BEFORE THE JHARKHAND ELECTRICITY REGULATORY COMMISSION

CASE NO. _____ of 2018

IN THE MATTER OF:

Petition for approval for True up of FY 2016-17 and 2017-18 for 1 X 63MW Coal Fired CFBC Thermal Power Project under Section 61 & 62 of the Electricity Act 2003.

...Petitioner

AND

IN THE MATTER OF:

Inland Power Ltd

3A, Auckland Place

Kolkata - 700017

West Bengal, India

&

Jharkhand Urja Vikas Nigam Ltd. (JBVNL), Ranchi is the "Respondent" to the Petition.

Details of enclosures:

- Annexure No. 1 IPL letter dated 5th June 2018 seeking extension of time of 3 months for filling of the Petitions for True-up of FY 2016-17 and FY 2017-18
- 2. Annexure No. 2 Annual accounts for FY 2016-17
- 3. Annexure No. 3 Annual accounts for FY 2017-18
- Annexure No. 4 Board resolution of raising of equity by Rs. 9.50 cr from 16th July 2016
- 5. Annexure No. 5 Data formats as per JSERC Tariff Regulations 2015
- 6. Annexure No. 6 Vehicle loan details for FY 2016-17
- 7. Annexure No. 7 Vehicle loan details for FY 2017-18
- Annexure No. 8 Letters from banks highlighting the interest rates charged to IPL for FY 2016-17 & 2017-18
- Annexure No. 9 Interest certificates for term loan paid to various banks for FY 2016-17 & 2017-18
- 10. Annexure No. 10 Details of bank charges paid for FY 2016-17 & 2017-18
- 11. Annexure No. 11 Month wise interest rate for every bank- for FY 2016-17 & 2017-18
- 12. Annexure No. 12 Details for assets bought in FY 2016-17 & FY 2017-18
- 13. Annexure No. 13 IPL's NOC to operate dated 22.09.2010 by the Jharkhand State Pollution Control Board
- 14. Annexure No. 14 MOEF fly ash notification, 1999
- 15. Annexure No. 15 JSERC order for TPCL of April 2014 of Annual Performance Review Petition for FY 2012-13 (including truing-up for FY 2011-12)
- 16. Annexure No. 16 APTEL Appeal No. 244 of 2012
- 17. Annexure No. 17 Technical consultant's report on Ash Generation & disposal.
- 18. Annexure No. 18 Water charges details for FY 2016-17
- 19. Annexure No. 19 Water charges details for FY 2017-18
- 20. Annexure No. 20 Details of type of plant, type of cooling water system etc.
- 21. Annexure No. 21 Copy of email dated 30th August 2016 to SLDC and JBVNL intimating about the civil commotion and riot outside the plant

- 22. Annexure No. 22 Letter to JBVNL on 31st August 2016 under Article 9 of the PPA intimating about the Force Majeure
- 23. Annexure No. 23 Copy of FIR about the civil commotion and riot outside the plant
- 24. Annexure No. 24 Newspaper clipping about the civil commotion and riot outside the plant
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- 36. Annexure No. 36 Copy of email for submission of techno commercial study from an independent consultant on segregation of common costs
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Facts of the case:

- Inland Power Limited signed a Memorandum of Understanding (MoU) with Government of Jharkhand to develop a 126 MW (+ 20%) (2x 63 MW) power project in October 2011.
- Accordingly, IPL has set up a 63 MW thermal power plant based on CFBC technology in Gola, District Ramgharh, Jharkhand. The commercial operation date of first unit of 63 MW is 21st May 2014.
- 3. 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.
- 4. 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 Vikash Nigam Limited or "JBVNL") 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 JBVNL) on April 22nd, 2013 for purchase and sale of entire quantity of power to be generated from Unit 1 of 63MW inclusive of quantity mentioned in earlier Principal PPA.
- JSERC on 27th May 2014 issued a tariff order, Actually approving the tariff for the years FY 2014-15 and 2015-16 respectively based on the then Petition of Inland Power limited.
- Subsequent to CoD of IPL's unit 1 on May 21, 2014, IPL filed a petition before JSERC for approval of capital cost of unit 1, true-up of FY 2014-15 and Annual Performance Review (APR) of FY 2015-16 and approval of Multi-Year Tariff from FY 2016-17 to FY 2020-21.
- Pursuant to the whole process, JSERC came out with its order for true-up of FY 2014-15 and Multi-Year Tariff from FY 2016-17 to FY 2020-21 in Case No. 06 & 11 of 2016 dated 16 May 2017 and directed IPL to file True-up for FY 2015-16.

- 8. Based on the direction of the Hon'ble Commission, IPL filed a petition before JSERC for approval of true-up of FY 2015-16.
- Pursuant to the whole process, JSERC came out with its order for true-up of FY 2015-16, in Case No. 06 of 2017 dated 19th March 2018 and directed IPL to file True-up for FY 2016-17 and APR petition for FY 2017-18.
- 10. In view of the above, IPL in accordance with the provisions of Section 62 of the Electricity Act, 2003 and under the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 is submitting this Petition for FY 2016-17 and for FY 2017-18.

PRAYER TO THE HON'BLE COMMISSION

The Petitioner respectfully prays that the Hon'ble Commission may:

- Condone the delay in filing of True-up Petition for FY 2016-17
- Accept the petition for True-up of FY 2016-17 and FY 2017-18
- Approve the numbers for the True-up of FY 2016-17 and FY 2017-18 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 further submission as may be at a future date; and
- 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.

The Petitioner further declares that the subject matter of the petition has not been raised by the Petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any orders in relation thereto.

Place: Date: 10 September 2018

On behalf of Inland Power Limited

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List of Abbreviations

| Abbreviation | Definition | | |
|--------------|---|--|--|
| 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 | | |
| Gol | Government of India | | |
| JSERC | Jharkhand State Electricity Regulatory Commission | | |
| kCal | Kilocalorie | | |
| Кg | Kilogram | | |
| kWh | Kilowatt-hour | | |
| MAT | Minimum Alternative Tax | | |
| МІ | Milliliter | | |
| MT | Million Tonnes | | |
| MUs | Million Units | | |
| MW | Megawatt | | |
| NAPAF | Normative Annual Plant Availability Factor | | |
| 0&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 | | |

1 Condone the delay in filling the Petitions

1.1 Condone the delay in filling the True-up of 2016-17 and FY 2017-18

- 1.1.1 The Hon'ble Commission via its order dated 19th March 2018 had directed the petitioner to file True-Up petition for FY 2016-17 and FY 2017-18 within three months from the date of issuance of the order. In view of the above direction, the Petitioner had submitted a prayer for extension of time of 3 months for filling of the Petitions vide its letter dated 5th June 2018 (letter attached as Annexure 1). Via the same letter, the Petitioner also prayed to the Hon'ble Commission to allow it to file the True-up petition for FY 2017-18 since FY 2017-18 has already ended.
- 1.1.2 In pursuance of the same, the Petitioner was under process of preparation of Financial Statement of FY 2017-18 as per statutory norms. However, there was delay in finalizing the Financial Statement of FY 2017-18 due to complexities involved with GST compliance. Hence, there has been a slight delay beyond the prayed 3 months in filing of the Petitions.
- 1.1.3 The Petitioner prays to the Hon'ble Commission to condone the delay in filing the True-up petition for FY 2016-17 and accept the filling of the True-up petition for FY 2017-18 under Power of Relaxation under JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 and other inherent powers of the Hon'ble Commission under the Electricity Act, 2003

2 Background

2.1 Profile of Inland Power limited

- 2.1.1 Inland Power Limited ("IPL") is promoted by the Inland Group which was founded in 1970s. IPL has been incorporated to expand the business interests of the Inland Group in the power sector. The Inland Group has major interests in logistics, Jewellery Exports, Tea Plantation and Bearings. Inland World Logistics Private Limited (IWLPL) is the flagship group company and is one of the premier logistics companies in India with more than 350 branches across India.
- 2.1.2 IPL had been originally incorporated on 22nd June, 1993 as a Private Limited Company and was subsequently converted to a Public Limited Company on 3rd April, 2008 as Inland Power Ltd. IPL has set up one unit of the project of 2x63 MW thermal power plant based on CFBC technology at Inland Nagar near Gola, District Ramgarh, Jharkhand as an Independent Power Plant (IPP). Stage one has been commissioned and its operational from 21st May 2014

