner to provide the source of funding of Rs. 0.70 Crore.

4.90 The Petitioner in its reply dated February 25, 2021 submitted the detail of assets capitalized in the FY 2019-20 as shown below.

Table 19: Details of the assets capitalized as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20
	Petition
Factory Shed	0.141
Office chairs	0.019
Windows	0.022
Revolving Chair	0.002
Freezer	0.002
Computer & Peripherals	0.004
Industrial Man cooler Pedestal	0.002
Motorised Telescopic Chute	0.053
Electrical welding Machine	0.026
Submersible Pump	0.001
Pallet	0.112
Hand Trolley & Four wheeled Platform Trolley	0.004
Brick Plant	0.204
Peabo Box and Installation	0.007
25 no. IP Phone (GXP 1615)	0.008
Mobile	0.005
Air Conditioner	0.014
Printer	0.001
Water Purifier	0.004
Electrical Fitting & Testing Equipment	0.06
Welding Machine	0.004
Voltage Transformer	0.007
Total	0.701

4.91 The Petitioner submitted that majorly additional capitalization is spent to ensure for efficient and successful operation of the Generating Station.

4.92 The Commission observes that the Petitioner while submitting its MYT Petition for FY 2016-17 to FY 2020-21 did not propose any additional capitalisation for any financial year of the Control Period. Further, the Regulations provide the provision for filing the APR prior to the actual additional capitalisation before the Commission for approval. The Petitioner even failed to submit the APR detailing the additional capitalisation before the Commission.

4.93 The Commission further observes that the expenses submitted are minor expenses that are recurring in nature and essentially forms part of O&M Expenses. In view of the above, the Commission has not approved any additional capitalisation for FY 2019-20.

- 4.94 The Commission directs the Petitioner to ensure any additional capitalisation as per MYT Order issued by the Commission. Further, any deviations from MYT Order need to be brought to the notice of the Commission for prior approval instead of post facto approval after actual capitalisation.
- 4.95 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 20: Details of the Additional Capitalization as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Capitalization	-	0.70	-

Depreciation

Petitioner's Submission

- 4.96 The Petitioner had submitted that depreciation had been calculated as per the depreciation rates provided in the Appendix-I of the JSERC Generation Tariff Regulations 2015.
- 4.97 The Petitioner has calculated the depreciation taking into account the closing asset for FY 2018-19 and additional capitalization of Rs. 0.70 Crore for FY 2019-20. The depreciation submitted by the Petitioner is given in the table below.

Table 21: Depreciation as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Depreciation	15.60	17.20

Commission's Analysis

- 4.98 The provisions laid out in the JSERC Generation Tariff Regulations, 2015 for approval of depreciation is reproduced below.

“7.28 Depreciation shall be calculated for each year of the tariff period, on the amount of Capital Cost of the assets admitted by the Commission;

Provided that depreciation shall not be allowed on assets funded by any capital subsidy / grant

7.29 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.



7.31 Depreciation shall be calculated annually based on ‘Straight Line Method’ and at rates specified in Appendix-I to these Regulations for the assets of the generating station:

Provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from the Date of Commercial operation shall be spread over the balance Useful life of the assets.

7.32 In case of existing projects, the balance depreciable value as on 1st April 2016 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31st March 2016 from the gross depreciable value of the assets.

The rate of depreciation shall be continued to be charged at the rate specified in Appendix-I till cumulative depreciation reaches 70%. Thereafter the remaining depreciable value shall be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90%.

7.33 Depreciation shall be chargeable from the first Year of commercial operation. In case of commercial operation of the asset for part of the Year, depreciation shall be charged on pro rata basis.”

4.99 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 Generation Tariff Regulations, 2015.

4.100 The following table shows the depreciation approved by the Commission against that submitted by the Petitioner.

Table 22: Depreciation as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Depreciation	15.60	17.20	17.19

Operation & Maintenance Expenses

Petitioner’s Submission



- 4.101 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.
- 4.102 The Petitioner has further claimed water charge as Rs. 1.46 Crore based on actuals for FY 2019-20 in line Clause 7.46 of the JSERC Generation Tariff Regulations, 2015.
- 4.103 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 23: O&M Expenses as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
O&M Expenses	20.43	29.39
Water Charges	-	1.46

Commission’s Analysis

- 4.104 The provisions laid out in the JSERC Generation Tariff Regulations, 2015 for approval of O&M expenses are as under:

*“7.40 Operation and Maintenance (O&M) expenses shall comprise of the following:
 Salaries, wages, pension contribution and other employee costs;
 Administrative and General costs;
 Repairs and maintenance expenses; and
 Other miscellaneous expenses statutory levies and taxes (except corporate income tax).*

.....

