Jharkhand State Electricity Regulatory Commission

Order

on

approval of

True up of ARR for FY 2015-16

for

Inland Power Ltd. (IPL)

Ranchi

19 March 2018

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List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
ARR	Aggregate Revenue Requirement
COD	Commercial Operation Date
CFBC	Circulating Fluidized Bed Combustion
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoI	Government of India
JSERC	Jharkhand State Electricity Regulatory Commission
kCal	Kilocalorie
Kg	Kilogram
kWh	Kilowatt-hour
MAT	Minimum Alternative Tax
Ml	Millilitre
MT	Million Tonnes
MUs	Million Units
MW	Megawatt
NAPAF	Normative Annual Plant Availability Factor
O&M	Operations and Maintenance
PLF	Plant Load Factor
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
RoE	Return on Equity
Rs	Rupees
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SLM	Straight Line Method
UoM	Units of measurement

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BEFORE

Jharkhand State Electricity Regulatory Commission, Ranchi

Case No.: 06 of 2017

In the matter of:

Approval of
True up for FY 2015-16

In the matter:

Inland Power Limited,
3A Auckland Place, Suite No. 5A, 5th Floor, Kolkata - 700017

PRESENT

Hon'ble Dr. Arbind Prasad	**-**	**Chairperson**
Hon'ble Mr R. N. Singh	**-**	**Member (T)**

Order dated 19 March 2018

In this Petition, Inland Power Ltd. (hereinafter referred to as IPL) has prayed for approval of True up of ARR for FY 2015-16.

A1: 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 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 JSERC is discharging its functions as prescribed in Section 86 of the Act.

1.4 In accordance with provisions of the said Act, the JSERC discharges the following functions: -

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:

Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

(c) facilitate intra-state transmission and wheeling of electricity;

(d) issue 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 advises the State Government on all or any of the following matters, namely :-

(a) promotion of competition, efficiency and economy in activities of the electricity industry;

(b) promotion of investment in electricity industry;

(c) reorganisation and restructuring of electricity industry in the State;

(d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.

1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.

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

(a) ensure availability of electricity to consumers at reasonable and competitive rates;

(b) ensure financial viability of the sector and attract investments;

(c) promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;

(d) promote competition, efficiency in operations and improvement in quality of supply.

The Petitioner-Inland Power Limited (IPL)

1.8 Inland Power Limited (hereinafter referred to as "the Petitioner" or "IPL") is a company incorporated under the provisions of the Indian Companies Act, 1956.

1.9 IPL was originally incorporated on June 22, 1993 as a Private Limited Company and was subsequently converted to a Public Limited Company on April 03, 2008.

1.10 IPL signed a Memorandum of Understanding (hereinafter referred to as "the MoU") with Government of Jharkhand to develop a 126 MW (± 20%) (2x 63 MW) power project in October 2011.

1.11 Accordingly, IPL is setting up a 2x63 MW thermal power plant based on CFBC technology in two stages in Gola, District Ramgarh, Jharkhand. The commercial operation date of the first unit of 63 MW is May 21, 2014.

1.12 As per the provisions of the MOU, 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. Further, the MoU stipulates that out of the 25% under first right of refusal to the State, the rate of 12% share will be on variable cost.

1.13 Pursuant to the MoU signed between Government of Jharkhand and IPL, IPL signed a Power Purchase Agreement (hereinafter also referred to as "the PPA") with Jharkhand State Electricity Board (now Jharkhand Urja Vikas Nigam Limited or "JUVNL") on February 23, 2012 for supplying 35 MW of 63 MW from Stage 1 of the Project on long term basis. Subsequently, IPL signed a supplementary PPA with JSEB (now JUVNL) on April 22, 2013 for purchase and sale of entire quantity of power to be generated from Unit 1 of 63 MW inclusive of quantity mentioned in earlier Principal PPA.

1.14 JSERC on May 27, 2014 issued a Tariff Order provisionally approving the tariff for the years FY 2014-15 and FY 2015-16 respectively based on the Petition of Inland Power Limited.

1.15 Subsequently, JSERC on May 16, 2017 issued a Tariff Order on approval of Capital Cost, True Up of ARR for FY 2014-15 and Annual Performance Review for FY 2015-16 and ARR and Tariff Determination for the period FY 2016-17 to FY 2020-21 for Inland Power Ltd. (IPL)

The Petitioner's Prayers

1.16 The Petitioner in its tariff petition has prayed before the Commission the following:

a) To accept the petition for approval of True-up of FY 2015-16

b) Condone any inadvertent omissions/ errors/ rounding off differences/ shortcomings and permit IPL to add/ change/ modify this filing and make further submission as may be at a future date; and

c) Pass such further and other orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

1.17 The Petitioner filed for the truing up for FY 2015-16 based on the actual information and audited accounts (including the requisite auditor certifications).

Scope of the Present order

1.18 The Commission in this order has conducted the truing up for FY 2015-16 after thorough scrutiny of the information submitted by the Petitioner.

1.19 While conducting the exercise, the Commission has taken into consideration the following

(a) Materials placed on record by the Petitioner

(b) Provisions of the Electricity Act, 2003,

(c) Provisions of the National Electricity Policy,

(d) Provisions of the National Tariff Policy,

(e) Principles and provisions laid down in the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2010 (hereinafter referred to as 'JSERC Generation Tariff Regulations, 2010').

1.20 Accordingly, the Commission has scrutinized the Petitions in detail and hereby issues the Order on Approval of True-up for the FY 2015-16 for Inland Power Limited.

A2: PROCEDURAL HISTORY

Background

2.1 The Petitioner started construction of the project on December 20, 2011 post the signing of the MoU with Government of Jharkhand. The commercial operation of its Stage I of 63 MW was achieved on May 21, 2014.

2.2 The JSERC Generation Tariff Regulations 2010 require the Petitioner to file before the Commission a Business Plan and MYT application for the Control Period.

2.3 The Petitioner filed a petition with the Commission for approval of the tariff for the MYT control period (FY 2013-14 to FY 2015-16) on July 17, 2013.

2.4 JSERC on May 27, 2014 issued a Tariff Order provisionally approving the tariff for the years FY 2014-15 and FY 2015-16 respectively.

2.5 Subsequently, JSERC on May 16, 2017 issued a Tariff Order on Approval of Capital cost of Unit-I (63 MW), True-up of the ARR for the year FY 2014-15, Annual Performance Review for the year FY 2015-16 and Tariff for the MYT control period FY 2016-17 to FY 2020-21.

Filing of the Petition by the Petitioner

2.6 The Petitioner in its tariff petition has prayed before the Commission the following:

d) To accept the petition for approval of True-up of FY 2015-16

e) Condone any inadvertent omissions/ errors/ rounding off differences/ shortcomings and permit IPL to add/ change/ modify this filing and make further submission as may be at a future date; and

f) Pass such further and other orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

2.7 The Petitioner filed for the truing up for FY 2015-16 based on the actual information and audited accounts (including the requisite auditor certifications).

Information gaps in the Petition

2.8 In accordance with Section 64(3) of the Act, the State Electricity Regulatory Commission, within one hundred and twenty days of the filing of application for determination of tariff, is required to either accept it and issue a Tariff Order or reject the application for reasons to be recorded in writing. The Commission accepted the application submitted by the Petitioner for determination of tariff. As part of tariff determination exercise for the Control Periods, several deficiencies/ information gaps were observed in the tariff petition submitted by the Petitioner.

2.9 Those information gaps were pointed out and communicated to the Petitioner vide letter no.

(a) JSERC/ Case (Tariff) No. 06 of 2017/301 dated. 28.07.2017

(b) JSERC/ Case (Tariff) No. 06 of 2017/418 dated. 08.09.2017

(c) JSERC/ Case (Tariff) No. 06 of 2017/514 dated. 06.11.2017

2.10 The Petitioner subsequently submitted its response to the aforesaid letters and provided the requisite additional data/ information vide following letters:

(a) Letter dated 23.08.2017

(b) Letter dated 18.09.2017

(c) Letter dated 11.11.2017.

2.11 The Commission scrutinized the additional data/information and upon its validation, has passed this Order on the petition filed by the Petitioner.

Inviting Public Comments/Suggestions

2.12 The Commission directed the Petitioner to make available copies of the petition to the members of general public on request, and also issue a public notice inviting comments/ suggestions on the petition for Approval of True-up for FY 2015-16.

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 on which the public notice by IPL appeared

Sl. No.	Newspaper	Date of Publication
1.	Hindustan	29.11.2017 & 30.11.2017
2.	The Pioneer	29.11.2017 & 30.11.2017

Sl. No.	Newspaper	Date of Publication
3.	Sanmarg	29.11.2017 & 30.11.2017
4.	Morning India	29.11.2017 & 30.11.2017

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 where the notice was issued by the Commission are as under:

Table 2: List of newspapers and dates on which the public notice by JSERC appeared

Sl. No.	Newspaper	Date of Publication
1.	Prabhat Khabar	12.01.2018
2.	Dainik Bhaskar	12.01.2018
3.	Hindustan Times	12.01.2018
4.	Times of India	12.01.2018

Submission of Comments/Suggestions and Conduct of Public Hearing

2.15 A public hearing was held on January 24, 2018 at Ranchi. The list of participants is attached in Annexure-1 of the present order.