2.2 Project Summary

2.2.1 The project construction activities started on 20th December 2011 and the commercial operation date of stage 1 of 63MW unit was on 21st May 2014. The key milestones for the project are provided in the table below:

| Date | Key Milestones | | | | | |
|-----------------------------|--|--|--|--|--|--|
| 18 Oct 2011 | MoU between Govt of Jharkhand and JSEB for facilitation of project | | | | | |
| 5 th Sept 2011 | Coal linkage for 63 MW | | | | | |
| Various dates | Land lease deed registered, land possession handed over and access to site was achieved. | | | | | |
| 3 rd May 2010 | Concurrence for water drawal from Water Resources Department, Government of Jharkhand | | | | | |
| 22 nd Sept 2010 | Clearance from State Pollution Control Board - NOC for construction obtained | | | | | |
| 12 th Aug 2011 | Achievement of financial closure | | | | | |
| 20 th Dec 2011 | Environmental clearances obtained from Ministry of Environment & Forest (MoEF) | | | | | |
| 23 Feb 2012 | PPA for selling power to JSEB | | | | | |
| 22 April 2013 | Supplementary to the PPA | | | | | |
| 21 st May 2014 | Start of Commercial Operation of 1 st unit of 63 MW of the plant | | | | | |
| 27 th May 2014 | JSERC Tariff order Actually approving the tariff for the years FY 2014-15 and FY 2015-16 | | | | | |
| 16 th May 2017 | JSERC Tariff order approving Capital cost of unit 1, True-up for FY 2014-15 and MYT for FY 2016-17 to FY 2020-21 | | | | | |
| 19 th March 2018 | JSERC Tariff order approving True-up for FY 2015-16 | | | | | |

Table 1: Milestone Table

- 2.2.2 The Site for the project comprises of around 120 acres of land which has been acquired in the villages of Tonagatu, Bariatu and Biyang in district Ramgarh for setting up of the project. The project site is well connected by road and rail route. The land purchased by the company has been registered and mutated in the name of the company as Industrial land.
- 2.2.3 IPL has already received concurrence for water drawal from Water Resources Department, Government of Jharkhand for drawing water of total quantity of 4.50 MCM annually for 2 x 63 MW plant configuration from Senegarha Nullah (a tributary of Bhairvi river) and also from Bhairvi river itself. The water shall be pumped and fed to the project site through dedicated raw water pipelines.
- 2.2.4 The fuel for the plant is being procured from various sources available like:
 - e auction CIL coal
 - Coal from the forward auction of CIL

- Washery Rejects of CCL
- Rejects from Tata Steel limited
- Dolochar from the open market
- 2.2.5 A Power Purchase Agreement (PPA) has been signed between IPL and JSEB (now JBVNL) on 23-Feb-2012 and further a supplementary to the PPA was signed on 22nd April 2013 whereby IPL will sell the entire capacity of 63 MW from 1st unit to JBVNL. Out of 63 MW JBVNL will purchase 12% at variable cost only and the balance at the tariff determined by JSERC.

Table 2 : Details of Capacity supplied to JBVNL and tariff rational

| Capacity to be supplied to JBVNL | | Tariff | | | |
|----------------------------------|--|---|--|--|--|
| 1. | 88 % of total actual power generation of Stage 1 | Total Tariff (both Fixed Charge and Energy charge including FPA as approved by JSERC) | | | |
| 2. | 12 % of total actual power generation of Stage 1 | Variable cost (Energy Charge including FPA as approved by JSERC.) | | | |

- 2.2.6 The plant would evacuate power at 132 kV level to the nearest JBVNL substation at Sikidiri which would be the delivery point for sale of power to JBVNL. The 1 x 63 MW Project has been commenced from 21st May 2014.
- 2.2.7 The petitioner is bearing transmission losses from the generation point at exbus to the delivery point at the Sikidiri substation. These transmission losses are due laws of physics and are uncontrollable in nature. The figure below depicts the same.

Figure 1: Transmission loss faced by the Petitioner



2.2.8 The key details of the power plant are provided in table below:

| SN | Parameter | Details | | |
|----|----------------------------------|---|--|--|
| 1 | Name of power station | Inland Coal fired CFBC Thermal Power Plant | | |
| 2 | Project Capacity | 1 x 63 MW | | |
| 3 | Location | Inland Nagar near Gola, District Ramgarh, Jharkhand | | |
| 4 | Nearest Railway site | Gola, 5 km from the project site | | |
| 5 | Nearby highway | Ramgarh Bypass, NH – 23 at a distance of 1 km. | | |
| 6 | Financial closure of the Project | 12 th Aug 2011 | | |

| SN | Parameter | Details | | |
|----|--|--|--|--|
| 7 | Fuel | Coal & Dolochar & coal rejects | | |
| 8 | Fuel supplier | Various sources | | |
| 9 | Water | Water Resources Department, Government of Jharkhand for drawing water of total quantity of 4.50 MCM annually | | |
| 10 | Commissioning Date | 21 st May 2014 | | |
| 11 | JSERC Tariff order for provisional approval of tariff | 27 th May 2014 | | |
| 12 | Capital cost approval, True-up FY 2014- 15 & MYT order for FY 2016-21 | 16 th May 2017 | | |
| 13 | Order for True-up of FY 2015-16 | 19 th March 2018 | | |

2.3 Technology

- 2.3.1 Circulating Fluidized Bed Combustion (CFBC) Technology have been used for the project which is environmentally benign compared to conventional pulverized coal fired technology of similar capacity. The main advantage of this technology is that almost any type of fuel can be burned. However, as any type of fuel can be burned in a CFBC plant, the O&M costs are higher as compared to pulverised fuel fired power plants. IPL submits that it is helping the state of Jharkhand by using rejects such as coal rejects, dolochar etc. that are environment friendly.
- 2.3.2 Fuels used in a CFBC plant are generally coal, coal rejects, dolochar, other rejects etc. As such types of fuel have a very high content of ash, the costs associated with ash collection, handling and disposal are higher as compared to other plants. Also, due to use of such fuels, CFBC boilers usually have been observed to have a longer stabilisation period, lower availability during initial few years and higher auxiliary consumption.

2.4 About the Petition

- 2.4.1 The Hon'ble Commission has provided vide notification dated 10th November 2015, JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2015 or "JSERC Regulations, 2015". The Regulations are applicable to the projects which are commissioned during the control period starting FY 2016-17.
- 2.4.2 The Petitioner is seeking various approvals for its 1 x 63MW CFBC thermal power plant. The approvals sought by the Petitioner are True-up of the years FY 2016-17 and FY 2017-18
- 2.4.3 Pursuant to the enactment of the Electricity Act, 2003 (EA 2003), as per Section64 (1) of Act, a generating company intending to sell power to a Distribution

Licensee is required to file an application for determination of tariff to the Appropriate Commission. As IPL is selling power to the JBVNL, the Appropriate Commission in this case is the Hon'ble Jharkhand State Electricity Regulatory Commission ("JSERC" or "Commission").

2.5 Annual accounts

2.5.1 The audited Annual accounts of IPL for FY 2016-17 and FY 2017-18 are attached as Annexure 2 and Annexure 3 as required under regulation 12.8 of the JSERC Tariff Regulations, 2015

3 True-up of 2016-17 and FY 2017-18

3.1 Regulatory provisions

3.1.1 The Hon'ble Commission in its regulation has stated the following on true-up of various costs under the regulations. The same is as shown below:

"True up during Control Period

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

- (a) During the control period, the Commission shall undertake true up of parameters except those mentioned in point (b) below in accordance with Clauses 14.1 to 14.3 of this Regulation;
- (b) 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. The Commission shall also not undertake true up of actual capital cost incurred vis-à-vis target as well as related depreciation and financing cost during the control period;
- (c) at the end of the control period
 - *i.* the Commission shall review actual capital investment vis-à-vis approved capital investment.
 - ii. Depreciation and financing cost, which includes cost of debt including working capital (interest), cost of equity (return) shall be trued up on the basis of audited/authenticated information and prudence check by the Commission.

6.12 Any financial loss on account of underperformance on targets for parameters specified in clause 6.11 (a) to (e) of these Regulations is not recoverable through tariffs. Similarly, any financial gain on account of over-performance with respect to these parameters is to the Generating Company's benefit and shall not be adjusted in Tariffs.

6.13 The Commission shall carry out truing up of tariff of generating station based on the performance of following Uncontrollable parameters:

(a) Force Majeure;

(b) Change in Law; and

(c) Primary Fuel Cost.

6.15 Notwithstanding anything contained in these Regulations, the gains or losses in the controllable items of ARR on account of force majeure factors shall be passed on as an additional charge or rebate in ARR over such period as may be laid down in the order of the Commission."

3.1.2 The Hon'ble Commission in its Regulations, 2015 has stated the following on review of various costs under the regulations. The same is as shown below:

"Review at the end of the Control Period

14.4 Towards the end of the Control Period, the Commission shall seek to review if the implementation of the principles laid down in these Regulations has achieved

their intended objectives. While doing this, the Commission shall take into account, among other things, the industry structure, sector requirements, consumer and other stakeholder expectations and Applicant's requirements at that point in time. Depending on the requirements of the sector to meet the objects of the Act, the Commission may revise the principles for the second Control Period.