7.46 The Water Charges and capital spares for thermal generating stations shall be allowed separately:

Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition:

Provided that the generating station shall submit the details of year wise actual capital spares consumed at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance as per Clause 7.47 of the Regulation or special allowance as per Clause 7.10 and 7.11 of the Regulation or claimed as a part of additional



capitalisation or consumption of stores and spares and renovation and modernization.

- 4.105 Since, the JSERC 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.
- 4.106 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.
- 4.107 The Commission observed that the Petitioner had claimed the O&M Expenses on actual basis instead of normative basis as per regulations and directed the Petitioner to re-submit the same as per the Regulations. In compliance to the Commission’s direction, the Petitioner submitted that they claim the O&M cost in line with its audited accounts.
- 4.108 The Commission is of the view that ensuring reliable coal source at an economical price is the prime responsibility of 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.
- 4.109 With regard to water charges claimed, the Commission directed the Petitioner to provide the detail of actual specific water consumption and basis of water rate at which water bill was raised for FY 2019-20. In compliance to the Commission’s direction, the Petitioner submitted the month wise water consumption and rate of water charge to derive the total water charge for FY 2019-20. The Petitioner further submitted the water bill to substantiate the water consumption and water drawl rate.
- 4.110 The Commission has scrutinized the details submitted by the Petitioner and approves the water charge as shown below.

Table 24: O&M Expenses as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved

O&M Expenses	20.43	29.39	20.43
Water Charges	-	1.46	1.46
O&M Expenses including Water Charge	20.43	30.85	21.89

Interest on Loan

Petitioner's Submission

4.111 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 2019-20. The Petitioner has submitted the Interest certificate issued by the Banks in support of interest rate and interest paid by the Petitioner in FY 2019-20.

Table 25: Interest on Loan as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Opening Debt Balance	166.27	148.74
Net Additions	0.00	0.00
Repayment	15.60	29.06
Closing Debt Balance	150.67	119.68
Average Debt	158.47	134.21
Rate of Interest (%)	12.16%	12.10%
Interest on Debt	19.28	15.87
Finance Charges	-	0.37
Interest & Finance Charges	19.28	16.24

Commission's Analysis

4.112 The Commission has calculated the gross normative loan for FY 2019-20 as per JSERC Generation Tariff Regulation, 2015 as quoted below.

“7.13 In case of the generating station declared under commercial operation prior to 1.4.2016, debt-equity ratio allowed by the Commission for determination of Tariff for the period ending 31.3.2016 shall be considered for determination of tariff.

During the control period, debt-equity ratio allowed by the Commission for determination of Tariff for the period ending 31st March 2017 shall be considered for determination of tariff.



7.14 For the project declared under commercial operation on or after 1.04.2016, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity deployed is less than 30% of capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Explanation: -

i. The premium, if any, raised by the Generating Company, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid-up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station.

ii. Provided, further that any consumer contribution, deposit work 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.

iii. Any expenditure incurred or projected to be incurred on or after 1st April 2016 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 specified in clause 7.14 of this Regulation.”

.....

“7.19 The loans arrived at in the manner indicated in clause 7.13 and 7.14 of these Regulations shall be considered as gross normative loan for calculation of interest on loan.

7.20 The normative loan outstanding as on 1st April 2016 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31st March 2016 from the gross normative loan

7.21 The repayment for any year during the Tariff Period shall be deemed to be equal to the depreciation allowed for that Year.

7.22 Notwithstanding any moratorium period availed by the Generating Company, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station does not have actual loan, then the weighted average rate of interest of the Generating Company as a whole shall be considered

7.24 The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest”.

- 4.113 The Commission has considered the opening balance of normative debt for FY 2019-20 as closing balance for FY 2018-19 as per the True-up Order dated September 22, 2020.
- 4.114 The Commission further observed that the Petitioner has considered the actual repayment against the norms which states that the repayment shall be equal to depreciation allowed for that respective financial year. The Commission has approved the repayment equal to approved depreciation in line with the methodology specified in JSERC Generation Tariff Regulations, 2015 to arrive at the closing balance of normative debt component.
- 4.115 The Commission has computed the weighted average rate of interest based on the actual loan portfolio as submitted by the Petitioner.
- 4.116 The Commission further observed that the Finance Charges claimed by the Petitioner is not related to term loan and is associated with Cash Credit account. Hence, the Commission has not approved any Finance Charges for FY 2019-20.
- 4.117 In accordance with the methodology submitted above, the Commission has computed the interest on loan as shown below.