A3: SUMMARY OF THE PETITION FOR APPROVAL OF TRUE-UP FOR FY 2015-16

Overview of the Thermal Station

3.1 The Petitioner has set up a 63MW Circulating Fluidized Bed Combustion (CFBC) based power plant out of the planned 2 x 63 MW. The plant in Stage –I is the subject of tariff determination in the Petition filed by the Petitioner.

Table 3: Overview of the thermal station

S. No.	Unit	Installed Capacity	Status of Operation	Commercial date of Operation
1.	1	63 MW	Operational	May 21, 2014

True-up for FY 2015-16

3.2 In its petition the Petitioner has requested for the Truing up for the FY 2015-16 based on the actual information for the period from April 2015 to March 2016. The energy charge and fixed charge submitted by the Petitioner for FY 2015-16 are shown in the table below:

Table 4: Operational parameters, fixed cost and energy charges for FY 2015-16

Particulars	UoM	Actuals FY 2015-16 Submitted
Operational parameters		
Capacity	MW	63.00
Plant Load Factor	%	87.80%
Availability	%	91.42%
Gross Generation	MUs	484.55
Auxiliary Consumption	%	11.26%
Auxiliary Consumption	MUs	54.57
Net Generation	MUs	429.98
Weighted Average GCV of primary fuel	kCal/kg	2515.58
Station Heat Rate	kCal/kWh	2931
Calorific value of secondary fuel	kCal/litre	10000
Primary fuel consumption	MT	562953.70
Secondary oil consumption	kL	416.16
Annual cost of fuel per ton	Rs./Ton	1755.76
Depreciation	Rs. Cr.	15.84

Particulars	UoM	Actuals FY 2015-16 Submitted
Interest on Loan	Rs. Cr.	33.28*
Return on Equity	Rs. Cr.	14.48*
Interest on working Capital	Rs. Cr.	7.52*
O&M Expenses	Rs. Cr.	24.96
Cost of Secondary fuel oil	Rs. Cr.	2.07
Annual Fixed Cost	Rs. Cr.	**98.15**
Annual Fixed cost after PLF/PAF adjustment	Rs. Cr.	**108.90***
Income Tax Paid	Rs. Cr	1.10
Total Fixed Cost	Rs. Cr	**110.00***
Total Variable Cost	Rs. Cr.	**97.73***
Annual Revenue Requirement	Rs. Cr.	**207.73***

** As per revised submission by the Petitioner*

A4: PUBLIC CONSULTATION PROCESS

4.1 The public hearing was held on January 24, 2018 at Ranchi. The list of participants is attached in Annexure -1 of the present order.

4.2 The comments and suggestion of the members of the public along with the response thereon of the Petitioner and the views of the Commission are detailed hereunder:

Annual Fixed Charges

Public Comments/Suggestions

4.3 The Objector submitted that the Annual Fixed Cost of Inland Power has increased from Rs.84.73 Cr as approved by the Hon'ble Commission to Rs. 108.29 Cr in actual. Also, the Interest on loan has been significantly increased from Rs. 26.30 Cr as approved to Rs. 32.26 Cr in actual.

Petitioner's response

4.4 The Petitioner submitted that the annual fixed cost in FY 2015-16 have increased due to achievement of high PAF of 91.42% which required high O&M cost due to change in fuel mix and GCV.

4.5 The Petitioner further submitted that Depreciation, Return on equity, Interest on Loan have been claimed as per JSERC tariff regulations, 2010.

4.6 The Petitioner further submitted that dues of Rs.124.84 crore to be paid by JBVNL are pending as on 31st March, 2016, but, the Petitioner has been able to sustain only due to reduction in interest rates and the Interest rate for long term loan has been claimed as per the actual interest amount paid during the FY 2015-16 as per JSERC Regulations.

Commission's views

4.7 The Commission has taken note of the Objectors comments. The Commission while approving the fixed charges of IPL for the FY 2015-16 has made a detailed analysis and prudence check and accordingly approved the fixed charges as per JSERC Generation Tariff Regulations, 2010. The detailed analysis done by the Commission can be found in Section 5 of this Order.

O&M expenses

Public Comments/Suggestions

4.8 The Objector pointed out that the O&M Cost of Inland Power was approved at Rs.16.01 Cr for FY 2015-16 by the Hon'ble Commission against which the actual O&M cost submitted by Inland Power is Rs. 25.12 Cr. The Objector submitted that IPL is a new power plant and therefore this increase in O&M cost cannot be justified and prayed the Hon'ble Commission to disallow this increase in O&M cost submitted by Petitioner.

Petitioner's response

4.9 The Petitioner submitted that the increase in O&M cost is due to achievement of high PAF of 91.42% as against 75% PLF as per MYT Order dated 27.05.2014 which required high maintenance and manpower expenditure.

4.10 The Petitioner further submitted that the quantity of ash being produced has significantly increased due to change in fuel mix and also the average GCV has decreased substantially, resulting in significant increase in Ash being produced and consequent increase in Ash handling charges resulting in an overall increase in O&M charges. Further, the Petitioner had provided a

Commission's views

4.11 The Commission has taken note of the Objectors comments. The Commission has approved the O&M expenses as per JSERC Generation Tariff Regulations, 2010 as specified in paragraph 5.68 of this order.

Water Charges

Public Comments/Suggestions

4.12 The Objector submitted that the water charges are being paid by IPL to the concerned State Authorities for use of water in the power plant. However, this increase in water charges are pertinent to the handling and disposal of increased quantity of ash produced due to change in fuel mix resulting into increase in O&M charges of the plant and prayed the Hon'ble Commission to disallow this increase in water charges being submitted by Petitioner.

Petitioner's response

4.13 The Petitioner submitted that the water charges are being claimed separate from O&M charges as these are uncontrollable and are determined by the state agencies and over which the generator has no direct control.

4.14 The Petitioner further submitted that there has been no increase in usage of water due to change in fuel mix and the provision of claiming water charges as separate from O&M charges has been provided in the regulation 7.46 of the JSERC tariff regulations, 2016 and regulations 29(2) of the CERC tariff regulations, 2014.

Commission's views

4.15 The Commission has dealt with the issue in paragraph 5.67 of the order.

Gross station Heat rate and Auxiliary consumption

Public Comments/Suggestions

4.16 JBVNL objected that the higher claim of SHR and Auxiliary consumption should not be allowed by the Commission as it will result in increase in tariff for the end consumers.

Petitioner's response

4.17 The Petitioner submitted that the auxiliary consumption has increased beyond the approved numbers due to high ash production, transmission loss etc and submitted detailed reasons for the claims made with respect to high auxiliary consumption.

4.18 With respect to Gross SHR, the Petitioner submitted that submit that the actual SHR for FY 2015-16 has only slightly deviated from approved value of 2902 Kcal/kWh to actual of 2931 Kcal/kWh.

Commission's views

4.19 The Commission has dealt with the issue of Gross station Heat rate and Auxiliary Consumption in paragraph **Error! Reference source not found.** and paragraph 5.14 of t his Order respectively.

Fuel Procurement Plan

Public Comments/Suggestions

4.20 The Objector pointed out that the Petitioner in its Petition admitted that it doesn't have any fuel linkage and is procuring fuel from various sources like E -Auction CIL coal, Coal from iSMDC, Coal from forward auctions, Washery Rejects of CCL, Rejects from Tata, Dolochar from the open market, Coal from Open market etc. Even after so many years, the Petitioner has not signed any FSA with fuel suppliers and has kept on procuring fuel from costlier sources as mentioned above, resulting into very high per unit fuel cost.

4.21 The Objector further submitted that as per Jharkhand Energy Policy, 2012 "State is intended to provide & incentivize charred Coal (Waste of Coal Washeries) based power plant". IPL has been using coal washery rejects as a component of fuel mix to generate power resulting into higher fuel cost and JBVNL and erstwhile JSEB has been purchasing power from IPL

4.22 Hence, the Objector prayed the Hon'ble Commission to advise the State Government under Section 86 (2) to provide incentive either to Inland Power Ltd. for generating energy generated from rejects or to JBVNL for purchasing energy generated from rejects so that the burden of consumers due to higher cost of power purchase from Inland's Plant is reduced.

Petitioner's response

4.23 The Petitioner submitted that it has fuel supply agreement with Tata Steel, copy of which was submitted as part of the last petition. IPL is procuring fuel from e-auction by CIL as per the government's initiative of providing coal to power plants without fuel supply agreements.

4.24 The Petitioner further submitted that it has also participated in Central Government's SHAKTI scheme for coal procurement by providing a discount on tariff which would be passed on to JBVNL. The Petitioner submitted that it expects 20% of the coal requirements from mid of 2018 under this scheme at CIL notified price which would further reduce the costs of generation.

4.25 The Petitioner submitted that it welcomes this suggestion of JBVNL and requested JBVNL to approach the Hon'ble Govt. of Jharkhand for providing incentive to JBVNL for purchase of electricity from CFBC technology based units.

Commission’s views

4.26 The Commission in its earlier Order had already directed the Petitioner to develop a fuel procurement plan. The Petitioner now submitted that it has fuel supply agreement with Tata Steel, and is procuring fuel from e-auction by CIL as per the government’s initiative of providing coal to power plants without fuel supply agreements.

4.27 The Commission notes with concern that drastic variation in fuel mix from what has been approved earlier has affected the GCV of the primary fuel which in turn has resulted in steep increase in the O&M expenses of the Petitioner.