14.5 The end of the first Control Period shall be the beginning of the second Control Period and the Generating Company shall follow the same procedure unless required otherwise by the Commission. The Commission shall analyse the performance of the generating company with respect to the targets set out at the beginning of the first Control Period and based on the actual performance, expected efficiency improvements and other factors prevalent, determine the initial values for the next Control Period

A15: TRUING UP

15.1 The true-up for the Control Period shall be as per clause 6.14 and 6.15 of these Regulations."

4 Fixed Cost of the Plant

4.1 Annual fixed cost for FY 2016-17 and FY 2017-18

- 4.1.1 The fixed cost of the power plant has been approved by JSERC via Case No. 06 of 2016 dated 16th May 2017.
- 4.1.2 As per regulation 8.2 of the JSERC Tarff regulations, the following components of fixed cost have been considered for True-up of the tariff for the power plant:
 - (a) Return on Equity
 - (b) Interest on Long Term Loan
 - (c) Depreciation
 - (d) Interest on Working Capital
 - (e) Operation and Maintenance Expenses
- 4.1.3 For the computation of the fixed components, the Petitioner has considered the principles provided in the JSERC Regulations, 2015. These components have been discussed in detail in the following sections of the petition.

4.2 Return on Equity (ROE)

4.2.1 The Hon'ble Commission in its regulation has considered the pre-tax return on equity at 15.5% of equity capital. The Regulation 7.15 & 7.18 of the JSERC Regulations, 2015 are reproduced below for reference.

"Return on Equity

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

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

Provided the generating company 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 2016-17 to 2020-21 on actual gross income of any financial year."

- 4.2.2 The Petitioner has determined the Return on Equity (RoE) at a rate of 15.5% in accordance with the JSERC Regulations, 2015. As stated in earlier petitions of the Petitioner, the equity has been raised by Rs. 9.50 cr from 16th July 2016 and the total equity of the promoters in unit 1 of the power plants has reached Rs. 101.90 cr. The Board resolution of raising of equity by Rs. 9.50 cr from 16th July 2016 is attached as Annexure 4.
- 4.2.3 In view of the above, for computation of RoE, equity base of Rs. 92.40 Cr has been considered up to 15th July 2016 (106 days) and equity base of Rs. 101.90 Cr has been considered from 16th July 2016 (259 days). Further, it is submitted that the actual tax paid is being claimed separately.

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|--------------------------|--------|------------------------|------------------------|----------------------|----------------------|
| Opening Equity | Rs Cr. | 92.4 | 101.90 | 92.40 | 101.90 |
| Addition | Rs Cr. | 9.50 | - | 9.50 | - |
| Closing Equity | Rs Cr. | 101.90 | 101.90 | 101.90 | 101.90 |
| Rate of Return on Equity | % | 15.50% | 15.50% | 15.50% | 15.50% |
| Applicable MAT Rate | % | 20.39% | 20.39% | - | - |
| Net ROE rate | % | 19.47% | 19.47% | 15.50% | 15.50% |
| Return on Equity | Rs Cr. | 19.30 | 19.84 | 15.37 | 15.79 |

4.3 Interest and Financing charges on Loan Capital

4.3.1 As per Regulation 6.14 of JSERC Tariff Regulations, 2015, the Commission will undertake true-up of various parameters including working capital. The regulation is reproduced below for ready reference.

"True up during Control Period

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

(a) During the control period, the Commission shall undertake true up of parameters except those mentioned in point (b) below in accordance with Clauses 14.1 to 14.3 of this Regulation;

(b)

(c) at the end of the control period -

i.

ii. Depreciation and <u>financing cost</u>, which includes cost of debt including working capital (interest), cost of equity (return) <u>shall be trued up on the basis of audited/</u><u>authenticated information</u> and prudence check by the Commission.

4.3.2 In view of the above, the Petitioner has computed the Interest on long term Loan in line with the actual interest amount paid during FY 2016-17 and FY 2017-18. The Petitioner has considered actual loan portfolio and the repayment shown is considered equal to the actual repayment by the Petitioner in FY 2016-17 and FY 2017-18. The source wise loan details are given in Form F8 as part of the data formats attached as Annexure 5. The table below summarizes the interest on loan for FY 2016-17 and FY 2017-18.

| Particulars | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|--|------------------------|------------------------|----------------------|----------------------|
| Opening Balance for long term Loans | 229.61 | 213.73 | 231.33 | 207.28 |
| Additions during the Year | - | - | 0.10 | 0.08 |
| Repayments during the Year | 15.88 | 15.88 | 24.15 | 30.06 |
| Closing Balance for long term Loans | 213.73 | 197.85 | 207.28 | 177.30 |
| Rate of interest | 12.17% | 12.17% | 12.06% | 11.79% |
| Interest on Loan | 26.98 | 25.04 | 25.63 | 21.96 |
| Finance / Bank Charges | - | - | 0.81 | 0.72 |
| Total interest on loan and finance charges | 26.98 | 25.04 | 26.44 | 22.68 |

Table 5: Computation of Interest on long term Loan in Rs. Cr

4.3.3 The Petitioner submits that a vehicle loan of Rs. 10 lakhs was taken in FY 2016-17 for purchasing a mini bus for staffs for travelling from place of work to their home. Similarly, a vehicle loan of Rs. 7.50 lakhs was taken in FY 2017-18 for commuting of senior personnel from HQ to plant site. The vehicle loan details for FY 2016-17 and FY 2017-18 are attached as Annexure <mark>6</mark> and Annexure <mark>7</mark> respectively.

- 4.3.4 The following details for bank charges and bank interest rates are attached
- Annexure 8 Letters from banks highlighting the interest rates charged to IPL
- Annexure <mark>9</mark> Interest certificates for term loan paid to various banks
- Annexure 10 Details of bank charges paid
- Annexure 11 Month wise interest rate for every bank

4.4 Depreciation

- 4.4.1 The Hon'ble Commission in its Regulations, 2015 has considered following principals for determination of depreciation.
 - **"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;
 - **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:
 - **7.32** 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 up to 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%."

4.4.2 The depreciation has been computed as per the depreciation rates provided in the Appendix-I of the JSERC Tariff Regulations, 2015. The formats attached with the petition provide the details of calculation of depreciation based on the applicable rates and is attached as Annexure 5. The depreciation amount computed is provided in the table below:

Table 6: Computation of Depreciation

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|---|--------|------------------------|------------------------|----------------------|----------------------|
| Opening Gross block | Rs. Cr | 341.24 | 341.24 | 341.24 | 341.82 |
| Additional Capitalization | Rs. Cr | - | - | 0.58 | 0.36 |
| Closing Gross block | Rs. Cr | 341.24 | 341.24 | 341.82 | 342.18 |
| Deprecation due to Additional Capitalization | Rs. Cr | - | - | 0.030 | 0.019 |
| Total Depreciation | Rs. Cr | 15.60 | 15.60 | 15.63 | 15.65 |

- 4.4.1The Petitioner submits that it bought a mini bus of Rs. 10 lakh in FY 2016-17 and a vehicle of Rs. 8 lakhs in FY 2017-18. These vehicles are used for ferry employees from home to plant location. The vehicles were bought by taking a vehicle loan.
- 4.4.2 The Petitioner submits that it has also purchased various assets for Rs. 57.97 lakhs in FY 2016-17 & Rs. 35.70 lakhs in FY 2017-18 which were necessary for efficient and successful operation of the generating station. The purchases of assets were done from internal funds. The details of the assets purchased are attached as Annexure 12.
- 4.4.3 The additional capitalization was done as per Regulation 7.6 (iv) of the JSERC regulations 2015, the same is reproduced below for ready reference:

"7.6 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:

.....

(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;"

- 4.4.4 The depreciation of the vehicles bought has been considered at a rate of 5.28% in line with the depreciation rates provided in the Appendix-I of the JSERC Regulations, 2015.
- 4.4.5 The Petitioner prays to the Hon'ble Commission to allow the depreciation and the additional capitalization.

4.5 Interest on Working Capital

4.5.1 As per Regulation 6.14 of Tariff Regulations, 2015, the Commission will undertake true-up of various parameters including working capital. The regulation is reproduced below for ready reference.

"True up during Control Period

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

(a) During the control period, the Commission shall undertake true up of parameters except those mentioned in point (b) below in accordance with Clauses 14.1 to 14.3 of this Regulation;

(b)

(c) at the end of the control period –

i.

ii. Depreciation and financing cost, which includes cost of debt <u>including working</u> <u>capital (interest)</u>, cost of equity (return) <u>shall be trued up on the basis of audited/</u> <u>authenticated information</u> and prudence check by the Commission.

4.5.2 In view of the above, the Petition has claimed actual interest on working capital as shown in the table below. The details of the interest on working capital are also shown in Form F8 as part of the formats attached as Annexure 5.

Table 7: Actual working capital

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|-----------------------------|---------|------------------------|------------------------|----------------------|----------------------|
| Interest on Working Capital | Rs. Cr. | 5.99 | 6.02 | 7.54 | 8.86 |

- 4.5.3 The Petitioner submits that the actual interest on working capital is more that the approved value as JBVNL has failed to clear the dues to the Petitioner inspite of orders from the Hon'ble Commission (Case No. 26 of 2014), the APTEL (I.A. Nos. 710, 708 & 709 of 2016 dated 4th July 2014) and the Supreme Court of India (M.A. No. 1528 of 2017 in C.A. No. 11105 of 2017 dated 12th March 2018).
- 4.5.4 To tide over the crisis of non-payment of due by JBVNL, the Petitioner had to borrow Rs. 11.47 Cr in FY 2016-17 and further Rs. 21 lakhs in FY 2017-18 to ensure the electricity is supplied to JBVNL. In view of the above, the Petitioner submits that the Hon'ble Commission may allow the actual interest on working capital incurred by the Petitioner.

