

Jharkhand State Electricity Regulatory Commission



Order on
Petition for Annual Performance Review
for
FY 2012-13
(including truing-up for FY 2011-12)
for
Tenughat Vidyut Nigam Limited
(TVNL)

Ranchi

July 2014

Order on Petition for Annual Performance Review for FY 2012-13
(including truing-up for FY 2011-12)

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List of Abbreviations

Abbreviation	Description
AAD	Advance Against Depreciation
A&G	Administrative and General
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
BOQ	Bill of Quantity
CCL	Central Coalfields Limited
CEA	Central Electricity Authority
COD	Date of Commercial Operation
DPR	Detailed Project Report
EA	Electricity Act
ECR	Energy Charge Rate
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoI	Government of India
JSEB	Jharkhand State Electricity Board
JSERC	Jharkhand State Electricity Regulatory Commission
IDC	Interest During Construction
Kcal	Kilocalorie
Kg	Kilogram
kWh	Kilowatt-hour
MAT	Minimum Alternative Tax
MI	Millilitre
MT	Million Tonnes
MU	Million Units
MW	Megawatt
MYT	Multi Year Tariff
NAPAF	Normative Annual Plant Availability Factor
O&M	Operations and Maintenance
PAF	Plant Availability Factor
PLF	Plant Load Factor
PLR	Prime Lending Rate
PPA	Power Purchase Agreement

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Abbreviation	Description
R&M	Repair and Maintenance
RoE	Return on Equity
Rs	Rupees
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SFC	Secondary Fuel oil Consumption
SLDC	State Load Dispatch Center
SLM	Straight Line Method
TVNL	Tenughat Vidyut Nigam Limited
TTPS	Tenughat Thermal Power Station

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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. The Electricity Act, 2003 (hereinafter referred to as “the Act” or “EA, 2003”) came into force with effect from June 10, 2003; and the Commission is now deemed to have been constituted and functioning under the provisions of the Act.
- 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 With the Electricity Act, 2003 being brought into force, the earlier Electricity Regulatory Commission Act of 1998 stands repealed and the functions of JSERC are now defined as per Section 86 of the Act.
- 1.4 In accordance with the Act, the JSERC discharges the following functions: -
- (a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:

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

- (b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- (c) facilitate intra-state transmission and wheeling of electricity;
- (d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
- (e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
- (f) adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
- (g) levy fee for the purposes of this Act;
- (h) specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;
- (i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
- (j) fix the trading margin in the intra-state trading of electricity, if considered, necessary;
- (k) discharge such other functions as may be assigned to it under this Act.

1.5 The Commission 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 as brought out by GoI in compliance to Section 3 of the Act. The objectives of the National Tariff Policy are to:
- (a) ensure availability of electricity to consumers at reasonable and competitive rates;
 - (b) ensure financial viability of the sector and attract investments;
 - (c) promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;
 - (d) promote competition, efficiency in operations and improvement in quality of supply.

Tenughat Vidyut Nigam Limited

- 1.8 The Tenughat Vidyut Nigam Limited (TVNL) (hereinafter referred to as 'the Petitioner') is a wholly owned Generating Company of Government of Jharkhand and was constituted in 1987 under the Indian Company's Act, 1956.
- 1.9 The Petitioner operates two Units (Units I and II) of Tenughat Thermal Power Station (hereinafter referred to as 'TTPS' or 'the Power Plant') that are the subject of true up and review of operational parameters in the petition filed by it. Each unit has an installed power generation capacity of 210 MW. Unit I commenced its operations in September, 1996 and Unit II in September, 1997. With the creation of State of Jharkhand on November 15, 2000, the Petitioner is an undertaking of Government of Jharkhand.
- 1.10 The Petitioner had, in earlier petitions, submitted that all the papers relating to TTPS are still lying at the erstwhile office of the Petitioner located in Patna and in spite of the orders of the Jharkhand High Court, the Petitioner has not been able to access these documents. As such the details of the estimated costs of various items related to the project are not available to the Petitioner.
- 1.11 However, based on the expenditure details available with TTPS and discussions with the Petitioner, the total cost of the project at the time of CoD, including interest during construction (IDC), was approved as Rs 1247.04 Cr by the Commission in its previous Tariff Orders.

Status of PPA

- 1.12 The Petitioner entered into a Power Purchase Agreement (PPA) with JSEB on July 19, 2005. The PPA was executed on September 1, 2005 and was valid till August 1, 2010. However, Clause 10 of the general terms and conditions of the said PPA states that in case JSEB continues to receive power from TVNL even after expiry of the agreement without further renewal of formal extension thereof, then all the provisions of the said agreement shall continue to operate till the said agreement is formally extended, reviewed and replaced.
- 1.13 As per the PPA, the applicable rate for sale of energy by the Petitioner to JSEB will be the rate decided by the Commission at delivery point. The Commission in its previous Tariff Orders for FY 2010-11 and FY 2011-12 had directed the Petitioner to renegotiate its PPA with JSEB at the earliest and also to get the same ratified by the Commission.
- 1.14 The Petitioner has submitted that the PPA has been signed with JSEB on October 31, 2012.