Table 26: Interest on Loan as approved by the Commission (Rs. Crore)



Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Opening Debt Balance	166.27	148.74	163.65
Net Additions	-	-	-
Repayment	15.60	29.06	17.19
Closing Debt Balance	150.67	119.68	146.46
Average	158.47	134.21	155.06
Rate of Interest (%)	12.16%	12.10%	11.83%
Interest on Debt	19.28	15.87	18.18
Finance Charges	-	0.37	-
Interest & Finance Charges	19.28	16.24	18.18

Interest on Working Capital (IoWC)

Petitioner's Submission

4.118 The Petitioner has claimed the Interest on Working Capital as Rs. 2.82 Crore based on actuals and requested the Commission to approve the same for FY 2019-20.

Table 27: IoWC as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Interest on Working Capital	6.07	2.82

Commission's Analysis

4.119 The Commission observed that the Petitioner had claimed the Interest on Working Capital on actual basis instead of normative basis as specified in the regulations.

4.120 In reply to the Commission's direction, the Petitioner submitted that they have claimed the Interest on Working Capital as per audited accounts as specified in Jharkhand State Electricity Regulatory Commission (Terms & Conditions for Determination of Generation Tariff) Regulations, 2015.

4.121 The Commission determine working capital requirement in accordance with Clause 7.34 of Jharkhand State Electricity Regulatory Commission (Terms & Conditions for Determination of Generation Tariff) Regulations, 2015 which states

"7.34 The Commission shall determine the Working Capital requirement for coal-based generating stations containing the following components:

(a) Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 30 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;*
- (b) Cost of coal or lignite and limestone for 30 days for generation corresponding to normative annual plant availability factor;*
- (c) 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;*
- (d) Maintenance spares @ 20% of Operation and maintenance expenses specified in clauses 7.40 to 7.48 of these regulations;*
- (e) Operation and Maintenance expenses for 1 month; and*
- (f) Receivables equivalent to 2 months of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor.*

From the subclause (a), (b) and (c) of Clause 7.34 it is evident that the cost of coal and secondary fuel will be calculated on generation corresponding to the Normative Annual Plant Availability factor i.e., 82.50% against the actual value of Plant availability factor.”

- 4.122 The Petitioner is required to compute the Interest on Working Capital on normative basis as per Regulations, however the Petitioner had claimed the same on actuals. Hence, the Commission has re-computed the Interest on Working Capital based on normative basis for FY 2019-20.
- 4.123 Further, the Petitioner has received an amount of Rs. 1.24 Crore as Delay Payment Surcharge from its Beneficiary in the FY 2019-20 based on the audited accounts. However, the Petitioner has not shown the same in the revenue for FY 2019-20. 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 calculation of corresponding receivables against Delay Payment Surcharge. The Commission has considered interest on Working Capital as 12.55% as per 1st proviso of Regulation 7.38 of JSERC (Terms and

Conditions for Determination of Generation Tariff) Regulations, 2015 i.e., 9.05% base rate plus 350 basis points.

Table 28: IoWC as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Coal Cost for 2 Months	13.62		19.03
Cost of Secondary Fuel Oil for 2 Months	0.36		0.53
O&M Expenses for 1 month	1.70		1.82
Maintenance Spares (20% of O&M)	4.09	-	4.38
Receivables for 2 months	27.70		32.83
Total Working Capital	47.43		58.59
Rate of Interest	12.80%		12.55%
IoWC without taking into account of DPS impact	6.07	2.82	7.35
Delay Payment Surcharge	-	-	1.24
Corresponding Receivables against DPS	-	-	8.29
Interest on Receivables against DPS	-	-	1.04
Net-Interest on Working Capital	6.07	2.82	8.39

Return on Equity

Petitioner's Submission

4.124 The Petitioner has claimed the Return on Equity at 15.50% in accordance with the JSERC Generation Tariff Regulations, 2015 on opening equity base of Rs. 99.58 Crore after deduction of equity component of Rs. 2.32 Crore corresponding to common cost of Unit-II as approved by the Commission vide true up Order dated October 01, 2019. The Petitioner has claimed the income tax separately.