4.28 The Commission once again directs the Petitioner to develop a fuel procurement plan and explore options with its suppliers in order to reduce the cost of coal. The Petitioner should prioritize the procurement of primary fuel from the least cost source.

4.29 With respect to providing incentive, the Commission is of the view that the Objector and respondent should approach the Commission separately since it is not related to the current True-up Petition.

A5: TRUING UP FOR FY 2015-16

5.1 The Petitioner in its earlier Petition had prayed for determination of tariff for the period FY 2013-14 to FY 2015-16. The Commission after due scrutiny had approved a provisional tariff for FY 2014-15 to FY 2015-16 in its MYT Order dated May 27, 2014 based on submission of the anticipated date of COD of the plant as May 2014.

5.2 Subsequently, the Commission on May 16, 2017 issued a Tariff Order on Approval of Capital cost of Unit-I (63 MW), True-up of the ARR for the year FY 2014-15, Annual Performance Review for the year FY 2015-16 and Tariff for the MYT control period FY 2016-17 to FY 2020-21.

5.3 The Petitioner has now sought approval from the Commission for True-up of the ARR for FY 2015-16.

5.4 The Commission has analysed the submission of the Petitioner with respect to the ARR for FY 2015-16, and has undertaken the true up exercise of ARR components. The component-wise description of the Petitioner's submission and the Commission's analysis thereof is provided hereunder:

Operational Performance

Plant Availability

Petitioner's submission

5.5 The Petitioner submitted the actual plant availability of Unit 1 at 91.42% during FY 2015-16. The Petitioner in support to his submission, has submitted SLDC plant availability certificate for the FY 2015-16.

Commission's Analysis

5.6 The Commission in its provisional MYT Order dated May 27, 2014 had approved the Normative Annual Plant Availability Factor (NAPAF) at 75.00%.

5.7 The Commission had also specified that the approved norms may be reviewed at the time of true-up after considering the actual performance of the plant. The relevant extracts of the Order dated May 27, 2014 has been reproduced below:

"7.14 Thus, in the absence of CFBC technology specific NAPAF norms in the JSERC Generation Tariff Regulations 2010 and after considering the recommendations of the CEA, the technology specific norms specified by the CERC along with the clarification made by APTEL in Appeal No. 182 of 2010, the Commission finds merit in considering the Petitioner's submission regarding NAPAF norms."

"7.16 The provisionally approved norms for NAPAF may be reviewed at the time of true up of FY 2014-15 and FY 2015-16 after considering the actual performance of Unit-1 of the generation station."

5.8 Also as per Clause 8.6 of the Generation Tariff Regulations, 2010

"8.6 The norms of operation for generating stations other than existing stations shall be as under:

(a) Normative Annual Plant Availability Factor (NAPAF): All thermal generating stations, NAPAF shall be 85%."

5.9 Based on the above, the Commission now finds it appropriate to review the existing norm pertaining to normative plant availability of Unit-1 from 75% to 85%.

5.10 The Commission after scrutinising the plant availability certificate of SLDC, approves the availability of Unit 1 at 91.42% for the FY 2015-16.

Auxiliary Consumption

Petitioner's submission

5.11 The Petitioner submitted that the actual auxiliary consumption for the year is 11.26% as against the approved auxiliary consumption of 10.50%. The reasons cited by the Petitioner for the increase in auxiliary consumption pertains to high ash production, transmission losses, etc. The Petitioner has considered the transmission loss from the ex-bus to the delivery point at the sub-station in auxiliary consumption.

5.12 The Petitioner also submitted the recommendations of CEA report titled Recommendations on Operation Norms for Thermal Power Stations for Tariff Period beginning April 01, 2009 to substantiate the claim for approval of higher auxiliary consumption.

"14.6 The CFBC boilers involve higher auxiliary consumption due to higher pressure drops and consequently higher fan power as compared to the pulverized fuel fired units. Also, these units involve additional power consumption for lime stone handling, crushing and firing for control of SOx emissions. However, CFBC units do not require pulverizers as the fuel is fed in crushed form and thus there is a corresponding saving in the power consumption in pulverizers as compared to the pulverized fuel technology.

14.7 NLC have asked for an additional AEC of 1% on account of CFBC boiler technology and additional 0.5% on account of uncertainty etc that may be faced as the CFBC units are being implemented by them for the first time and past operation data is not available. Thus they have asked for an AEC of 11% for TPS Expn II and 12% for Barsingsar TPS on account of additional AEC of 0.67% for cooling water pumping from a distant source (60 kms).

An assessment of incremental auxiliary consumption for CFBC units has been made and it is found that the CFBC units entail higher auxiliary energy consumption of 0.7% to 1%. However, in the present case of NLC stations, the limestone is being procured in the powder form and consequently the power consumption for limestone crushing is eliminated and thus the incremental consumption should be on the lower side. <u>Thus, an additional auxiliary energy consumption of 1.0% may be allowed to NLC stations with CFBC boilers.</u>"

5.13 The Petitioner further submitted that SERCs in other states had allowed higher auxiliary consumptions for plants operating on CFBC technology.

Commission's Analysis

5.14 The Commission while dealing with the matter of approving the auxiliary consumption in its provisional MYT order dated May 27, 2014, 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%.

5.15 The Commission has now scrutinized the Detailed Project Report (DPR) of the plant submitted by the Petitioner, according to which, the auxiliary consumption of the plant is 10.00%.

5.16 Accordingly, the Commission approves auxiliary consumption of 10.00% for FY 2015-16.

Generation

Petitioner's submission

5.17 The Petitioner submitted that the actual gross generation of Unit 1 of the plant was 484.55 MU for FY 2015-16.

Commission's Analysis

5.18 The Commission in its MYT Order dated May 27, 2014 had approved Gross generation at 413.91 MU for Unit 1 after considering PLF at 75%.

5.19 The Petitioner in the present Petitioner has submitted the actual PLF of Unit-1 for FY 2015-16 at 87.80%. Hence, for the purpose of truing up for FY 2015-16, the Commission has considered the actual PLF and has accordingly approved the gross generation at 484.55 MU for the FY 2015-16.

Station Heat Rate

Petitioner's submission

5.20 The Petitioner submitted that the actual Station Heat Rate (SHR) during FY 2015-16 was 2931 kCal/kWh.

5.21 The Petitioner submitted that the deviation was due to drastic change in the fuel mix of the plant which resulted in the deterioration of average GCV.

5.22 The Petitioner further submitted that the availability of only low GCV fuel is uncontrollable in nature and requested the Hon'ble Commission to approve Station heat rate as per actuals.

Commission's Analysis

5.23 For the true-up of the year FY 2015-16, the Commission has verified the DPR of the plant submitted by the Petitioner with earlier Petitions. In the DPR, the Station Heat Rate of Unit-1 has been submitted as 2765 kCal/kWh.

5.24 Accordingly, the Commission now approves the same as 2765 kCal/kWh for FY 2015-16.

Fuel Cost Parameters

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

Petitioner's submission

5.25 The Petitioner submitted that Inland Power Ltd. doesn't have any fuel linkage due to which fuel was procured from various sources as mentioned below:

i. e-Auction of CIL coal

ii. Coal from JSMDC

iii. Coal from forward auctions

iv. Washery rejects of CCL

v. Rejects from Tata

vi. Dolochar from the open market

vii. Coal from open market

5.26 The Petitioner submitted that depending on the availability of coal input, the blending ratio of coal, dolochar and coal rejects has significantly deviated from the norms approved by the Commission. The details as submitted by the Petitioner is given in the following table:

Table 5: Coal mix and GCV of fuel as submitted by Petitioner

Particulars	FY 2015-16	
	Approved in MYT	Submitted by IPL
Blending ratio (%) Coal – Dolochar - Rejects	70 : 0 : 30	52 : 27 : 21
GCV of Coal (kCal/kg)	3200.00	3570.26
GCV of Coal Reject (kCal/kg)	-	1889.92
GCV of Dolochar (kCal/kg)	1500.00	975.37

Commission's Analysis

5.27 The Commission has observed that there has been significant deviation in the blending ratio, which has resulted in lowering of the overall GCV, leading to more consumption of primary fuel for the plant than what was approved. The Petitioner has mentioned scarcity of fuel and higher landed coal cost as the reason behind the change in blending mix of primary fuel.

5.28 The Commission in its Tariff Order dated May 16, 2017 had directed the Petitioner to prioritize the procurement of primary fuel from the least cost source. The Commission reiterates that the Petitioner should develop a fuel procurement plan so as to ensure that the primary fuel as per the approved blending ratio is procured. The Petitioner should also take up the issue with the fuel suppliers to address the issue of fuel scarcity.

5.29 For the purpose of truing-up, the Commission has considered the submissions of the Petitioner including supporting documents certified by statutory auditors. The Commission computed the GCV on "as fired" for each type of primary fuel by considering the actual GCV for FY 2015-16 after scrutinizing the actual monthly GCV submitted by the Petitioner duly certified by auditor.