Scope of the Present Order

- 1.15 The Petitioner in the Filing of Petition for True up of FY 2011-12 and Review of Operational Parameters for FY 2012-13 dated January, 2013 has prayed before the Commission:
- (a) To approve the Operational and Fuel Parameters, Annual Revenue Requirement and Generation Tariff for Unit I and Unit II of TVNL for truing-up for FY 2011-12;
 - (b) To approve the Revised Estimate of Operational and Fuel Parameters for Unit I and Unit II of TVNL for FY 2012-13;
- 1.16 The Petitioner filed for the truing up for FY 2011-12 based on the actual information and audited accounts for FY 2011-12. The Commission in this order has conducted truing up for FY 2011-12 after thorough scrutiny of the information submitted by the Petitioner.
- 1.17 While conducting the truing up for FY 2011-12 the Commission has taken into consideration the following:
- (a) Provisions of the Electricity Act, 2003,
 - (b) Provisions of the National Electricity Policy,
 - (c) Provisions of the Tariff Policy;
 - (d) Principles laid down in the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2004 (hereinafter referred to as 'Generation Tariff Regulations, 2004');

- (e) Principles laid down in the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2010 (hereinafter referred to as 'Generation Tariff Regulations, 2010').
- 1.18 The Petitioner filed for review of operational performance of FY 2012-13 based on operational parameters for first half of the first year of the control period i.e. FY 2012-13 based on the actual generation and plant parameters for April 2012 to September 2012. Later under additional information, it provided details of operational parameters for the whole year 2012-13.
- 1.19 As per Regulation 15 of the Generation Tariff Regulations, 2010 (as quoted below) the Commission is required to carry out periodic reviews of performance of a generation company during the control period.
- “Review during Control period*
- 15.1 To ensure smooth implementation of the Multi Year Tariff (MYT) framework, the Commission may undertake periodic reviews of Generating Company’s performance during the Control Period, to address any practical issues, concerns or unexpected outcomes that may arise.*
- 15.2 The Generating Company shall submit information as part of annual performance review on actual performance to assess the performance vis-à-vis the targets approved by the Commission at the beginning of the Control Period. This shall include annual statements of its performance and accounts including latest available accounting statements, norms achieved and the tariff worked out in accordance with these Regulations.*
- 15.3 The Commission may also direct any modifications to the forecast of the Generating Company for the remainder of the Control Period, with detailed reasons for the same.”*
- 1.20 The Petitioner has not submitted a petition for truing up for FY 2012-13 and the petition for revision of estimates for operational parameters for FY 2012-13 was submitted on basis of actual information upto September 2012. The Petitioner subsequently submitted the actual operational data for FY 2012-13; however, audited statements for FY 2012-13 for TVNL and other requisite certifications of the Statutory Auditors, certifications regarding Availability from the SLDC, etc are not available with the Commission for truing up for FY 2012-13.
- 1.21 Further, since FY 2012-13 is already over, the Commission does not find it prudent to revise the tariff for the year at this stage. Hence, the Commission directs the Petitioner to submit a petition for truing up of FY 2012-13, annual performance review for FY 2013-14 and the revision of estimates/ tariff for FY 2014-15 to FY 2015-16 within 2 months of this Order.

A2: PROCEDURAL HISTORY

Background

- 2.1 Tenughat Vidyut Nigam Limited is a power generating company incorporated on November 26, 1987 under Indian Company's Act, 1956. TVNL, a Govt. of Jharkhand Undertaking is having its corporate office at Ranchi.
- 2.2 The total installed capacity of TVNL is 420 MW having two units of 210 MW capacity each. The first unit of 210 MW was put under commercial operation in September 1996 and second unit of 210 MW in September 1997.