Table 29: Return on Equity as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Opening Equity	101.90	99.58
Addition during the Year	-	-
Closing Equity	101.90	99.58
Average Equity	101.90	99.58
Rate of ROE	15.50%	15.50%
Return on Equity	15.79	15.43

Commission's Analysis



- 4.125 The Commission observed that the closing equity base as Rs. 90.31 Crore for FY 2018-19 as approved in its True up Order dated September 22, 2020 is not matching with the opening base of FY 2019-20 as projected by the Petitioner. The Commission vide its letter No. JSERC/Case (Tariff) no.: 7 & 8 of 2020/380 dated January 11, 2021 directed the Petitioner to justify the reason for such deviation and reconcile the same.
- 4.126 The Petitioner in its reply dated February 25, 2021 submitted that they have considered the equity base of Rs. 101.90 Crore as per approved MYT Order dated May 16, 2017 and deducted the common cost of Unit-II of Rs. 2.32 Crore as recognised by the Commission in its Order dated October 01, 2019.
- 4.127 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 once again. The Commission has considered the opening equity for FY 2019-20 equal to closing equity approved by the Commission for FY 2018-19 vide Order dated September 22, 2020.
- 4.128 In accordance with Clause 7.16, Clause 7.17 and Clause 7.18 of the JSERC Generation Tariff Regulations, 2015, the Commission has approved the rate of return on equity as 15.50% as shown below.

Table 30: Return on Equity as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Opening Equity	101.90	99.58	90.31
Addition during the Year	-	-	0.00
Closing Equity	101.90	99.58	90.31
Average Equity	101.90	99.58	90.31
Rate of ROE	15.50%	15.50%	15.50%
Return on Equity	15.79	15.43	14.00

Fixed Charge excluding Tax, ARR Publication & Fee Expenses

Petitioner's Submission

- 4.129 The summary of Fixed Charge excluding Income Tax, ARR Publication & Fee Expenses as submitted by the Petitioner before the Commission for FY 2019-20 is shown below.

Table 31: Fixed Charge excluding Tax, ARR Publication & Fee Expenses as submitted by the Petitioner (Rs. Crore)



Particulars	FY 2019-20	
	MYT Order	Petition
O&M Expenses including Water Charge	20.43	30.85
Depreciation	15.60	17.20
Interest on Loan	19.28	16.24
Return on Equity without Tax	19.84	15.43
Interest on Working Capital	6.07	2.82
Annual Fixed Cost excluding Tax, ARR Publication & Fee Expenses	81.21	82.55

Commission's Analysis

4.130 The Fixed Charge excluding Income Tax, ARR Publication & Fee Expenses as approved by the Commission for FY 2019-20 is shown below.

Table 32: Fixed Charge excluding Tax, ARR Publication & Fee Expenses as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
O&M Expenses	20.43	30.85	21.89
Depreciation	15.60	17.20	17.19
Interest on Loan	19.28	16.24	18.18
Return on Equity without Tax	19.84	15.43	14.00
Interest on Working Capital	6.07	2.82	8.39*
Fixed Cost excluding Tax, ARR Publication & Fee Expenses	81.21	82.55	79.65

* Including the expenses to finance the DPS while calculating the IoWC

Fixed Charge excluding Tax, ARR Publication & Fee Expenses after PAF Adjustment

Petitioner's Submission

4.131 The Petitioner submitted the Fixed Charge excluding Tax, ARR Publication & Fee Expenses after PAF adjustment as Rs. 80.59 Crore as shown below after considering normative PAF as 82.50% as shown below.

Table 33: Capacity Charges after PAF adjustment as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Fixed Cost excluding Tax, ARR Publication & Fee Expenses	81.21	82.55
Plant Availability Factor	-	80.54%
Fixed Cost excluding Tax, ARR Publication & Fee Expenses after PAF adjustment	81.21	80.59



Commission's Analysis

4.132 The Commission has calculated the Fixed Charge excluding Tax, ARR Publication & Fee Expenses after PAF adjustment considering the normative PAF of 85.00% as reasoned earlier in this Petition.

Table 34: Capacity Charges after PAF adjustment as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Fixed Cost excluding Tax, ARR Publication & Fee Expenses	81.21	82.55	79.65
Plant Availability Factor	-	80.54%	80.54%
Fixed Cost excluding Tax, ARR Publication & Fee Expenses after PAF adjustment	81.21	80.59	75.48

Income Tax

Petitioner's Submission

4.133 The Petitioner has claimed the Income Tax based on actual and requested the Commission for approval.

Table 35: Income Tax as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Income Tax	4.05	3.15

Commission's Analysis

4.134 The Commission scrutinized the ITR acknowledgement submitted by the Petitioner and after due prudence approves the Income Tax as tabulated below.