4.6 Operation and Maintenance Expenses (O&M Expenses)

- 4.6.1 The Petitioner submits that the actual O&M expenses have varied from the number approved by the Hon'ble Commission.
- 4.6.2 Increased quantity of low GCV fuel needed to be sourced leading to more handling charges for fuel & ash: Even at a PLF of 74%, the fuel handled due to change in fuel mix increased by around 5-7% due to low GCV fuel as shown in the table above. The detail of approved quantity of fuel and the actual quantity of fuel handled is shown below.

| Fuel | Approved quantity (MT) At 82.5% PLF | Actual quantity (MT) at around 74% PLF | Variation (MT) | % Variation |
|------------|---|--|----------------|-------------|
| FY 2016-17 | 4,30,136 | 4,14,683 | -15,453 | ~- 4% |
| FY 2017-18 | 4,30,136 | 4,59,381 | 29,245 | ~7% |

Table 8: Details of approved quantity of fuel & actual quantity of fuel handled in FY 2016-17

- 4.6.3 This increased the fuel handling expenses as IPL had to hire extra vehicles and manpower for the same.
- 4.6.4 **Increased quantity of ash produced**: IPL's fuel mix has changed drastically and also the average GCV has decreased substantially, resulting in significant increase in ash being produced and consequent increase in ash handling & disposal expenses and fuel handling expenses
- 4.6.5 The increase in ash handling & disposal expenses is directly linked to ash content of the coal, fuel mix, evacuation and transportation cost besides, meeting the statutory obligations. The table below shows approved and the actual fuel details for IPL's plant.

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|------------------------------|---------|------------------------|------------------------|----------------------|----------------------|
| GCV of Coal | Kcal/Kg | 4,078.68 | 4,078.68 | 3,964.96 | 3,984.79 |
| GCV of Rejects | Kcal/Kg | 1,937.31 | 1,937.31 | 1,976.83 | 2,099.07 |
| GCV of Dolochar | Kcal/Kg | 855.39 | 855.39 | 900.00 | 979.03 |
| Weighted average GCV of fuel | Kcal/Kg | 3,061.19 | 3,061.19 | 2,655.53 | 2,672.59 |
| Coal | % | 54.00% | 54.00% | 34.81% | 31.39% |
| Rejects | % | 43.00% | 43.00% | 63.94% | 66.94% |
| Dolochar | % | 3.00% | 3.00% | 1.26% | 1.67% |

Table 9: Approved and actual fuel details

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- 4.6.6 Thus, the increase in O&M cost is due to increase in the Ash handling & disposal expenses of increased quantity of ash produced
- 4.6.7 We would also like to highlight that the change in fuel mix is due to the delay in payment of dues by JBNVL. IPL could not procure the desired quantity of Coal from CIL, since the payment to CIL is to be made in advance and coal is supplied after 1-2 months. In order to continue the operation of the plant IPL was forced to procure extra quantity of coal rejects, as no advance payment is to be done for procurement of coal rejects.
- 4.6.8 This uncontrollable increase in the O&M charges incurred is due to costs related to handling and disposal of increased quantity of ash produced due to change of fuel mix because of increased use of coal rejects.
- 4.6.9 Dumping of ash generated: Almost all ash is being dumped to CCL RAJRAPPA Mine. This mine is about 14 kms away from the IPL Plant for which a sum of Rs.
 2.43 crore was spent for disposal of 222,512 MT of ash during FY 2016-17 and Rs. 3.42 Crore for disposal of 301,728 MT of ash during FY 2017-18.
- 4.6.10 **Statutory mandate to dispose Ash:** IPL submits that Ash had to be compulsorily handled and disposed by IPL on account of compliance with statutory mandate laid down vide its NOC to operate dated 22.09.2010 by the Jharkhand State Pollution Control Board (attached as Annexure 13).
- 4.6.11 As per the State Pollution Control Board's NOC to operate dated 22.09.2010, IPL has to dispose ash as per MOEF fly ash notification, 1999. The MOEF fly ash notification, 1999 is attached as Annexure 14. IPL had to transport the same to the farther areas involving transportation for distance of around 15 kms away from the project by engaging bulk transport vehicles for transporting the ash to distant low lying areas which resulted in incurrence of ash handling & disposal expenses as discussed above.
- 4.6.12 Allowing Ash disposal expenses to TPCL: IPL submits that JSERC vide its order on Annual Performance Review Petition for FY 2012-13 (including truing-up for FY 2011-12) for Tata Power Company Limited (TPCL) in April 2014, at para 5.73 to 5.75 has allowed Ash disposal expenses over and above the normative O&M expenses. The relevant extracts of the JSERC order for TPCL of April 2014 of Annual Performance Review Petition for FY 2012-13 (including truing-up for FY 2011-12) is attached as Annexure 15. The same is reproduced below for ready

reference:

"5.73 <u>Ash Disposal Expenses:</u> The Commission had Actually approved ash disposal expenses FY 2011-12 in the order dated May 31, 2012, and directed the Petitioner to submit the Statutory Auditor's certificate regarding the same. The Petitioner has submitted a certificate by the Statutory Auditor with this tariff Petition. The Commission therefore approves the Ash Disposal expenses submitted by the Petitioner at Rs 2.30 Cr for Unit 2 and Rs 2.38 Cr for Unit 3."

5.74.....

5.75 Hence the O&M expenses approved for True up of FY 2011-12 and that submitted by the Petitioner are shown in the table below:

| Particulars | Approved by JSERC in Actual true up | Submitted by Petitioner in true up Petition | Approved by JSERC in this order | | |
|-------------------------------------|--|--|------------------------------------|--|--|
| Normative O&M Expenses | 20.57 | 20.58 | 20.57 | | |
| Ash Disposal Expenses | 2.30 | 2.30 | 2.30 | | |
| ARR Publication and Fee Expenses | 0.10 | 0.10 | 0.10 | | |
| HO Allocation | 0.00 | 5.58 | 0.00 | | |
| Total O&M Expenses | 22.98 | | 22.98 | | |

Table 34 O&M expenses of Unit 2 approved for True Up for FY 2011-12 (Rs Cr)

- 4.6.13 The Petitioner submits that the Commission may allow ash handling and disposal expenses to IPL to ensure that the same treatment is meted out to both TPCL and IPL.
- 4.6.14 APTEL's judgement on allowing handling charges due to uncontrolled increase in the ash content of fuel and increase in haulage of ash to the disposal area: The Hon'ble APTEL in Appeal No. 244 of 2012 between DPSCL vs WBERC & others, at para 22 has clearly ruled that the variation in Ash handling charges maybe allowed due to any uncontrolled increase in the ash content of fuel and any increase in haulage of ash to the disposal area. The relevant extracts of the APTEL Appeal No. 244 of 2012 is attached as Annexure 16. The para 22 of the Appeal No. 244 of 2012 of the APTEL is reproduced below:

"22. As far as Ash Handling expenses are concerned, the same are dependent mainly upon the quantity of ash handled which in turn is dependent upon actual quantity of coal consumption and ash content of coal and the distance of ash disposal area from the main plant. Therefore, while computing the Ash Handling charges, these factors have to be considered. Thus, while examining the Ash Handling expenses in APR/true up the State Commission can consider the actual quantity of coal vis-à-vis the estimated quantity of coal based on the target

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<u>generation, any abnormal increase in the ash content of coal</u> and any increase in haulage of ash to the disposal area due to change in disposal area during the year in question <u>and accordingly allow variation in Ash Handling charges</u> if deemed necessary."

- 4.6.15 It is clear from the above judgement of the APTEL, that the variation in ash handling charges maybe allowed due to any uncontrolled increase in the ash content of fuel and any increase in haulage of ash to the disposal area. In view of the APTEL order, the Petitioner submits that the increase in ash handling and disposal charges may be allowed.
- 4.6.16 The overall impact of change in increased fuel handling and Ash handling and disposal was increase of around Rs. 4 Cr in FY 2016-17 and FY 2017-18 on O&M expenses. Out of these, Rs. 2.43 crore was spent for disposal of 222,512 MT of ash during 2016-17 and Rs. 3.42 Crore for disposal of 301,728 MT of ash during FY 2017-18. The remaining increase in O&M is due to increase in fuel and ash handling expenses incurred by the Petitioner as explained above.
- 4.6.17 A technical consultant report highlighting the details of ash disposal and ash transportation cost like quantity of ash transported, dumping location, cost of transportation, distance from plant is attached as Annexure 17.
- 4.6.18 The comparison of approved and actual O&M expenses for FY 2016-17 and FY 2017-18 are shown in the table below:

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|--|---------|------------------------|------------------------|----------------------|----------------------|
| Normative O&M expenses | Rs. Cr. | 17.01 | 18.08 | 17.01 | 18.08 |
| Ash & Fuel Disposal and handling Expenses | Rs. Cr. | - | - | 3.60 | 3.82 |
| Total Expenses | Rs. Cr. | 17.01 | 18.08 | 20.61 | 21.90 |

Table 10: O&M expenses

4.6.19 In view of the above, IPL prays to JSERC to allow the actual O&M expenses of Rs. 20.61 Cr for FY 2016-17 and Rs. 21.90 Cr for FY 2017-18.