5.30 The following tables summarize the weighted average GCV as submitted by the Petitioner and approved by the Commission and the Coal Mix submitted and approved by the Commission for Unit 1 of the station:

Table 6: Weighted average GCV submitted by Petitioner and as approved by the Commission

Particulars	Coal Mix (%)			GCV(kCal/ kg)		
	Approved in MYT	Submitted by IPL	Approved in True up	Approved in MYT	Submitted by IPL	Approved in True up
Coal	70.00	51.91	51.91	3200.00	3570.26	3570.26
Coal rejects	0.00	21.13	21.13	0.00	1889.92	1889.92
Dolochar	30.00	26.96	26.96	1500.00	975.37	975.37

Transit Loss

Petitioner's submission

5.31 The Petitioner submitted that the price of primary fuel is inclusive of applicable transit loss.

Commission's Analysis

5.32 The Commission in the MYT order dated May 27, 2014 had approved a transit loss at 0.8% for Unit 1 for FY 2015-16 in accordance with the norms specified in the JSERC Generation Tariff Regulation, 2010. The relevant extracts of the regulations has been reproduced below

"8.19 ……..

For the purpose of computing energy charges, landed cost of coal shall be arrived at after considering normative transit and handling loss of 0.8% on the quantity of coal dispatched by the coal supplier in case of non-pit-head generating stations and 0.2% on the quantity of coal dispatched by the coal supplier in case of pit-head generating stations."

5.33 The Commission in its earlier Order dated May 17, 2017 had directed the Petitioner to implement processes to record and maintain data on fuel source wise transit loss on actual basis. The relevant excerpts of the Order dated May 17, 2017 has been reproduced below:

"Transit loss

11.3 The Commission directs the Petitioner to immediately implement processes to record and maintain data on fuel source wise transit loss on actual basis and supply the same to the Commission along with the next tariff petition. The Petitioner is required to comply with the directive ***failing which the Commission may disallow a portion of the variable costs incurred by the Petitioner****."*

[Emphasis Added]

5.34 The Petitioner however submitted that the fuel wise landed price is inclusive of Normative transit loss of 0.8%.

5.35 The Commission is of the view that the Petitioner has not taken proper cognizance of the directives. In view of the same and in line with the above directive, the Commission has disallowed the transit loss and has accordingly deducted 0.8% from the landed cost of coal as submitted by the Petitioner for the FY 2015-16 while approving the weighted average landed power purchase cost of coal.

5.36 The Commission once again directs the Petitioner to immediately implement processes to record and maintain data on fuel source wise transit loss on actual basis and supply the same to the Commission along with the next tariff petition

Landed cost of Coal

Petitioner's submission

5.37 The Petitioner has submitted the landed cost of Coal at Rs 2742.69 per ton , Coal Rejects at Rs. 916.31 per Ton and Dolochar at Rs. 439.96 per Ton for Unit 1 of the plant for the FY 2015-16.

5.38 The Petitioner submitted that the price of fuel considered is inclusive of transit loss.

Commission's Analysis

5.39 As per clause 8.19 of the JSERC Generation Tariff Regulations, 2010

"8.19 The landed cost of coal shall include:

(a) Base cost of coal;

(b) Royalty;

(c) Taxes and duties;

(d) Transport cost by rail / ocean / road / pipeline or any other means; and

(e) Clean energy cess as per Ministry of Coal, Govt. of India Notification.

…….

5.40 The Petitioner in its original submission has provided month wise coal procurement and rate of coal (in Rs/MT) for each month of the FY 2015-16 duly certified by auditor.

5.41 The Commission during the process of validation found that there was a mismatch in the rate of Coal (Rs/MT) as submitted by the Petitioner in its Tariff filing formats and as per the CA certificate provided. The Commission brought this to the notice of the Petitioner vide its Letter no. JSERC/Case (Tariff) No.06 of 2017/514 dated. November 06, 2017.

5.42 The Petitioner vide its reply submitted that the rate of primary fuel of Rs. 1795.70/MT as submitted in the Auditors certificate for month wise landed price of the primary fuel (Annexure-9 (a) of the original petition) is for 'procurement' of primary fuel for FY 2015-16.

5.43 The Petitioner further submitted that there has been an inadvertent error in considering the prices for coal and coal rejects in its earlier submission and re-submitted the data in its reply to the discrepancy note.

5.44 The Petitioner in its revised submission has considered the rate of primary fuel of Rs. 1735.94/MT on 'consumption' basis of primary fuel for FY 2015-16.The Petitioner in support to his claim made, provided an auditors certificate for consumption of primary fuel for FY 2015-16.

5.45 The Commission after due prudence check of the submissions and after deduction of the transit loss after highlighted in the previous section, approves the landed cost of coal. The details are given in the table below:

Table 7: Landed cost of coal as approved by the Commission (Rs./MT)

Particulars	Weighted Average Landed Price of the coal (Rs./ ton)		
	Approved in MYT order	Submitted by IPL	Approved in True up
Coal	2100.00	2742.69	2742.68
Coal rejects	-	916.31	916.39
Dolochar	750.00	439.96	439.96
Transit loss	0.8%		
Weighted average landed cost	1708.56	1735.94	1722.05*

**after disallowing transit loss of 0.8%*

Energy Charge Rate (ECR)

Petitioner's submission

5.46 The Petitioner has submitted the energy charge rate for FY 2015-16 at Rs. 2.273 per Kwh.

Commission's Analysis

5.47 The formula for calculation of energy charge and energy charge rate (ECR) payable to a Generating Company is specified in Regulation 8.17 and 8.18 of the Generation Tariff Regulation, 2010 as quoted below:

"8.17 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.}

8.18 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 x CVSF) x LPPF x 100/ {CVPF x (100 – AUX)}

Where, AUX - Normative auxiliary energy consumption in percentage

CVPF - Gross calorific value of primary fuel as fired, in KCal per kg, per litre or per standard cubic metre, as applicable.

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.

LPPF - Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month.

SFC - Specific fuel oil consumption, in ml per kWh".

5.48 Accordingly, the Commission has calculated the ECR to be charged by the Petitioner as per the formula specified in the JSERC Generation Tariff Regulations, 2010. The table below details the ECR and Fuel Cost for Unit 1 for truing up of FY 2015-16 as submitted by the Petitioner and as approved by the Commission.

Table 8: Energy Charge Rate (ECR) as approved by the Commission

Parameters	UoM	Approved in MYT order	Submitted by IPL	Approved in True up
Gross Generation	MU	413.91	484.55	484.55
Auxiliary Consumption	%	10.50%	11.26%	10.00%
Heat Rate	kCal/kWh	2902	2931	2765
Specific Oil Consumption	ml/kWh	1.00	0.86	0.84
Calorific Value of Oil	kCal/l	10000	10000	10000
Landed price of Primary fuel	Rs/Ton	1708.56	1735.94	1722.05
Calorific value of Primary fuel	kCal/kg	2690	2515.58	2515.58
Energy Charge Rate	Rs/kWh	**2.05**	**2.273**	**2.097**
Fuel Cost	Rs Cr	**76.02**	**97.73**	**91.44**

Determination of Fixed cost

Additional Capitalization

Petitioner's submission

5.49 The Petitioner submitted that it had incurred additional capitalization of Rs. 1.91 Cr after CoD.

5.50 The Petitioner further submitted that the works carried out and claimed under additional capitalization were works deferred for execution due to paucity of funds and are funded by unsecured loans. The details of the additional capitalization during FY 2015-16 are given in the following table:

Table 9: Details of the Additional Capitalization submitted by the Petitioner (in Rs Cr)

Particulars	Unit	FY 2015-16
Coal Handling Plant	Rs. Cr	0.216
Ash Handling Plant	Rs. Cr	0.935
DM Plant	Rs. Cr	0.006
Brick Plant	Rs. Cr	0.017
Chimney	Rs. Cr	0.085
JCB & Hydra	Rs. Cr	0.217
EOT Crane	Rs. Cr	0.419
Office Equipment		
Air Conditioning	Rs. Cr	0.002
Computer	Rs. Cr	0.008
Water Cooler	Rs. Cr	0.004
Mobile & Communication System	Rs. Cr	0.005
Total	Rs. Cr	**1.914**

Commission's Analysis

5.51 The Commission has outlined the provisions for approval of any additional capitalization, for a generating station in Regulation 7.5 and 7.6 of the JSERC Generation Tariff Regulation, 2010.

5.52 The relevant clauses are outlined below:

Additional Capitalisation

"7.5 The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Undischarged liabilities;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, subject to the provisions under clause 7.3,7.4 of these Regulations;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in law.

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

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

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(ii) Change in law;

(iii) Deferred works relating to ash pond or ash handling system in the original scope of work;

(iv) *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;*"

5.53 The Commission vide its discrepancy note had directed the Petitioner to submit details of the additional capitalization incurred after CoD along with justifications as specified under Clause 7.5 and 7.6 of the JSERC Generation Tariff Regulations 2010.

5.54 The Petitioner vide its reply submitted that the additional works undertaken in FY 2015-16 form part of the DPR of the plant as submitted to the Commission.

5.55 The Petitioner further submitted that the works carried out and claimed under additional capitalization were works deferred for execution due to paucity of funds and are not deferred payments and the additional capitalization being claimed for FY 2015-16 did not form part of the tariff earlier.

5.56 The Petitioner has provided auditors certificate and copy of the bills for the additional capitalization works undertaken during the year FY 2015-16.