Table 36: Income Tax as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Income Tax	4.05	3.15	3.15

ARR Publication & Fee Expenses

Petitioner's Submission

4.135 The Petitioner submitted that they have incurred an expense of Rs. 0.25 Crore towards ARR Publication and Fee Expenses in FY 2019-20 and submitted the original receipt.

Table 37: ARR Publication & Fee Expenses as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
ARR Publication & Fee Expenses	-	0.25

Commission's Analysis

- 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. Hence, the Commission approves the ARR Publication & Fee Expenses after deducting the Rs. 0.019 Crore as mentioned above for FY 2019-20 as tabulated below.

Table 38: ARR Publication & Fee Expenses as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
ARR Publication & Fee Expenses	-	0.25	0.23

Fixed Charge

Petitioner's Submission

- 4.138 The summary of Fixed Charge including Income Tax, ARR Publication & Fee Expenses after PAF adjustment as submitted by the Petitioner for FY 2019-20 is shown below.

Table 39: Fixed Charge including Income Tax, ARR Publication & Fee Expenses after PAF adjustment as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20	
	MYT Order	Petition
Fixed Cost excluding Income Tax, ARR Publication & Fee Expenses after PAF adjustment	81.21	80.59
Income Tax	4.05	3.15
ARR Publication & Fee Expenses	-	0.25
Fixed Charges including Income Tax, ARR Publication & Fee Expenses after PAF adjustment	85.26	83.99

Commission's Analysis



4.139 The Commission approves the Annual Fixed Charges including Income Tax, ARR Publication & Fee Expenses after PAF adjustment for FY 2019-20 as shown below.

Table 40: Fixed Charge including Income Tax, ARR Publication & Fee Expenses after PAF adjustment as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20		
	MYT Order	Petition	Approved
Fixed Cost excluding Income Tax, ARR Publication & Fee Expenses after PAF adjustment	81.21	80.59	75.48
Income Tax	4.05	3.15	3.15
ARR Publication & Fee Expenses	-	0.25	0.23
Fixed Charges including Income Tax, ARR Publication & Fee Expenses after PAF adjustment	85.26	83.99	78.86

Recovery Mechanism

Commission's Analysis

4.140 The Government of Jharkhand and Inland Power Limited had executed the MoU to set up 126MW (+/- 20MW) power project in the State of Jharkhand. The relevant clause relate to sale of power is reproduced below:

“10.0 Sale of Power

10.1 The Government of Jharkhand or distribution licensees authorized by it will have the first right of claim on purchase up to 25% of power delivered to the system by the proposed power plant under terms of a Power Purchase Agreement to be mutually agreed on the basis of existing laws and regulations in force and the tariff for such power purchase will be determined by the appropriate Regulatory Commission.

10.2 Out of 25% under the first right of refusal of the State, the rate of 13% share will be as approved by JSERC and 12% share will be on variable cost by M/s. Inland Power Limited.”

4.141 In terms of the above, IPL will supply 12% of power at variable cost and rest 13% at the tariff approved by JSERC.

4.142 Subsequently to above, IPL had signed a PPA for 35MW with Jharkhand State Electricity Board (JSEB) on February 23, 2012 with tariff as mentioned below:

“The generation Tariff of Seller which is payable by the Buyer shall be as determined by Jharkhand State Electricity Regulatory Commission (JSERC). Out of 25% of 63MW i.e., 15.75MW, Board will purchase 12% of 63MW i.e., 7.56MW at variable cost only and balance at the tariff determined by Hon'ble JSERC.



“8.8 Tariff at Delivery Point

8.8.1 Subject to the provisions of this Agreement, Seller shall supply the Contracted Capacity and the Energy Output at the delivery Point on scheduled basis and Buyer shall pay to Seller for the Scheduled Energy as per joint reading done by both Parties. Tariff for such sale of Energy Output by Seller to Buyer at the Delivery Point shall be determined by JSERC”

11.14 Approval of the Agreement

This power purchase agreement is subject to approval of JSERC, with or without modification”

- 4.143 Later, on April 22, 2013, Supplementary Agreement was executed between IPL and JSEB for the remaining Capacity of 28WM from Unit-1. The supplementary PPA specified as follows:

“ WHEREAS the Buyer” Jharkhand State Electricity Board” and the Seller “Inland Power Ltd” are mutually agreed for purchase and sale of entire quantity of power to be generated from the 1st Unit of 63MW inclusive of quantity mentioned in earlier Principle PPA.