4.7 Water charges

4.7.1 IPL submits that as per Regulation 7.46 of the Tariff Regulations, 2015, Water charges are to be allowed separately for thermal power plants. The regulation is reproduced below for ready reference.

"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:"

- 4.7.2 The Water charges paid by IPL to the concerned state authorities for use of water in the power plant are Rs. 0.69 crore for FY 2016-17 and Rs. 1.39 crore for FY 2017-18. Water related charges were not considered by JSERC while approving the normative O&M expenses for FY 2016-17 and FY 2017-18. The details for the water charges are attached as Annexure 18 and Annexure 19 for FY 2016-17 and FY 2017-18 respectively. The details of type of plant, type of cooling water system etc. as required under regulation 7.46 are attached as Annexure 20.
- 4.7.3 The Petitioner prays to the Hon'ble Commission to approve Water charges of Rs. 0.69 Crore and Rs. 1.39 crore for FY 2016-17 and FY 2017-18 respectively in line with the JSERC tariff regulations 2015.

4.8 Force Majeure condition in September 2016

- 4.8.1 The Petitioner submits that it faced a Force Majeure condition in September 2016 as there was civil commotion and riot outside the plant. No generation of power could be undertaken in September 2016 as the intake water pipelines, generator etc. were damaged by miscreants due to the civil commotion and riot. The Petitioner intimated about the same to JBVNL and SLDC via email dated 30th August 2016, attached as Annexure 21. We also submitted a letter to JBVNL on 31st August 2016 under Article 9 of the PPA intimating about the Force Majeure condition of civil commotion and riot outside the plant, letter attached as Annexure 22. Copies of the FIR report and newspaper articles about the civil commotion and riot are attached as Annexure 23 and Annexure 24 respectively.
- 4.8.2 In view of the above, we requested the SLDC via our letter Ref No. IPL/SLDC/2017-18/188 dated 22nd August 2017 (attached as Annexure 25) to provide us with deemed availability for the month of September 2016 as per the relevant rules and regulations of the Hon'ble Commission. We requested SLDC to provide us deemed availability for September 2016 equal to the average availability achieved in the 11 months of FY 2016-17, which is equal to

83.79%. However, SLDC has failed to respond to the email or the letter submitted by the Petitioner and has issued Availability certificate for FY 2016-17 considering zero availability during September 2016. The SLDC plant availability certificate for FY 2016-17 is attached as Annexure 26.

4.8.3 We submit that as per Article 9 of the PPA signed between IPL and JBVNL (erstwhile JSEB), a civil commotion or riot is considered a Force Majeure event. The relevant article of the PPA is reproduced below for ready reference.

"ARTICLE 9

FORCE MAJEURE

Neither party shall be liable for any claim for any loss or damage whatsoever arising out of failure to carry out the terms of the Agreement to the extent that such a failure is due to force majeure events such as war, rebellion, mutiny, <u>civil commotion, riot</u>, strike lock-out, forces of nature, accident, act of God or <u>any other such reason beyond the control of concerned party</u>. Any party claiming the benefit of this clause shall reasonably satisfy the other party of the existence of such an event and give written notice within a reasonable time to the o her to this effect. Generation/drawal of power shall be started as soon as practicable by the parties concerned after such eventuality has come to an end or ceased to exist."

4.8.4 As per regulation 6.13 of the JSERC tariff regulations 2015, Force Majeure condition is considered as an uncontrollable parameter. The regulation is reproduced below for ready reference

"6.13 The Commission shall carry out truing up of tariff of generating station based on the performance of following Uncontrollable parameters:

- (a) <u>Force Majeure</u>;
- (b) Change in Law; and
- (c) Primary Fuel Cost"
- 4.8.5 Thus, the civil commotion and riot outside the Petitioner's plant was an uncontrollable and a Force Majeure event.

4.9 Total Fixed Cost

4.9.1 The recovery of capacity charges is to be done as per regulation 8.10 to 8.11 of the JSERC regulations, 2015. The same is extracted below for ready reference.

"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 on 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 and 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."

- 4.9.2 The Petitioner has considered availability for 11 months for FY 2016-17, due to Force Majeure condition prevailing in September 2016 as discussed above. The PAF achieved in 11 months for FY 2016-17 was 83.79%. For FY 2017-18 the PAF achieved was 82.89%. Thus, the Petitioner has achieved availability higher than the normative availability of 82.5% as set by the Hon'ble Commission for FY 2016-17 and FY 2017-18. The SLDC plant availability certificates for FY 2016-17 and FY 2017-18 are attached as Annexure 26 and Annexure 27 respectively.
- 4.9.3 Based on the above discussion, the total fixed charges FY 2016-17 and FY 2017-18 has been computed. The Hon'ble Commission is requested to approve the fixed charges as discussed in the table below:

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017- 18 Actual |
|-----------------------------|----------|------------------------|------------------------|----------------------|-----------------------|
| Depreciation | Rs Crore | 15.60 | 15.60 | 15.63 | 15.65 |
| Interest on Loan | Rs Crore | 24.98 | 23.08 | 26.44 | 22.68 |
| Return on Equity | Rs Crore | 19.30 | 19.84 | 15.37 | 15.79 |
| Interest on Working Capital | Rs Crore | 5.99 | 6.02 | 7.54 | 8.86 |
| O&M Expenses | Rs Crore | 17.01 | 18.08 | 20.61 | 21.90 |
| Water charges | Rs Crore | - | - | 0.69 | 1.39 |
| Fixed Cost | Rs Crore | 82.88 | 82.62 | 86.28 | 86.27 |

Table 11 : Computation of Fixed cost

5 Performance targets

5.1 Regulatory provisions

5.1.1 The Hon'ble Commission had set performance targets for controllable parameters under Tariff Regulations 2015. The regulation is reproduced below for ready reference

Performance Targets

6.11 The Commission shall set targets for each year of the Control Period for the items or parameters that are deemed to be "controllable" and which includes:

(a) Gross Station Heat Rate;

(b) Normative Annual Plant Availability Factor

(c) Auxiliary Energy Consumption;

(d) Secondary Fuel Oil Consumption;

(e) Operation and maintenance Expenses;

(f) Financing cost which includes cost of debt (interest), cost of equity (return); and

(g) Depreciation

6.12 Any financial loss on account of underperformance on targets for parameters specified in clause 6.11 (a) to (e) of these Regulations is not recoverable through tariffs. Similarly, any financial gain on account of over-performance with respect to these parameters is to the Generating Company's benefit and shall not be adjusted in Tariffs.

6.13 The Commission shall carry out truing up of tariff of generating station based on the performance of following Uncontrollable parameters:

(a) Force Majeure;

(b) Change in Law; and

(c) Primary Fuel Cost."

5.1.2 The Month wise data of all operational parameters for FY 2016-17 and FY 2017 is attached as Annexure 28 and Annexure 29 respectively. The actual performance on these controllable parameters is discussed below:

5.2 Gross Station Heat Rate (SHR)

5.2.1 The Hon'ble Commission had set a SHR target of 2902 kCal/kWh for both FY 2016-17 and FY 2017-18 as per its order in Case No. 06 and 11 of 2016 dated 16th May 2017. The actual SHR values area attached as part of submission of operation parameters as attached to the Petition. However, as SHR is a controllable parameter as per regulation 6.11 of the JSERC Tariff Regulations 2015, normative values have been considered for FY 2016-17 and FY 2017-18. The same is shown in the table below.

Table 12: Gross Station heat rate

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Normative | FY 2017-18 Normative |
|-------------------------|----------|------------------------|------------------------|-------------------------|-------------------------|
| Gross Station heat rate | kCal/kWh | 2902 | 2902 | 2902 | 2902 |

5.3 Normative Annual Plant Availability Factor (NAPAF)

5.3.1 The Hon'ble Commission had set a NAPAF target of 82.5% for both FY 2016-17 and FY 2017-18 as per its order in Case No. 06 and 11 of 2016 dated 16th May 2017. The Petitioner has considered availability for 11 months for FY 2016-17, due to Force Majeure condition prevailing in September 2016 as discussed above. The PAF achieved in 11 months for FY 2016-17 was 83.79%. For FY 2017-18 the PAF achieved was 82.89%.

5.3.2 The approved and actual numbers are shown in the table below.

Table 13: Normative Annual Plant Availability Factor

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|---|------|------------------------|------------------------|----------------------|----------------------|
| Normative Annual Plant Availability Factor | % | 82.50% | 82.50% | 83.79% | 82.89% |

5.4 Auxiliary Energy Consumption

5.4.1 The Hon'ble Commission had set an Auxiliary consumption target of 10.5% for both FY 2016-17 and FY 2017-18 as per its order in Case No. 06 and 11 of 2016 dated 16th May 2017. As CFBC plants technology wise have higher auxiliary consumption, the auxiliary consumption of the Petitioner's plant has been high since commissioning of the plant. The Auxiliary consumption is 11.26% for FY 2016-17 and 10.95% for FY 2017-18. The approved and actual numbers are shown in the table below.