5.57 The Commission had approved the Capital cost of the plant vide its order dated May 16, 2017 after detailed review and prudence check of the costs incurred by the Petitioner. The Petition for approval of capital cost was submitted on May 24, 2016 which was well after the year FY 2015-16 was over. In that Petition, the Petitioner had not submitted any details of the work deferred for execution which were part of the original scope of work as had been claimed now. In case the additional capitalization claimed now was part of the original scope of work, it should have been brought to the notice of the Commission earlier while the capital cost was being approved. In view of that the Commission is not inclined to approve the additional capitalization as claimed by the Petitioner now. Hence the Commission after due scrutiny of the submissions has decided to disallow the claims of the Petitioner.

Depreciation

Petitioner's submission

5.58 The Petitioner submitted that depreciation has been calculated as per the provisions of the JSERC Generation Tariff Regulations 2010. The depreciation submitted by the Petitioner is given in the table below:

Table 10: Depreciation* (in Rs Cr) for Unit 1 for the year FY 2015-16

Particulars	Unit	FY 2015-16
Opening balance of gross fixed asset (GFA)	Rs. Cr	346.21
Additional Capitalization	Rs. Cr	1.91
Depreciation	Rs. Cr	15.84
Net Fixed Assets (NFA)	Rs. Cr	318.66

** Revised submission by the Petitioner*

Commission's Analysis

5.59 The provisions laid out in the JSERC Generation Tariff Regulations, 2010 for approval of depreciation are given 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.

….

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."

5.60 Accordingly, the Commission calculated the depreciation for Unit 1 of the plant by considering the approved capital cost and the depreciation rates specified in Appendix-I of JSERC Generation Tariff Regulations, 2010.

5.61 The following table shows the depreciation for the Plant as calculated by the Commission as against that submitted by the Petitioner:

Table 11: Depreciation (in Rs Cr) as approved by the Commission

Particulars	Unit	Approved in MYT order	Submitted by IPL	Approved in True up
Total Depreciation for the FY 2015-16	Rs. Cr	15.91	15.84	15.60

Operation & Maintenance (O&M) Expenses

Petitioner's submission

5.62 The Petitioner submitted that the actual O&M Expenses has varied from the expenses as approved by the Commission in the MYT order dated May 27, 2014.

5.63 The Petitioner mentioned that the variation in the O&M expense is due to increase in the costs related to handling and disposal of high quantity of ash produced. The ash output increased due to change in the fuel mix and subsequent lowering of the average GCV of primary fuel.

5.64 The Petitioner further submitted that the O&M charges also include water charges being paid by the Petitioner to the concerned state authorities for use of water in the plant.

5.65 The Petitioner has also quoted para no. 22 from Hon'ble APTEL ruling No. 244 of 2012 between DPSCL vs WBERC and others, regarding allowance of ash disposal expenses due to uncontrolled increase in the ash content and on any increase in haulage of ash to the disposal area.

5.66 In view of the reasons stated above, the Petitioner has prayed to the Commission to allow the increase in the O&M expenses. The details as submitted are given in the following table:

Table 12: O&M Expenses (in Rs Cr) as submitted by the Petitioner

Particulars	Unit	Approved in MYT order	Submitted by IPL
Operation and Maintenance (O&M) expenses	Rs. Cr	16.01	24.96

Commission's Analysis

5.67 The provisions laid out in the JSERC Generation Tariff Regulations, 2010 for approval of O&M expenses are as under:

"7.40 Operation and Maintenance (O&M) expenses shall comprise of the following:

(a) Salaries, wages, pension contribution and other employee costs;

(b) Administrative and General costs;

(c) Repairs and maintenance expenses; and

(d) Other miscellaneous expenses statutory levies and taxes (except corporate income tax).

...

New Generating Stations:

7.44 The O&M expenses (in Rs. lakhs/ MW) permissible towards determination of tariff for Coal and Lignite fired (including those based on CFBC technology) shall be as follows:

Year	*200/ 210/ 250 MW sets*	*300/330/350 MW sets*	*500 MW sets*	*500 MW and above sets*
2011-12	*20.34*	*17.88*	*14.53*	*13.08*
2012-13	*21.51*	*18.91*	*15.36*	*13.82*
2013-14	*22.74*	*19.99*	*16.24*	*14.62*
2014-15	*24.04*	*21.13*	*17.17*	*15.46*
2015-16	*25.42*	*22.34*	*18.15*	*16.34*

5.68 Since, the JSERC Generation Tariff Regulations, 2010 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 27, 2014. Accordingly, the Commission had approved the O&M expenses based on the norms specified for 200/210/250 MW sets for FY 2015-16.

5.69 The provisions laid out in the JSERC Generation Tariff Regulations, 2010 for true-up during the control period is given as under:

"6.14 The true up across various controllable parameters shall be conducted as per principles stated below:-

(a) any surplus and deficit on account of O&M expenses shall be to the account of the generating company and shall not be trued up in ARR; and"

5.70 The Commission has noted the submissions of the Petitioner regarding the increase in the O&M costs and is of the opinion that the primary reason for the increase is the change in the fuel mix of the primary fuel which has resulted in lowering of overall GCV, increase in ash output and subsequently led to increased ash handling expenses.

5.71 The Commission in the MYT order dated May 27, 2014 had mentioned the following:

"7.46 Accordingly, the Commission after scrutinizing the submissions made by the Petitioner provisionally approves the GCV, blending ratio and price of coal and dolochar as per the submissions of the Petitioner. Further the Commission directs the Petitioner to prioritize procurement of primary fuel from the least cost source."

5.72 Thus it is clear from above, that the Commission had approved the blending ratio after considering the submissions of the Petitioner. The Petitioner has submitted that the fuel supply with JSMDC did not materialize due to scarcity of fuel and higher landed cost. However, it is the responsibility of the Petitioner to ensure that the approved blending ratio is maintained by procuring the primary fuel accordingly from alternate sources. The increase in O&M expense seems to be caused by the inability of the Petitioner to maintain the appropriate blending ratio.

5.73 Regulations 6.14 (a) of JSERC Generation Tariff Regulations, 2010 clearly provides that any surplus / deficit on account of O&M expenses shall be to be the account of generating company and shall not be trued up in the ARR. Accordingly, claims of such additional expenses are not passed on to the beneficiaries.

5.74 The Commission has considered the norms specified in the JSERC Generation Tariff Regulations, 2010 for 200/210/250 MW sets and accordingly has approved the O&M expenses for FY 2015-16 of Unit 1 of the Plant.

Table 13: O&M expenses (in Rs Cr) as approved by the Commission

Particulars	Unit	Approved in MYT order	Submitted by IPL	Approved in True up
Approved O&M expenses	Rs. Cr	16.01	24.96	16.01

Return on Equity (RoE)

Petitioner's submission

5.75 The Petitioner submitted that return on equity has been computed considering a pre-tax return of 15.50% as per JSERC Generation Tariff Regulations, 2010.

5.76 The Return on Equity (in Rs Cr) as submitted by the Petitioner has been tabulated below:

Table 14: Return on Equity (in Rs Cr)* submitted by the Petitioner

Particulars	UoM	FY 2015-16
Opening Equity	Rs. Cr	92.40
Addition/ Withdrawal	Rs. Cr	-
Closing Equity	Rs. Cr	92.40
Average Equity	Rs. Cr	92.40
Rate of Equity	%	15.50%
Applicable Tax rate	%	1.10%
Return on Equity	Rs. Cr	**14.48***

**Revised submission by the Petitioner*

Commission's Analysis

5.77 The provisions laid out in the JSERC Generation Tariff Regulations, 2010 for approval of Return on Equity are as under:

"7.15 Return on equity shall be computed in rupee terms, on the equity base determined in accordance with clause 7.13, 7.14 of these Regulations.

7.16 Return on equity shall be computed on pre-tax basis at the base rate of 15.50%, to be grossed up as per clause 7.17 of these Regulations.

……………

Provided that in case of Projects commissioned on or after 1st April, 2011, an additional return of 0.5% shall be allowed if such Projects are completed within the timeline specified in Appendix-II to these Regulations:

Provided further that the additional return of 0.5% shall not be admissible if the Project is not completed within the timeline specified above for reasons whatsoever:

7.17 The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate applicable to the Generating Company as per details shown as under:

(i)……….

(ii) MYT period: Base rate to be grossed by the applicable tax rate for the Year 2011-12

Provided that return on equity with respect to the actual tax rate applicable to the Generating Company, in line with the provisions of the relevant Finance Acts of the respective year during the Control period shall be trued up separately for each year of the Control period along with the tariff petition filed for the next Control period.

7.18 Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where 't' is the applicable tax rate in accordance with clause 7.17 of these Regulations."

Appendix-II Timeline for completion of Projects

1. The completion time schedule shall be reckoned from the date of investment approval by the Board (of the Generating Company), up to the Date of Commercial Operation of the Units or Block of units.

2. The time schedule has been indicated in months in the following paragraphs and tables:

(i) Thermal Power Projects - Coal/Lignite Power Plant

Unit size 200/210/250/300/330 MW and 125 MW CFBC technology

(a) 33 months for Green Field Projects. Subsequent Units at an interval of 4 months each.
(b) 31 months for Extension Projects. Subsequent Units at an interval of 4 months

5.78 The Commission observed that the Petitioner has paid 1.10 Cr as tax liability during the year, but it has also received a credit entitlement of the same amount as verified from the financial statements for the year FY 2015-16. The same has been communicated to the Petitioner vide discrepancy note.