WHEREAS parties are mutually agreed that all the terms and condition will remain the same as on the Principle PPA.”

- 4.144 The Commission in its Order dated May 28, 2019 had approved the PPA as follows:

“25. Hence, it derives from the above observations that the tariff applicable for the supplementary PPA, which is for entire quantity of power to be generated from the 1st unit of 63 MW will be same as of the levelized tariff of the Principal PPA i.e., weighted average of 12% power procured at variable cost only and 13% power procured at the tariff approved by the JSERC.”

- 4.145 Inland Power Limited had filed an Appeal before the Hon’ble APTEL (Appeal no. 209 of 2019 & IA No. 1218 of 2019) against order dated May 28, 2019, in which the Hon’ble APTEL on July 04, 2022 passed an Order as:

13. In our considered view, the contractual terms of a third party i.e. AP&RL cannot determine or regulate the relationship between the parties herein. In our considered view, the approach of the State Commission has been wholly misdirected it having overlooked and glossed over Clause 10.5(a), quoted earlier, which leaves no room for doubt that the procuring agency is entitled to get only 12 % of the total power generated ‘at variable cost’, it being impermissible to translate it into 48% of the total power generated as is the result of the view taken by the State Commission. The view taken by the State Commission amounts to re-writing the contract between the parties, which is impermissible.



14. In the foregoing facts and circumstances, we are unable to uphold the impugned order to the extent the Commission has introduced formula of 'weighted average of 12% power procured'. The financial terms under the PPA/supplementary PPA shall be governed by the tariff orders already passed by the State Commission as referred to earlier.

15. We are informed at this stage by the counsel for the second respondent that certain subsequent orders of the State Commission would also have a bearing on the financial obligations, the same being presently subject matter of appeal nos. 125 of 2020 and 411 of 2019 which are pending on the file of this Tribunal. We clarify that this judgment will be without prejudice to the contentions of the parties vis-à-vis such subsequent orders of the State Commission.

- 4.146 The Commission, in view of the order by the Hon'ble APTEL, allows recovery of full fixed charge and entire variable charges corresponding to power supplied to JBVNL:

Table 41: Annual Revenue Requirement (ARR) as approved by the Commission (Rs. Crore)

Particulars	UoM	FY 2019-20		
		MYT Order	Petition	Approved
Fixed Cost after PAF adjustment	Cr	85.26	83.99	78.86
Energy Cost	Cr	-	121.47	107.02
Recoverable ARR	Cr	-	205.45	185.88
Energy Charge Rate (ECR)	Rs. /kWh	2.090	3.14	2.772

- 4.147 Furthermore, the Commission in the view of the Order by the Hon'ble APTEL dated July 04, 2022 need to allow the full recovery of the fixed charges for the FY 2016-17, FY 2017-18 and FY 2018-19. The details of impact on the ARR for the FY 2016-17, FY 2017-18 and FY 2019-20 due to approval of full fixed cost is provided in the below table. The total unrecovered amount will be adjusted in Revenue Gap/surplus for the FY 2019-20.

Table 42 Difference in ARR due to 100 % of fixed cost in Rs. Crore

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Fixed Cost (approved at 88%)	70.25	69.84	59.41
Fixed Cost (Updated)	79.83	79.36	67.51
Energy Cost	72.79	67.73	78.18
ARR at 88% fixed cost	143.04	137.57	137.59
ARR at 100% fixed cost	152.62	147.09	145.69
Amount to be Adjusted	9.58	9.52	8.10

Revenue

Petitioner's Submission

4.148 The Petitioner had submitted that the amount billed to JBVNL was Rs. 191.38 Crore which includes Capacity Charge and Energy Charges and Fuel Cost Adjustment bill. The Petitioner further stated additional revenue of Rs. 0.93 Crore from Fly Ash Brick plant.

Table 43: Revenue as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20
	Petition
Revenue from Sale of Power	191.38
Revenue from Fly Ash Brick Plant	0.93
Revenue from Operations	192.31

Commission's Analysis

4.149 The Commission observed that the Petitioner had not considered the income generated from Delay Payment Surcharge invoice generated to the Beneficiary. The Commission has also considered their income of Rs. 1.24 Crore in form of Delay Payment Surcharge while calculating the net revenue as the Commission has already considered the impact of working capital funding required to finance the Delay Payment Surcharge.