Table 14: Auxiliary energy consumption

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|------------------------------|------|------------------------|------------------------|----------------------|----------------------|
| Auxiliary energy consumption | % | 10.50% | 10.50% | 11.26% | 10.95% |

- 5.4.2 As CFBC plants technology wise have higher auxiliary consumption, the Auxiliary consumption of the Petitioner's plant has been high since commissioning of the plant. Due to the above, the auxiliary consumption is higher than the approved numbers due to high ash production, transmission loss etc.
- 5.4.3 The transmission loss being borne by the petitioner is from the generation point at ex-bus to the delivery point at the substation. This transmission losses are included by the Petitioner in the auxiliary consumption shown above. As these transmission losses are due laws of physics and are uncontrollable in nature, thus, the petitioner requests the commission to approve the same. The figure below depicts the same.

Figure 2: Transmission loss faced by the Petitioner



5.4.4 The Petitioner requests the Hon'ble Commission to approve actual auxiliary consumption as shown in the table above. The Petitioner submits the recommendations of CEA to substantiate the claim for approval of higher auxiliary consumption than the approved figures. The '*Recommendations on Operation Norms for Thermal Power Stations for Tariff Period beginning 1st April, 2009*', of CEA is reproduced below:

"14.6 The <u>CFBC boilers involve higher auxiliary consumption due to higher</u> <u>pressure drops and consequently higher fan power as compared to the pulverized</u> <u>fuel fired units</u>. 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 <u>CFBC units entail higher auxiliary energy</u> <u>consumption of 0.7% to 1%</u>. 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. Thus, an additional auxiliary energy consumption of 1.0% may be allowed to NLC stations with CFBC boilers."

- 5.4.5 It is evident from the above that the CEA's assessment was in regard to the CFBC technology and therefore the actual auxiliary consumption for the generating station of IPL should also be allowed.
- 5.4.6 It is also to be noted that following Auxiliary Consumption has been allowed by various Commissions on CFBC technology:
 - i. In case of Raj West Power Limited, RERC has allowed an Auxiliary Consumption of 11.5%
 - ii. 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
 - iii. In case of Bajaj Energy Pvt Ltd, UPERC has allowed an Auxiliary Consumption of 11.5% during stabilization and 11% post stabilization period.
- 5.4.7 The summary of other CFBC plants where similar orders has been passed by the respective Commission has been summarized at Annexure 30.
- 5.4.8 In view of the above, the Petitioner's prays to the Hon'ble commission to approve the actual auxiliary consumption for FY 2016-17 and FY 2017-18.

5.5 Secondary fuel oil Consumption

5.5.1 The Hon'ble Commission had set secondary fuel oil consumption target of 1 ml/kWh for both FY 2016-17 and FY 2017-18 as per its order in Case No. 06 and 11 of 2016 dated 16th May 2017. As secondary fuel oil consumption is a controllable parameter as per the JSERC Tariff Regulations 2015, the normative value has been considered for FY 2016-17 and FY 2017-18. The same is shown in the table below.

Table 15 : Secondary fuel oil Consumption

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Normative | FY 2017-18 Normative |
|--------------------------------|---------|------------------------|------------------------|-------------------------|-------------------------|
| Secondary fuel oil consumption | ml/ kWh | 1.00 | 1.00 | 1.00 | 1.00 |

6 Energy Charges

6.1 Fuel Price and Calorific Value

- 6.1.1 As IPL has no fuel linkage, it is procuring fuel from various sources available like:
 - E –Auction CIL coal
 - Coal from the forward auctions
 - Washery Rejects of CCL
 - Rejects from Tata Steel
 - Dolochar from the open market
- 6.1.2 Based on the availability of coal input the blending ratio of Coal, Dolochar and Coal rejects has changed significantly from the approved figures. The transit loss has been considered at a normative value of 0.8% as per Regulation 8.21 of the Tariff Regulations 2015.

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|--|---------|------------------------|------------------------|----------------------|----------------------|
| GCV of Coal | Kcal/Kg | 4,078.68 | 4,078.68 | 3,964.96 | 3,984.79 |
| GCV of Rejects | Kcal/Kg | 1,937.31 | 1,937.31 | 1,976.83 | 2,099.07 |
| GCV of Dolochar | Kcal/Kg | 855.39 | 855.39 | 900.00 | 979.03 |
| Weighted average GCV of fuel | Kcal/Kg | 3,061.19 | 3,061.19 | 2,655.53 | 2,672.59 |
| Coal | % | 54.00% | 54.00% | 34.81% | 31.39% |
| Rejects | % | 43.00% | 43.00% | 63.94% | 66.94% |
| Dolochar | % | 3.00% | 3.00% | 1.26% | 1.67% |
| Fuel mix | % | 54:43:3 | 54:43:3 | 35:64:1 | 31:67:2 |
| Price of Coal | Rs./MT | 2,830.32 | 2,830.32 | 2,793.23 | 2,615.59 |
| Price of Rejects | Rs./MT | 851.02 | 851.02 | 1,067.57 | 1,080.28 |
| Price of Dolochar | Rs./MT | 543.40 | 543.40 | 770.18 | 618.62 |
| Weighted average Price of Primary Fuel | Rs./MT | 1,910.61 | 1,910.61 | 1,664.63 | 1,554.54 |
| Transit Loss considered | % | 0.8% | 0.8% | 0.8% | 0.8% |
| Weighted average Price of Primary Fuel after transit loss | Rs/ MT | 1,926.02 | 1,926.02 | 1,678.06 | 1,567.08 |

Table 16: Approved and actual fuel details

6.1.3 The Petitioner submits that as can be seen from the table above, the primary fuel-mix, GCV of the primary fuel-mix and its price have significantly varied in actual than approved by the Commission.

- 6.1.4 We would also like to highlight that the change in fuel mix is due to the delay in payment of dues by JBNVL. IPL could not procure the desired quantity of Coal from CIL, since the payment to CIL is to be made in advance and coal is supplied after 1-2 months. In order to continue the operation of the plant IPL was forced to procure extra quantity of coal rejects, as no advance payment is to be done for procurement of coal rejects.
- 6.1.5 The Petitioner has strived hard to ensure that the fuel mix is economical and below the price level fixed by the Hon'ble Commission.
- 6.1.6 The auditor certificate with following details for primary fuel bought are attached as Annexure 31 Fuel wise monthly details of -
 - Quantity as received,
 - Quantity as fired in the boiler
 - Gross Calorific Value (GCV)
 - Price separately showing Base cost of coal, Royalty, Taxes and duties, Transport cost, Clean energy cess and transit loss

6.2 Primary fuel cost

6.2.1 As per the actual fuel cost discussed in the above paragraphs, the primary fuel costs has been computed for the generating stations as provided in the table below.

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|---|----------|------------------------|------------------------|----------------------|----------------------|
| Capacity | MW | 63 | 63 | 63 | 63 |
| Plant Load Factor | % | 82.50 | 82.50 | 74.37 | 74.15 |
| Gross units generated | MU | 455.30 | 455.30 | 410.43 | 409.21 |
| Auxiliary consumption | MU | 47.81 | 47.81 | 46.21 | 44.81 |
| Auxiliary consumption | % | 10.50 | 10.50 | 11.26 | 10.95 |
| Net units Generated | MU | 407.49 | 407.49 | 364.22 | 364.40 |
| Weighted average GCV of primary fuel | kCal/Kg. | 3,061 | 3,061 | 2,655 | 2,672 |
| Weighted average cost of primary fuel after Transit loss | Rs/ MT | 1,926 | 1,926 | 1,678 | 1,567 |
| Primary Fuel Cost | Rs. Cr | 82.85 | 82.85 | 75.01 | 69.40 |

Table 17: Computation of total Variable Charge

6.2.2 The Petitioner requests the Hon'ble Commission to approve the variable charge for FY 2016-17 and FY 2017-18 as submitted above based on the actual numbers.
6.3 Secondary fuel oil cost

6.3.1 As per Regulation 8.3 of the JSERC Tariff Regulations 2015, the cost of secondary fuel oil is to be considered as part of Energy charges. The secondary fuel oil cost has been computed considering normative secondary fuel oil consumption of 1.00 ml/kWh. The computation is as provided in the table below:

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|--------------------------------|------------|------------------------|------------------------|----------------------|----------------------|
| Gross Units Generated | MUs | 455.30 | 455.30 | 410.43 | 409.21 |
| Secondary fuel Oil Consumption | ml/Kwh | 1.00 | 1.00 | 1.00 | 1.00 |
| GCV of oil | kCal/litre | 10,000 | 10,000 | 10,000 | 10,000 |
| Oil consumption | KL | 455 | 455 | 410.43 | 409.21 |
| Base Price of Oil | Rs / KL | 47,000 | 47,000 | 57,490 | 61,237 |
| Cost of secondary fuel oil | Rs Crore | 2.14 | 2.14 | 2.36 | 2.51 |

Table 18: Computation of Secondary fuel oil cost

6.3.2 The auditor certificate and sample bills for secondary fuel oil bought and consumed are attached as Annexure 32.

6.4 Computation of Energy Charge

6.4.1 As per the primary and secondary fuel cost discussed in the above paragraphs, the energy charge has been computed for the generating stations as provided in the table below.

| Table 19: Computation | of Energy Charge |
|------------------------------|------------------|
|------------------------------|------------------|

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|------------------------------|----------|------------------------|------------------------|----------------------|----------------------|
| Primary Fuel Cost | Rs. Cr | 82.85 | 82.85 | 75.01 | 69.40 |
| Secondary Fuel Cost | Rs. Cr | 2.14 | 2.14 | 2.36 | 2.51 |
| Total Energy charge | Rs. Cr | 84.99 | 84.99 | 77.37 | 71.91 |
| Net units Generated | MU | 407.49 | 407.49 | 364.22 | 364.40 |
| Total Energy charge per unit | Rs./ kWh | 2.09 | 2.09 | 2.12 | 1.97 |

6.4.2 The Petitioner requests the Hon'ble Commission to approve the total Energy charges for FY 2016-17 and FY 2017-18 as submitted above based on the actual numbers.