5.79 The Petitioner vide his reply submitted that the entitlement will be available at a future date when the benefit of MAT has been received and the actual tax payment in that year will be less. Considering the same, the Petitioner has claimed the tax paid for the FY 2015-16.

5.80 As Per regulation 25(3) of the CERC (Terms and Conditions of Tariff) Regulations, 2014

"25 (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year……"

5.81 Accordingly, the Commission has considered the tax paid separately for the FY 2015-16.

5.82 The Commission has worked out the Return on Equity of the Plant as per provisions of the JSERC Generation Tariff Regulation, 2010 and has considered the rate of return on equity at 15.50%. The details of ROE approved by the commission for FY 2015-16 are given as under:

Table 15: Return on Equity (in Rs Cr) as approved by the Commission

Particulars	UoM	Approved in MYT order	Submitted by IPL	Approved in True up
Opening Equity balance	Rs. Cr	92.40	92.40	92.40
Net additions	Rs. Cr	0.00	0.00	0.00
Closing Equity balance	Rs. Cr	92.40	92.40	92.40
Average Equity	Rs. Cr	92.40	92.40	92.40
RoE (Pre-tax)	%	15.50%	15.50%	15.50%
Applicable tax rate	%	20.008%	1.10%	-
RoE (Post-tax)	%	19.377%	15.67%	15.50%
Return on Equity	Rs. Cr	**14.86**	**14.48**	**14.32**

Interest on Loan

Petitioner's submission

5.83 The Petitioner has computed the interest on long term loan in line with the actual interest amount paid and the actual repayment made during the FY 2015-16. The interest on loan including finance charges for the period FY 2015-16 is Rs. 33.28 Cr.

Commission's Analysis

5.84 The provisions laid out in the JSERC Generation Tariff Regulations, 2010 for approval of Interest on Debt is quoted as under:

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

5.85 The Commission has calculated the opening balance of normative debt for the year based on the closing balance for FY 2014-15 as per the true up in tariff order dated May 16, 2017. The approved depreciation has been considered as repayment in line with the methodology specified in JSERC Generation Tariff Regulations, 2010 to arrive at the closing balance of normative debt component.

5.86 As per Clause 7.3 of the Generation Tariff Regulations, 2015

"7.3 Capital cost for a Project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan –

(i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or

(ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, as admitted by the Commission after prudence check shall form the basis for determination of tariff;"

5.87 The Commission vide its discrepancy note had directed the Petitioner to submit actual loan portfolio with the applicable interest rate.

5.88 The Petitioner vide its reply to the discrepancy note submitted the actual loan portfolio depicting the interest rate applicable for each loan for the FY 2015-16.

5.89 The rate of interest has been considered as the weighted average rate of interest as per submissions made by the Petitioner vide its reply to the discrepancy note.

Table 16: Interest on Loan# (in Rs Cr) as approved by the Commission

Particulars	UoM	Approved in MYT order	Submitted by IPL	Approved in True up
Opening Debt balance	Rs. Cr	214.24	253.54	235.38
Net additions	Rs. Cr	0.00	1.91	-
Repayment	Rs. Cr	15.91	24.11	15.60
Closing Debt balance	Rs. Cr	198.33	231.34	219.79
Rate of Interest *	%	12.75%	13.73%	13.73%
Interest on Debt	Rs. Cr	**26.30**	**32.37**	**31.24**
Finance Charges	Rs. Cr	0	0.91	0.91
Total Interest & Finance Charges	Rs. Cr	**26.30**	**33.28**	**32.15**

** Weighted average rate of Interest of all loans of the Petitioner*

Cost of Secondary fuel

Petitioner's submission

5.90 The Petitioner has submitted the details of secondary fuel oil as tabulated below

Table 17: Cost of Secondary Fuel Oil (in Rs Cr) as submitted by the Petitioner

Particulars	UoM	FY 2015-16
Gross units generated	MU	484.55
Calorific value of Oil	kCal/L	10,000
Specific Oil Consumption	ml/kWh	0.86
Oil Consumption	kL	416.16
Base price of oil	Rs./kL	49,802.71
Cost of Secondary fuel oil	Rs. Cr	**2.07**

Commission's Analysis

5.91 The provisions laid out in the JSERC Generation Tariff Regulations, 2010 for approval of cost of secondary fuel oil are as under:

"7.49 Expenses on secondary fuel oil in Rupees shall be computed corresponding to normative secondary fuel oil consumption (SFC) specified in clause 8.4, 8.6 of these Regulations, in accordance with the following formula:

= SFC x LPSFi x NAPAF x 24 x NDY x IC x 10

Where,

SFC – Normative Specific Fuel Oil consumption in ml/kWh

LPSFi – Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially

NAPAF – Normative Annual Plant Availability Factor in percentage

NDY – Number of days in a year

IC - Installed Capacity in MW

7.51 The secondary fuel oil expenses shall be subject to fuel price adjustment at the end of the each year of Control period as per following formula:

= SFC x NAPAF x 24 x NDY x IC x 10 x (LPSFy – LPSFi)

Where,

LPSFy – Weighted average landed price of secondary fuel oil for the year in Rs./ml

5.92 The Commission vide its discrepancy note has directed the Petitioner to submit month wise GCV of the secondary fuel duly certified by auditors for the FY 2015-16. The Petitioner vide his reply has submitted the same.

5.93 The Commission has worked out the weighted average landed price of secondary fuel from the details of month-wise secondary fuel purchased for the FY 2015-16 duly certified by auditor and actual Specific fuel consumption has been considered at 0.84 ml/kWh while approving the cost of secondary fuel

5.94 The cost of secondary fuel as approved by the Commission has been tabulated below:

Table 18: Cost of Secondary Fuel (in Rs Cr) as approved by the Commission

Particulars	UoM	Approved in MYT order	Submitted by IPL	Approved in True up
Gross Generation at Normative plant availability	MU	413.91	484.55	484.55
Normative Specific Fuel Oil consumption	ml/kWh	1.00	0.86	0.84
Oil Consumption	kL	413.91	416.16	408.00
Weighted average landed price of secondary fuel	Rs./kL	50,000	49802	49663
Cost of Secondary Fuel Oil	Rs. Cr	**2.07**	**2.07**	**2.03**

Interest on Working Capital

Petitioner's submission

5.95 The Petitioner submitted that the working capital requirement has been computed as per the provisions of JSERC Generation Tariff Regulations, 2010.

5.96 The Petitioner further submitted that the actual rate of interest has been considered for computing the interest on working capital, in line with Regulation 7.38 of the JSERC Regulations, 2010. The interest rate considered for calculation is the prevailing SBI rate as on 1st April 2015. The Interest on working capital as submitted by the Petitioner is given in the table below:

Table 19: Interest on working capital (in Rs Cr) as submitted by Petitioner

Particulars	Unit	FY 2015-16
Coal Cost for 2 months	Rs. Cr	16.29
Cost of secondary fuel oil for 2 months	Rs. Cr	0.35
O&M Expenses for 1 month	Rs. Cr	2.08
Maintenance Spares (20% of O&M)	Rs. Cr	4.99
Receivables for 2 months	Rs. Cr	32.65
Total Working Capital	Rs. Cr	**56.35**
Rate of Interest	%	13.35%
Interest on Working Capital	Rs. Cr	**7.52**

5.97 The Petitioner mentioned that the working capital has increased as JBVNL has not paid the Petitioner as per the bills raised.

Commission's Analysis

5.98 The working capital requirement for the Petitioner has been determined by considering the following components as per Regulation 7.34 of the JSERC Generation Tariff Regulation, 2010:

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

(a) *Cost of Coal for two months for generation corresponding to the Normative Annual Plant Availability Factor;*

(b) *Cost of secondary fuel oil for two months for generation corresponding to the Normative Annual Plant Availability Factor;*

(c) *Maintenance spares @ 20% of operation and maintenance expenses;*

(d) *Operation and Maintenance expenses for 1 month; and*

(e) *Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor. "*

5.99 The Commission also outlines the provisions laid out in the JSERC Generation Tariff Regulations, 2010 for approval of Interest on Working Capital as under:

"7.38 Rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on April 1, 2011 or April 1 of the year in which the generating station or a unit thereof, is declared under commercial operation, whichever is later during Transition period.

During Control Period rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on April 1, 2012 or April 1 of the year in which the generating station or a unit thereof, is declared under commercial operation.