4.150 Further, the Commission observes that the Petitioner has claimed revenue from sale of Fly Ash Bricks after deduction of Rs. 0.30 Crore towards O&M Expenses of Brick Plant. However, the same is not substantiated by the audited accounts. Therefore, the Commission has not considered Rs. 0.30 Crore towards O&M Expenses of Brick Plant. Thus, the net Revenue from sale of fly ash bricks is Rs. 1.23 Crore (Sale of Fly Ash Bricks (Rs. 2.56 Crore) less Cost of Materials Consumed (Rs. 1.33 Crore)).

4.151 The Commission after due prudence check the auditor certificate approved the revenue for FY 2019-20 including Delay Payment Charge as tabulated below.

Table 44: Revenue as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20	
	Petition	Approved
Revenue from Sale of Power	191.38	191.38
Revenue from Delay Payment Surcharge	-	1.24
Revenue from Sale of Fly Ash Bricks	0.93	1.23
Revenue from Operations	192.31	193.84

Gap/ Surplus for FY 2019-20

Petitioner's Submission

4.152 The Petitioner had claimed the gap of Rs. 13.14 Crore for FY 2019-20 and requested the Commission to approve the same along with carrying cost of Rs. 1.65 Crore as shown below.

Table 45: Gap/(Surplus) as submitted by the Petitioner (Rs. Crore)

Particulars	FY 2019-20
	Petition
Fixed Charge	80.59
Energy Charge	121.47
Other Expenses	3.39
Net Annual Revenue Requirement	205.45
Revenue from Sale of Power	191.38
Revenue from Sale of Fly Ash Brick	0.93
Gap/(Surplus)	13.14
Interest Rate	12.55%
Carrying Cost	1.65
Gap including Carrying Cost	14.79

Commission's Analysis

4.153 The JSERC Generation Tariff Regulations, 2015, states that:

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

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

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

4.154 Based on the approved Annual Revenue Requirement (ARR) and revenue, the Commission has approved the Gap/(Surplus) for FY 2019-20 as shown below.

Table 46: Gap/(Surplus) as approved by the Commission (Rs. Crore)

Particulars	FY 2019-20
	Approved
Annual Revenue Requirement	185.88
Revenue from Operations	193.84
Gap/(Surplus)	(7.67)

4.155 The Commission has approved the Gap/(surplus) for FY 2019-20 along with adjustment in the view of the Order by the Hon'ble APTEL dated July 04, 2022 for the recovery of the fixed charges for the FY 2016-17, FY 2017-18 and FY 2018-19. The Gap/Surplus along with the carrying cost approved by the Commission is shown below.

Table 47: Gap/(Surplus) including Carrying Cost as approved by the Commission (Rs. Crore)

Particular	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
Opening Balance	0.00	0.09	(7.95)	(18.32)	7.12	31.92	31.92
Addition during the FY	0.09	(8.04)	(10.37)	(7.97)	0.00	0.00	0.00
Refunded to JBVNL	0.00	0.00	0.00	33.41	24.80	0.00	0.00
Closing Balance	0.09	(7.95)	(18.32)	7.12	31.92	31.92	0.00
Average Balance	0.05	(3.93)	(13.14)	(5.60)	19.52	31.92	15.96
Interest Rate	12.80%	12.60%	12.20%	12.55%	11.65%	10.50%	10.50%
Gap/Surplus for respective Financial Year	0.01	(0.50)	(1.60)	(0.70)	2.27	3.35	2.51

4.156 The Commission has carried out the True-up for FY 2019-20 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.

4.157 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 Petitioner and its Beneficiaries, the same need to be taken into account while final adjustment which shall be carried out mutually



A 6: ANNUAL PERFORMANCE REVIEW FOR FY 2020-21

- 6.1 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.
- 6.2 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.
- 6.3 The Petitioner, in the current Petition, has sought the Annual Performance Review (APR) for FY 2020-21 based on the actual operational performance till Septh 2020 and projected for the remaining months of FY 2020-21. The Petitioner submitted that the actual financial performance for FY 2020-21 will be submitted before the Commission along with True-up Petition for FY 2020-21.
- 6.4 The Commission has, however, decided not to carry out the APR for FY 2020-21 as considerable time has lapsed and the Petitioner has already filed truing-up Petition for FY 2020-21 based on an audited account. As the truing up petition is under active consideration of this Commission. The Commission, therefore, does not find any merit in carrying out APR for FY 2020-21.