7 Other Expenses

7.1 Application Fee and Publication Expenses

7.1.1 As per Regulation 11.7 of the Tariff Regulations, 2015 the expenses incurred as application fees and publication expenses for approval of tariff, may be allowed to be recovered by IPL directly from JBVNL. The regulation is reproduced below for ready reference.

"Application fee and the publication expenses

11.7 The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the Generating Company directly from the Beneficiaries."

- 7.1.2 The Petitioner has incurred Rs. 16 lakhs as filling fees for filing of tariff determination petition for the period FY 2016-17 to FY 2020-21. The copy of the receipt of Rs. 16 Lakhs is attached as Annexure 33.
- 7.1.3 The Petitioner also submits that JSERC vide its order on Annual Performance Review Petition for FY 2012-13 (including truing-up for FY 2011-12) for Tata Power Company Limited (TPCL) in April 2014, at para 5.73 to 5.75 has allowed ARR publication and fees expenses to TPCL. The JSERC order for TPCL of April 2014 of Annual Performance Review Petition for FY 2012-13 (including truingup for FY 2011-12) is attached as Annexure 15. The same is reproduced below for ready reference

"5.74 <u>ARR Publication and Fee Expenses</u>: The Commission approves Rs 0.10 Cr for Unit 2 and Unit 3 for truing up of FY 2011-12

5.75 Hence the O&M expenses approved for True up of FY 2011-12 and that submitted by the Petitioner are shown in the table below:"

| Particulars | Approved by JSERC in Actual true up | Submitted by Petitioner in true up Petition | Approved by JSERC in this order |
|-------------------------------------|--|--|---------------------------------|
| Normative O&M Expenses | 20.57 | 20.58 | 20.57 |
| Ash Disposal Expenses | 2.30 | 2.30 | 2.30 |
| ARR Publication and Fee Expenses | 0.10 | 0.10 | 0.10 |
| HO Allocation | 0.00 | 5.58 | 0.00 |
| Total O&M Expenses | 22.98 | 28.56 | 22.98 |

Table 34 O&M expenses of Unit 2 approved for True Up for FY 2011-12 (Rs Cr)

- 7.1.4 The Petitioner submits that the Commission may allow application fees and publication expenses to IPL to ensure that the same treatment is meted out to both TPCL and IPL.
- 7.1.5 In view of the above regulations and the order of the Hon'ble Commission in TPCL case, the Petitioner prays to the Hon'ble Commission to allow Application fee and Publication expenses of Rs. 16 lakhs as incurred by the Petitioner.

7.2 Actual Tax paid

7.2.1 The petitioner has not grossed up the RoE with the tax and the Petitioner requests the Hon'ble Commission to allow tax as actually paid by the Petitioner as per Regulation 7.18 of the Tariff Regulations 2015.

Table 20: Actual tax paid for FY 2016-17 and FY 2017-18

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|-----------------|---------|------------------------|------------------------|----------------------|----------------------|
| Actual tax paid | Rs. Cr. | - | - | 1.98 | 5.83 |

7.3 Total Other expenses

7.3.1 A snap shot of total Other expenses for True-up of FY 2016-17 and FY 2017-18 is provided below:

Table 21 : Other expenses

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|----------------------------------|----------|------------------------|------------------------|----------------------|----------------------|
| ARR Publication and Fee Expenses | Rs Crore | - | - | 0.16 | - |
| Tax Paid | Rs Crore | - | - | 1.98 | 5.83 |
| Total Other Expenses | Rs Crore | - | - | 2.14 | 5.83 |

8 Summary of submissions for True-up of FY 2016-17 and FY 2017-18

8.1.1 The following section provides the summary of tariff submitted by the Petitioner for True-up of FY 2016-17 and FY 2017-18.

8.2 Annual Fixed Cost

8.2.1 A snap shot of the Annual Fixed cost for the True-up of FY 2016-17 and FY 2017-18 is provided below:

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|-----------------------------|----------|------------------------|------------------------|----------------------|----------------------|
| Depreciation | Rs Crore | 15.60 | 15.60 | 15.63 | 15.65 |
| Interest on Loan | Rs Crore | 24.98 | 23.08 | 26.44 | 22.68 |
| Return on Equity | Rs Crore | 19.30 | 19.84 | 15.37 | 15.79 |
| Interest on Working Capital | Rs Crore | 5.99 | 6.02 | 7.54 | 8.86 |
| O&M Expenses | Rs Crore | 17.01 | 18.08 | 20.61 | 21.90 |
| Water charges | Rs Crore | - | - | 0.69 | 1.39 |
| Fixed Cost | Rs Crore | 82.88 | 82.62 | 86.28 | 86.27 |

Table 22 : Computation of Fixed cost

8.3 Energy Charges

8.3.1 A snap shot of the Energy charges for True-up of FY 2016-17 and FY 2017-18 is provided below:

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|---|----------|------------------------|------------------------|----------------------|----------------------|
| Capacity | MW | 63 | 63 | 63 | 63 |
| Plant Load Factor | % | 82.50 | 82.50 | 74.37 | 74.15 |
| Gross units generated | MU | 455.30 | 455.30 | 410.43 | 409.21 |
| Auxiliary consumption | MU | 47.81 | 47.81 | 46.21 | 44.81 |
| Auxiliary consumption | % | 10.50 | 10.50 | 11.26 | 10.95 |
| Net units Generated | MU | 407.49 | 407.49 | 364.22 | 364.40 |
| Specific Fuel Oil Consumption | ml/kwh | 1.00 | 1.00 | 1.00 | 1.00 |
| Rate of Oil | Rs./KL | 47,000 | 47,000 | 57,490 | 61,237 |
| Weighted average GCV of primary fuel | kCal/Kg. | 3,061 | 3,061 | 2,656 | 2,672 |
| Weighted average cost of primary fuel after Transit loss | Rs/ MT | 1,926.02 | 1,926.02 | 1,678 | 1,567 |
| Primary Fuel Cost | Rs. Cr | 82.85 | 82.85 | 75.01 | 69.40 |
| Secondary Fuel Cost | Rs. Cr | 2.14 | 2.14 | 2.36 | 2.51 |
| Total Energy charges | Rs. Cr | 84.99 | 84.99 | 77.37 | 71.90 |
| Per unit Energy charges | Rs./ kWh | 2.09 | 2.09 | 2.12 | 1.97 |

Table 23: Computation of Variable Charge

8.3.2 The Petitioner requests the Hon'ble Commission to approve the Energy charges for FY 2016-17 and FY 2017-18 as submitted above based on the actual numbers.

8.4 Other Expenses

8.4.1 A snap shot of other expenses for True-up of FY 2016-17 and FY 2017-18 is provided below:

Table 24 : Other expenses

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|----------------------------------|----------|------------------------|------------------------|----------------------|----------------------|
| ARR Publication and Fee Expenses | Rs Crore | - | - | 0.16 | - |
| Tax Paid | Rs Crore | - | - | 1.98 | 5.83 |
| Total Other Expenses | Rs Crore | - | - | 2.14 | 5.83 |

8.5 Net Annual Revenue Requirement

8.5.1 The Petitioner requests the Hon'ble Commission to approve the tariff for supply of electricity to JBVNL as summarised in the Table below for the true-up of FY 2016-17 and FY 2017-18.