7.39 The interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures."

5.100 Accordingly the Commission calculated the Interest on Working Capital on the rates prevailing on the April 1, 2015 i.e. at 14.75% for the Plant. The detailed calculation made by the Commission is shown in the tables below:

Table 20: Interest on Working Capital (in Rs Cr) as approved by the Commission

Particulars	UoM	Approved in MYT order	Submitted by IPL	Approved in True up
Coal Cost for 2 months	Rs. Cr	12.67	16.29	15.24
Cost of secondary fuel oil for 2 months	Rs. Cr	0.34	0.35	0.34
O&M Expenses for 1 month	Rs. Cr	1.33	2.08	1.33
Maintenance Spares (20% of O&M)	Rs. Cr	3.2	4.99	3.20
Receivables for 2 months	Rs. Cr	26.79	32.65	29.82
Total Working Capital	Rs. Cr	**44.33**	**56.35**	**49.93**
Rate of Interest	%	14.75%	13.35%	14.75%
Interest on Working Capital	Rs. Cr	**6.54**	**7.52**	**7.36**

Annual Fixed Charges

5.101 Regulation 8.2 of the Generation Tariff Regulations, 2010 states that the annual fixed charges of a thermal generating station shall consist of the following

(a) Return on Equity;

(b) Interest and Financing Charges on Loan Capital;

(c) Depreciation;

(d) Operation and Maintenance Expenses;

(e) Interest Charges on Working Capital; and

(f) Cost of Secondary Fuel Oil

5.102 The annual fixed charges as submitted by the Petitioner and as approved by the Commission for the FY 2015-16 has been tabulated below:

Table 21: Annual Fixed Charges (in Rs Cr) approved by the Commission

Particulars	UoM	Approved in MYT order	Submitted by IPL	Approved in True up
O&M Expenses	Rs. Cr	16.01	24.96	16.01
Depreciation	Rs. Cr	15.91	15.84	15.60
Interest on Loan	Rs. Cr	26.30	33.28	32.15
Return on Equity	Rs. Cr	17.90	14.48	14.32
Cost of Secondary Fuel	Rs. Cr	2.07	2.07	2.03
Interest on Working Capital	Rs. Cr	6.54	7.52	7.36
Total Fixed Cost	Rs. Cr	**84.73**	**98.15**	**87.47**

Recovery of Capacity charges

Petitioner's submission

5.103 The Petitioner has submitted that the recovery of fixed charges has been calculated as per clause 8.10 to 8.12 of the JSERC Generation Tariff Regulations, 2010 as the Plant Availability Factor (PAF) of the plant for the year FY 2015-16 is 91.42%.

5.104 The capacity charges submitted by the Petitioner after PAF adjustment is given in the table below:

Table 22: Capacity charges as submitted by Petitioner after PAF adjustment

Particulars	UoM	FY 2015-16
Fixed cost as computed	Rs. Cr	98.15
Fixed cost after PAF adjustment	Rs. Cr	108.90

Commission's analysis

5.105 The provisions laid out in the JSERC Generation Tariff Regulations, 2010 for approval of recovery of fixed charges are as under:

"8.10 The fixed cost of a thermal generating station shall be computed on annual basis, based on norms specified under these Regulations, and recovered o monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by its Beneficiaries as per their respective percentage share/ allocation in the capacity of the generating station.

8.11 Full Capacity Charges shall be recoverable at Normative Annual Plant Availability Factor (NAPAF) specified in clause 8.4, 8.6 of these Regulations. Recovery of Capacity Charges below the level of Normative Annual Plant Availability Factor (NAPAF) will be on a pro-rata basis. At zero availability, no Capacity Charges shall be payable.

8.12 The capacity charge (inclusive of incentive) payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:

(a) Generating stations in commercial operation for less than ten (10) years on 1st April of the financial year:

= (AFC x (NDM / NDY) x (0.5 + 0.5 x PAFM / NAPAF) (in Rupees)

Provided that in case the plant availability factor achieved during a financial year (PAFY) is less than 70%, the total capacity charge for the year shall be restricted to:

=AFC x (0.5 + 35 / NAPAF) x (PAFY / 70) (in Rupees)

(b) For generating stations in commercial operation for ten (10) years or more on 1st April of the year:

= (AFC x NDM / NDY) x (PAFM / NAPAF) (in Rupees)

Where,

AFC - Annual fixed cost specified for the year, in Rupees;

NAPAF – Normative annual plant availability factor in percentage;

NDM – Number of days in the month;

NDY – Number of days in the year;

PAFM – Plant availability factor achieved during the month, in percent;

PAFY – Plant availability factor achieved during the year, in percent

5.106 As per the above provisions, the Commission has approved the recovery of fixed charges, considering NAPAF as approved in paragraph 5.9 of this Order , as tabulated below

Table 23: Capacity charges (in Rs Cr) as approved by the Commission after PAF adjustment

Particulars	UoM	FY 2015-16
Fixed cost as computed	Rs. Cr	87.47
Fixed cost after PAF adjustment (Normative PAF @ 85%)	Rs. Cr	90.77

Tax Paid

Petitioner's submission

5.107 The Petitioner submitted that it has claimed tax on actuals and requested the Hon'ble Commission to approve the same as tax on RoE has not been claimed.

Commission's analysis

5.108 As Per regulation 25(3) of the CERC (Terms and Conditions of Tariff) Regulations, 2014

"25 (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year……"

5.109 Accordingly, the Commission approves the actual tax as submitted by the Petitioner for the FY 2015-16 which has been tabulated below.

Table 24: Tax (in Rs Cr) as approved by the Commission

Particulars	UoM	Submitted by IPL	Approved in True up
Tax Paid	Rs. Cr	1.10	1.10

Annual Revenue Requirement for the FY 2015-16

5.110 The Annual Revenue Requirement (ARR) of the Petitioner after PAF adjustment and Tax paid for the FY 2015-16 has been tabulated below.

Table 25: Annual Revenue Requirement for the FY 2015-16

Particulars		UoM	Submitted by IPL	Approved in True up
Total Fixed cost after PAF Adjustment	A	Rs. Cr	108.90	90.77
Tax Paid	B	Rs Cr	1.10	1.10
Total Variable cost	C	Rs. Cr	97.73	91.44
Annual Revenue Requirement (ARR)	D = A+B+C	Rs. Cr	**207.73**	**183.31**

Penalty for Non-Compliance of Directives

5.111 The Commission in its earlier Order dated May 16, 2017 had directed the Petitioner to conduct a techno commercial study from an independent consultant to ascertain the segregation of common costs to the units and the purpose of allocation to unit-1. The relevant excerpts of the Order has been reproduced below:

"Techno-commercial study to segregate common costs

11.4 The Commission hereby directs the Petitioner to conduct a techno-commercial study from an Independent consultant to identify and segregate the costs for the Common facilities that has been created for the plant e.g. administrative building, cooling system along with chimney, ash disposal system, coal feeding system, roads, boundary wall, water intake pipe and land corridor etc. A mechanism should also be developed to segregate the common costs between the units and propose allocation to Unit 1."

5.112 The Petitioner in the current Petition submitted that it has not considered the construction of unit 2 of the power plant considering the power offtake scenario in the country and difficulty in obtaining payments form JBVNL and hence, no costs have been incurred for unit 2 except land as submitted in its earlier Petitions

5.113 The Commission found the reply of the Petitioner unsatisfactory and gave another opportunity to the Petitioner vide its discrepancy note dated 8th September, 2017, to perform the study and ascertain the percentage allocation of common costs to unit-1 specifically. The relevant extracts of the Commission's query has been reproduced below:

"The Commission in the previous order dated 16th May 2017 directed the Petitioner to conduct a techno commercial study to ascertain the segregation of common costs. The Commission finds the submission of the Petitioner to be unsatisfactory in this regard.

The plant was envisaged considering two units to bring in efficiencies. Hence, the common facilities e.g. administrative building, cooling system along with chimney, ash disposal system, coal feeding system, roads, boundary wall, water intake pipe and land corridor etc. were developed initially. Thus, the Petitioner should provide the percentage allocation of all the common costs for Unit I specifically."

5.114 The Petitioner vide its reply again submitted that it has not considered the construction of unit 2 of the power plant and requested the Commission for the grant of three months to conduct such study and submit the report. However, no such report has been submitted by the Petitioner to the Commission till date. The reply of the Petitioner for the Commission's query dated 8th September, 2017 has been reproduced below:

"a. We submit that the considering the power offtake scenario in the country and difficulty in obtaining payments form JBVNL, IPL has not considered the construction of unit 2 of the power plant. Hence, as submitted earlier, no costs have been incurred for unit 2 except land which has not been considered for unit 1 costs.

b. However, we submit that the Hon'ble Commission may provide us with 3 months to submit the techno commercial study from an independent consultant to provide the percentage allocation of all the common costs for Unit 1 specifically."

5.115 Even after repeated directives issued by the Commission, the Petitioner has not taken any initiative to perform such study. The Commission takes serious note of the non-compliance of the Petitioner in this regard. This shows that the Petitioner has taken the directives casually. In view of the same, the Commission has now decided to impose a penalty of 5% of the Aggregate Revenue Requirement (ARR) of the Petitioner for the FY 2015-16.

5.116 The Commission re-directs the Petitioner to perform the techno-commercial study to ascertain the common costs allocation to Unit-1 and submit a report within three months of the issuance of this tariff Order failure of which may attract penalty.

Table 26: ARR for the FY 2015-16 after imposing penalty as approved by the Commission

Particulars	Approved in True up
ARR for the FY 2015-16 - (1)	183.31
Penalty imposed (5% of the ARR for the FY 2015-16) - (2)	9.17
Net ARR for the FY 2015-16 (1-2)	**174.14**

Revenue from Sale of Power to JBVNL

Petitioner's submission

5.117 The Petitioner submitted that the amount billed to JBVNL was 198.91 Cr which includes Energy and capacity charges, FPA bill and Delay payment surcharge.

5.118 The Petitioner further submitted that the Hon'ble Commission vide its order in case no 26 of 2014 and 06 of 2016 has directed the respondent to make payments to the Petitioner based on the invoice raised. However, the respondent has to this date failed to clear the dues of the Petitioner. The respondent has also not cleared the dues of the Petitioner pertaining to late payment surcharge.