A 7: STATUS OF EARLIER DIRECTIVES

- 7.1 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 September 22, 2020		
Development of a Fuel Procurement Plan		
<p>The Petitioner is directed to develop a fuel procurement plan & explore options with its suppliers in order to reduce the cost of coal.</p> <p>The petitioner is further directed to prioritize its primary fuel procurement from the least cost source. In addition to above, the Commission also directed the Petitioner to bring to the notice of the Commission any changes in fuel mix on quarterly basis and submit consolidated report along with Business Plan and MYT petition.</p>	<p>The Petitioner submitted that they have participated in bidding of coal under Shakti Scheme and secured coal. Further, the Petitioner had signed an agreement with CCL on January 19, 2019.</p> <p>The Petitioner added that they will be submit a fuel procurement plan highlighting the strategy for optimum supply chain costs considering availability and transportation elements along with MYT Petition.</p> <p>The Petitioner had submitted the quarterly reports for variation in fuel mix to Commission.</p>	<p>The Commission noted the compliance of the Petitioner.</p>
Enhancement of Brick Plant & Ash disposal details		
<p>The Commission directed the Petitioner to submit the report detailing the enhanced capacity of the Brick plant and expected revenue in the future along with the next petition. The petitioner is also directed to submit the actual ash generation and its disposal FY 2019-20 along with next petition.</p>	<p>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.</p> <p>The Petitioner has submitted the details of Ash generation and its disposal percentage for FY 2019-20 along with Petition.</p>	<p>The Commission noted the compliance of the Petitioner.</p>
Specific Fuel Consumptions		
<p>The Petitioner is directed to submit monthly details of start-ups taken after shutdown. The details should also include monthly quantity of secondary fuel consumed during plant start-up and flame support, if required.</p>	<p>The Petitioner has submitted the details of start-ups taken after shutdown and HSD consumed in FY 2019-20 along with the Petition.</p>	<p>The Commission noted the compliance of the Petitioner and directs the Petitioner to ensure the same in future also.</p>



Directives	Status	Views of the Commission
Use of LDO as Secondary Fuel		
<p>The Commission directed the Petitioner to carry out detailed study to accommodate LDO, all necessary details of works to be carried out along with cost Benefit analysis and rate reasonability in case any modification is required in the existing infrastructure. Any non-compliance in this regard will lead to curtailment of additional secondary fuel oil cost due to usage of HSD.</p>	<p>The Petitioner submitted that they are in the process of finalising the detail report for use of LDO in place of HSD. Presently, the Technical Consultant is finalizing the DPR outlining capital cost estimates, technical aspects, implementation plan including modalities for O&M and safe operation of the plant with LDO.</p> <p>The Petitioner further added that after finalisation and Boards Approval, the same will be submitted before the Commission for approval.</p>	<p>The Commission noted the compliance of the Petitioner and directs the Petitioner to submit the detail proposal before the Commission for approval within two months from the date of this Order.</p>



A 8: DIRECTIVES

- 8.1 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.
- 8.2 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.
- 8.3 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.

This order is signed and issued by the Jharkhand State Electricity Regulatory Commission on November 04, 2022.

Date: 04.11.2022

Place: Ranchi

**Sd/-
(Atul Kumar)
Member (Technical)**

**Sd/-
(Mahendra Prasad)
Member (Law)**



ANNEXURE

Annexure-1: List of participating members of the public in the Public Hearing

Sl. No.	Name	Address / Organisation if any
1	Vivek Ranjan	Ranchi
2	Rishi Nandan	G.M., Commercial, JBVNL
3	Arvind Kumar	ED (C&R), JBVNL
4	Anita Prasad	DGM (T&RM), JBVNL
5	Radha Krishna Tripathy	JBVNL
6	Gaurav	Doranda, Ranchi
7	Amit Kumar Chaudhary	101, A, Ratnawaly Apartment, Lalpur Chowk, Ranchi
8	Dr. Binnu Kumar	280, Magistrate Colony, Doranda, Ranchi
9	Sanjay Kumar Singh	Inland Power Ltd., Ashok Nagar, Ranchi
10	Anand Bardia	Inland Power Ltd., Ashok Nagar, Ranchi
11	Veebha Kumari	JEE, JBVNL
12	Sony Prasad	JEE, JBVNL
13	Rajesh Kumar	Ashok Nagar, Ranchi
14	Ortan Tirkey	Ashok Nagar, Ranchi