Table 25 : Net Annual Revenue Requirement

| Particulars | Unit | FY 2016-17 Approved | FY 2017-18 Approved | FY 2016-17 Actual | FY 2017-18 Actual |
|--------------------------------|----------|------------------------|------------------------|----------------------|----------------------|
| Annual fixed cost | Rs Crore | 82.88 | 82.62 | 86.28 | 86.27 |
| Total Energy Charges | Rs Crore | 84.99 | 84.99 | 77.37 | 71.90 |
| Total Other Expenses | Rs Crore | - | - | 2.14 | 5.83 |
| Net Annual Revenue Requirement | Rs Crore | 167.87 | 167.61 | 165.78 | 164.01 |

8.6 Adjustment of Deficit Amount

8.6.1 The Petitioner submits that the tariff already recovered from JBVNL is less than the tariff approved by the Commission vide its order in Case No. 06 and 11 of 2016 dated 16th May 2017. In view of the above, the Petitioner is entitled to recover the under-recovered amount from JBVNL as per Regulation 6.17 & 6.18 of the JSERC tariff regulations, 2015. The regulations are reproduced below for ready reference.

"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 shall recover the under-recovered amount from the beneficiaries, in accordance with 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."

8.6.2 As discussed above, the Petitioner requests the Hon'ble Commission to approve the recovery from JBVNL as per regulation 6.18 of JSERC tariff regulations, 2015. Details of invoices raised to JBVNL during FY 2016-17 and FY 2017-18 are attached as Annexure 34. The under-recovered amount and the calculation as per regulation 6.18 of JSERC tariff regulations, 2015 is shown in the table below:

| Particulars | Unit | FY 2016-17 Actual | FY 2017-18 Actual |
|---|----------|----------------------|----------------------|
| Annual fixed cost | Rs Crore | 86.28 | 86.27 |
| Total Energy Charges | Rs Crore | 77.37 | 71.90 |
| Total Other Expenses | Rs Crore | 2.14 | 5.83 |
| Net Annual Revenue Requirement | Rs Crore | 165.78 | 164.01 |
| Total amount billed by IPL to JBVNL | Rs Crore | 152.40 | 154.15 |
| Gap for the year | Rs Crore | -13.38 | -9.86 |
| Bank rate for calculating carrying cost | % | 17.55% | 17.35% |
| Carrying cost | Rs Crore | 2.35 | 1.71 |
| Total amount to be recovered from JBVNL | Rs Crore | 15.73 | 11.57 |

| Table 26 : Adjustment | of Deficit amount |
|-----------------------|-------------------|
|-----------------------|-------------------|

8.6.3 The Bank rate for calculating carrying cost has been considered as per JSERC tariff regulations 2015. The same is reproduced below for ready reference

"2.1 (8) "Bank Rate" means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;"

- 8.6.4 The base rate for State Bank of India has been considered as prevailing on 1st April 2016 and 1st April 2017 for FY 2016-17 and FY 2017-18 respectively.
- 8.6.5 Overall, the Petitioner prays to the Hon'ble Commission to approve the numbers for the True-up of FY 2016-17 and FY 2017-18 as discussed above.

9 Compliance of Directives

9.1 Directives as per the Hon'ble Commissions order in Case No.: 06 of 2017

| Sr. No. | Directive | Response |
|---------|--|---|
| 1. | Data on operational performance parameters7.2 The Petitioner is directed to submit Month wise data of all operational parameters to the Commission with subsequent petitions. | The Month wise data of all operational parameters for FY 2016-17 and FY 2017-18 is attached as Annexure <mark>28</mark> and <mark>29</mark> respectively. |
| 2. | 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. | The Petitioner submits that it has strived hard to ensure that the fuel mix is economical and below the price level fixed by the Hon'ble Commission. Hence for FY 2016-17 and FY 2017-18 the actual price of fuel is below the approved price level fixed by the Hon'ble Commission. The same has been discussed while computation of Energy Charges above. Towards a step for strengthening of Fuel procurement, the Petitioner submits that under the SHAKTI coal procurement scheme of the Govt. of India, IPL was won a bid for supply of coal. From FY 2018-19, IPL expects to receive 67,400 MT of coal from CCL coalfields of CIL. The provisional LOI issued by CCL to IPL is attached as Annexure 35. |
| 3. | 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 | The Petitioner submits that it has already commissioned a techno commercial study from an independent consultant; the copy of the study was submitted to JSERC by IPL via email dated 5 th April 2018. The copy of the email and study of the independent consultant are attached as Annexure 36 and Annexure 37 respectively. As per the independent consultant's report, the common cost for the unit 2 of the |

| Sr. No. | Directive | Response | |
|---------|--|--|--|
| | etc. A mechanism should also be developed to segregate the common costs between the units and propose allocation to Unit 1. | Petitioner's plant comes out to be Rs. 8.56 Cr. | |
| | 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. | | |
| 4. | 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 | The Petitioner submits that it has done its best to remove any data discrepancies in the present petition. We have also ensured that all required data and proofs in support of its claims are made a part of this Petition. | |
| | were highlighted throughout the tariff order and provide all data and proofs along with next the Petition. | | |
| 5. | 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. | The data for source wise Transit loss for FY 2016-17 and FY 2017-18 are attached as Annexure 38. | |

10 Prayers

10.1 IPL has the following prayers before JSERC

- a) Condone the delay in filing of True-up Petition for FY 2016-17
- b) Accept the petition for True-up of FY 2016-17 and for FY 2017-18
- c) Approve the numbers for the True-up of FY 2016-17 and FY 2017-18 as discussed in this Petition
- d) Condone any inadvertent omissions/ errors/ rounding off differences/ shortcomings and permit IPL to add/ change/ modify this filing and make further submission as may be at a future date; and
- e) Pass such further and other orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

Annexures

Annexure No. 1 – IPL letter dated 5th June 2018 seeking extension of time of 3 months for filling of the Petitions for True-up of FY 2016-17 and FY 2017-18

Annexure No. 2 – Annual accounts for FY 2016-17

Annexure No. 3 – Annual accounts for FY 2017-18

Annexure No. 4 – Board resolution of raising of equity by Rs. 9.50 cr from 16th July 2016 Annexure No. 5 – Data formats as per JSERC Tariff Regulations 2015

Annexure No. 6 – Vehicle loan details for FY 2016-17

Annexure No. 8 – Letters from banks highlighting the interest rates charged to IPL

Annexure No. 9 – Interest certificates for term loan paid to various banks

Annexure No. 10 – Details of bank charges paid

Annexure No. 11 – Month wise interest rate for every bank

Annexure No. 12 – Details for assets bought in FY 2016-17 & FY 2017-18

Annexure No. 13 – IPL's NOC to operate dated 22.09.2010 by the Jharkhand State Pollution Control Board Annexure No. 14 – MOEF fly ash notification, 1999

Annexure No. 15 – JSERC order for TPCL of April 2014 of Annual Performance Review Petition for FY 2012-13 (including truing-up for FY 2011-12)

Annexure No. 16 – APTEL Appeal No. 244 of 2012

Annexure No. 17 – Technical consultant's report on Ash Generation & disposal.

Annexure No. 18 – Water charges details for FY 2016-17

Annexure No. 19 – Water charges details for FY 2017-18

Annexure No. 19 – Water charges details for FY 2017-18

Annexure No. 20 – Details of type of plant, type of cooling water system etc.

Annexure No. 21 – Copy of email dated 30th August 2016 to SLDC and JBVNL intimating about the civil commotion and riot outside the plant

Annexure No. 22 – Letter to JBVNL on 31st August 2016 under Article 9 of the PPA intimating about the Force Majeure

Annexure No. 23 – Copy of FIR about the civil commotion and riot outside the plant

Annexure No. 24 – Newspaper clipping about the civil commotion and riot outside the plant Annexure No. 25 – Letter to SLDC dated 22nd August 2017 to provide deemed availability for September 2016

Annexure No. 26 – SLDC availability certificate for FY 2016-17

Annexure No. 27 – SLDC availability certificate for FY 2017-18

Annexure No. 28 – Operational parameters for FY 2016-17

Annexure No. 29 – Operational parameters for FY 2017-18

Annexure No. 30 – Summary of order of other Commission on auxiliary consumption for CFBC plants

| Parameter | RERC | GERC | UPERC |
|----------------------|--------------------|---|---|
| Туре | Lignite based | Lignite based | Coal based |
| Entity | Raj West Power Ltd | Gujarat Industries Power Company Ltd | Bajaj Energy Pvt Ltd |
| Capacity per unit | 8 x 135 MW | 2 x 250 MW | 2 x 45 MW |
| Aux. Consumption | 11.5% | 12.5% for 3 years and 11.5% from 4 th year | 11.5% during stabilization and 11% - post stabilization |

Annexure No. 31 – Fuel wise monthly details with Auditor certificates

Annexure No. 32 – Auditor certificate for purchase & consumption of secondary fuel and sample bills for secondary fuel oil

Annexure No. 33 – Copy of receipt of filling fees paid

Annexure No. 34 – Details of invoices raised to JBVNL during FY 2016-17 and FY 2017-18

Annexure No. 34 – Details of invoices raised to JBVNL during FY 2016-17 and FY 2017-

18

Annexure No. 35 – CCL LOI to IPL under SHAKTI scheme

Annexure No. 36 – Copy of email for submission of techno commercial study from an independent consultant on segregation of common costs Annexure No. 37 – Copy of techno commercial study from an independent consultant on segregation of common costs

Annexure No. 38 – Source wise monthly primary fuel purchased and actual receipt with Transit loss for FY 2016-17 and FY 2017-18