Commission's analysis

5.119 The Commission after due prudence check of the auditors certificate for sales to JBVNL approves the amount billed to JBVNL as tabulated below

Table 27 Amount billed to JBVNl (in Rs Cr) as approved by the Commission

Particulars	Submitted by IPL	Approved in True up
Energy and Capacity Charges	181.67	181.67
FPA	8.32	8.32
Delay Payment Surcharge	8.82	8.82
Total	**198.81**	**198.81**

Gap/ Surplus for FY 2015-16

5.120 Regulation 6.18 of JSERC Generation Tariff Regulations, 2010, states that

"6.18 The amount under-recovered or over-recovered, along with simple interest, 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 after the truing up exercise."

5.121 Also Regulation 6.16 & 6.17 of the JSERC Generation Tariff Regulations, 2010, states that

"6.16 If the Tariff already recovered is more than the Tariff determined after true up, the Generating Company shall refund to the Beneficiaries the excess amount so recovered along with simple interest at the rate equal to short term prime lending rate of State Bank of India as on 1st April of the respective Year."

"6.17 Similarly, in case the Tariff already recovered is less than the Tariff determined after true up, the Generating Company shall recover from the Beneficiaries, the less recovered amount along with simple interest at the rate equal to short term prime lending rate of State Bank of India as on 1st April of the respective Year/Years subject to adhering to the timelines specified by the Commission for filling of True-up application. In case, it is found that the filling of True-up is delayed due to the reasons attributable to the Generating Company, the under recovery shall not bear any interest expenses."

5.122 Accordingly, the Commission has calculated the gap/ (surplus) for the period of FY 2015-16 and approved the same as tabulated below.

Table 28: Gap/ (Surplus) in Rs Cr for FY 2015-16

Particulars		Units	FY 2015-16
Total Fixed cost after PAF Adjustment (including Tax Paid)	A	Rs. Cr	91.87
Total Variable cost	B	Rs. Cr	91.44
Annual Revenue Requirement (ARR)	C = A+B	Rs. Cr	183.31
Penalty for the non-compliance of directives	D = 5% *C	Rs Cr	9.17
Net Annual Revenue Requirement (ARR)	**E = C-D**	**Rs Cr**	**174.14**
Total Amount Billed by IPL	F	Rs. Cr	198.81
Delay payment surcharge billed	G	Rs. Cr	8.82
Net amount billed (Capacity + Energy - FPA charges)	H = F - G	**Rs. Cr**	**190.00**
Gap/ (Surplus) for the year	I = E-H	Rs. Cr	(15.85)
Carrying cost	J	Rs. Cr	(4.62)
Total Amount to be recovered	K = I+J	**Rs. Cr**	**(20.48)**

A6: COMPLIANCE TO DIRECTIVES

Directives as per Tariff Order dated May 16, 2017	Status	Views of the Commission
Report on operational performance parameters Report of operational performance parameters along with the actual transit loss needs to be submitted along with the next tariff petition.	The Petitioner submitted report on operational performance parameters on actual basis.	The Commission is of the view that the Petitioner has not taken proper cognizance of the directives of the Commission. The Commission once gain directs the Petitioner to submit a report of operational performance parameters along with the actual transit loss along with the next tariff Petition failing which the Commission may consider imposing penalty.
Techno-Commercial Study To bring in clarity for all stakeholders, the Commission hereby directs the Petitioner to conduct a techno-commercial study from an Independent consultant for achieving the following objectives a) To identify and ascertain whether common facilities for Unit-1 and Unit-2 have been created for the plant e.g. administrative building, cooling system along with chimney, ash disposal system, coal feeding system, roads, boundary wall, water intake pipe and land corridor etc. b) To ascertain and segregate the common costs to the Units and propose allocation to Unit-1	The Petitioner submitted that after considering the power offtake scenario in the country and difficulty in obtaining payments form JBVNL, it has not considered the construction of unit 2 of the power plant. Hence, as submitted earlier, no costs have been incurred for unit 2 except land.	The Petitioner in its reply to the discrepancy note had requested the Commission for a period of 3 months to submit techno commercial study from an independent consultant to provide the percentage allocation of all common costs to Unit-1. The Commission is of the view that the Petitioner has not taken proper cognizance of the Commission's directives as per the earlier Order dated May 16, 2017. The Commission directs the Petitioner to conduct the study and submit a report within three months failure of which may attract penalty.

Directives as per Tariff Order dated May 16, 2017	Status	Views of the Commission
Fuel Procurement Plan The Petitioner is directed to develop a fuel procurement plan and explore options with its suppliers in order to reduce the cost of coal. The Petitioner should prioritize the procurement of primary fuel from the least cost source.	The Petitioner submitted that it has fuel supply agreement with Tata Steel, copy of which was submitted as part of the last petition. IPL is procuring fuel from e-auction by CIL as per the government's initiative of providing coal to power plants without fuel supply agreements.	The Commission observes that drastic variation in fuel mix from what has been approved earlier has affected the GCV of the primary fuel. This has resulted in steep increase in the O&M expenses of the Petitioner. The Commission again directs the Petitioner to develop a fuel procurement plan and explore options with its suppliers in order to reduce the cost of coal. The Petitioner should prioritize the procurement of primary fuel from the least cost source.
Fuel Source Wise Transit Loss The Commission directs the Petitioner to immediately implement processes to record and maintain data on fuel source wise transit loss on actual basis and supply the same to the Commission along with the next tariff petition. The Petitioner is required to comply with the directive failing which the Commission may disallow a portion of the variable costs incurred by the Petitioner.	The Petitioner submitted the details for fuel source wise transit loss.	The Commission is of the view that the Petitioner has not taken proper cognizance of the directives of the Commission. The Commission once gain directs the Petitioner to submit a report of the **actual transit loss** along with the next tariff Petition failing which the Commission may consider imposing penalty.

A7: DIRECTIVES

True-Up petition for FY 2016-17 and APR Petition for FY 2017-18

7.1 The Petitioner is directed to submit True-up Petition for the FY 2016-17 and APR Petition for FY 2017-18 within three months from the date of issuance of this Order.

Data on operational performance parameters

7.2 The Petitioner is directed to submit Month wise data of all operational parameters to the Commission with subsequent petitions.

Development of a fuel procurement plan

7.3 The Petitioner is directed to develop a fuel procurement plan and explore options with its suppliers in order to reduce the cost of coal. The Petitioner should prioritize the procurement of primary fuel from the least cost source.

Techno-commercial study to segregate common costs

7.4 The Commission hereby directs the Petitioner to conduct a techno-commercial study from an Independent consultant to identify and segregate the costs for the Common facilities that has been created for the plant e.g. administrative building, cooling system along with chimney, ash disposal system, coal feeding system, roads, boundary wall, water intake pipe and land corridor etc. A mechanism should also be developed to segregate the common costs between the units and propose allocation to Unit 1.

7.5 The Petitioner is required to submit a report within three months from the date of issuance of this Order. Any non-compliance may attract penalty.

Data adequacy in the next Petition

7.6 The Commission observes with concern that the Petitioner has not submitted the required data and proofs in support of its claims made in the current Petition. The submissions were made only after the discrepancies were raised by the Commission. The Petitioner is hereby directed to remove all the discrepancies which were highlighted throughout the tariff order and provide all data and proofs along with next the Petition.

Fuel Source wise actual transit loss

7.7 The Commission directs the Petitioner to immediately implement processes to record and maintain data on fuel source wise transit loss on actual basis and supply the same to the Commission along with the next tariff petition. The Petitioner is required to comply with the directive failing which the Commission may disallow a portion of the variable costs incurred by the Petitioner.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this the 19th of March, 2018.

Date: **19th of March, 2018.**
Place: Ranchi

Sd/-	Sd/-
(Shri R. N. Singh)	**(Dr. Arbind Prasad)**
MEMBER (T)	**CHAIRPERSON**

A8: ANNEXURES

Annexure 1: List of participating members of public in the public hearing

S No.	Name /Shri	Address/ Organization if any
1	Praveen Kumar	Bariatu, Ranchi, Inland Power Ltd.
2	Jai Prakash Mahto	Katamkuli
3	Rajesh	Ashok Nagar, Ranchi
4	Sanjay Kumar Singh	Hinoo, Ranchi
5	Sailendra Nath Sinha	Astha Regency Hehal, Ranchi
6	Pramod Pandey	Signet Media
7	M.L. Khetan	Inland Power Ltd.
8	K. Vamsi Atiya	PwC, Consultant
9	Abhishek Amaraon	Inland Power Ltd.
10	A. Sengupa	Harmu, Ranchi
11	Vinit Singh	Harmu, Ranchi
12	Vikash Raja	Chutia, Ranchi
13	Puja Harit	The Pioneer
14	Dhananjay Kumar	Kusai Colony, Ranchi
15	Giriraj Jhawar	Bariatu Road, Ranchi
16	Vinay Mumrmu	The Pioneer
17	Sunil Kumar	Madhukarpur
18	Sunil Kumar Thakur	CE (C&R), JBVNL
19	Rishi Nandan	ESE/C&R, JBVNL
20	Ishan Srivastava	Sr. Consultant, Deloitte
21	Sanjeev Kumar	Lalpur, Ranchi
22	Surendar Mahto	Harmu, Ranchi
23	Jay Kumar	Butimore, Ranchi
24	Suman Jha	Gola, Ramgarh
25	Sanjay Kumar	Namkum, Ranchi