Filing of ARR and Tariff petition by TVNL (FY 2004-05 to FY 2011-12)

- 2.3 In view of the Hon'ble ATE's Judgement and in accordance with the Generation Tariff Regulations, 2004 and its powers under the Section 62 1 (a) of the Act, 2003, the Commission directed the Petitioner to file the ARR and Tariff petition with the Commission for determination of tariff of the two units (Unit I and Unit II).
- 2.4 TVNL filed its petition on March 31, 2004 for setting generation tariff for the year 2004-05. The Commission issued the Generation Tariff Order of FY 2004-05 for TVNL on August 23, 2004.
- 2.5 For FY 2005-06, TVNL filed a petition on September 7, 2005, seeking revision of the existing generation tariff. The petition was accepted on November 26, 2005. The Tariff Order became effective from January 1, 2006.
- 2.6 ARR filing and tariff determination exercise was again conducted for FY 2007-08.
- 2.7 TVNL filed petitions for ARR and Tariff Determination for FY 2008-09 and FY 2009-10 on June 25, 2009. The petitions for FY 2008-09 and FY 2009-10 were not submitted within the time limits specified in the regulations and hence the process of determination of the tariff got delayed. Tariff Order was passed on March 5, 2010.
- 2.8 The Commission issued next tariff order for provisional truing up of ARR for FY 2009-10 and the determination of ARR and tariff for FY 2010-11 on November 22, 2010.
- 2.9 Next tariff order was passed on May 31, 2011 on ARR requirement and determination of generation tariff for FY 2010-11 and FY 2011-12.

Business Plan and MYT Order for FY 2012-13 to FY 2015-16

- 2.10 The Petitioner had submitted a petition for approval of Business Plan for the Control Period (FY 2012-13 to FY 2015-16), true up of ARR for FY 2010-11, revision of ARR for FY 2011-12 and for determination of ARR and generation tariff for the Control Period (FY 2012-13 to FY 2015-16) on December 23, 2011.
- 2.11 Subsequently, the Commission passed the Order on Business Plan and Annual Revenue Requirement and Determination of Generation Tariff for the First Control Period (FY 2012-13 to FY 2015-16) on May 30, 2012 (hereinafter referred to as “the MYT Order”).
- 2.12 In November 5, 2012, the Commission passed an order on the review petition filed by TVNL, in which the Petitioner asked for relief on disallowance of cost of inefficiency, relaxation of secondary fuel oil consumption norms and transit loss.

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- 2.13 In accordance with the Generation Tariff Regulations, 2010, the Petitioner had to submit the Annual Performance Review Petition by November 1, 2012. However, the Petitioner neither submitted the Petition nor requested for extension of time for submission of the same.
- 2.14 The Commission, on December 17, 2012, directed to the Petitioner to submit the Annual Performance Review Petition by January 15, 2013.
- 2.15 The Petitioner filed the petition for review of operational parameters for FY 2012-13 along with truing up of FY 2011-12 on January 5, 2013.
- 2.16 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 petition for Annual Performance Review for FY 2012-13 (including truing-up for FY 2011-12) on January 5, 2013.
- 2.17 The Commission was unable to conduct the hearing for the above Petition filed by the Petitioner as the Hon’ble Chairperson of the Commission had retired on December 15, 2012. Further the Member (Finance) post was vacant since 2008 and the Commission was functioning with only one Member i.e. Member (Technical).As per JSERC (Conduct of Business) Regulations, 2011 the quorum should be two members among the three members for issue of any effective orders, such as issue of tariff orders, issue of judgments for the cases filled in the Commission and for any important policy matters. The extract of the Regulation is as follows:

“Quorum:

For all initial procedural issues, the quorum may be one Member.

Except for initial procedural issues like notices, filing of copies and documents, the quorum of the Commission shall be two among the three Members.”

- 2.18 As there was only one member in the Commission, even though the ARR pertaining to all the distribution licensees and generators in the State of Jharkhand were received, the tariff orders could not be finalized due to lack of quorum.
- 2.19 Subsequently, the Member (Finance) was appointed in January 2014. Also, as per the directions of the APTEL in this regard, the Commission has amended the JSERC (Conduct of Business Regulations), 2011 and has modified the quorum to one member which shall facilitate the working of the Commission in the future even in the presence of only a single member.

Information Gaps in the True Up Petition

- 2.20 The Commission accepted the application submitted by the Petitioner for determination of tariff. However, during the tariff determination exercise for the Control Period, certain deficiencies/information gaps were observed in the tariff petition submitted by the Petitioner.
- 2.21 These information gaps were communicated to the Petitioner vide letter no.
- (a) JSERC/Legal/31 of 2012/908 dated February 18, 2013.
 - (b) JSERC/Legal/31 of 2012/133 dated June 3, 2014
- 2.22 The Petitioner subsequently submitted its response to the aforesaid letters and provided the requisite additional data/information vide letter no.
- (a) 0440/2013-14 dated February 19, 2014;
 - (b) 0104/2014-15 dated June 12, 2014.
- 2.23 The Commission scrutinized the additional data/information and on its validation, has passed this Order on the petition filed by the Petitioner.

Inviting Public Comments/Suggestions

- 2.24 The Commission through letter no. JSERC/31 of 2012/620 dated February 20, 2014, 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 Truing Up for FY 2011-12 and review of operational parameters for FY 2012-13.
- 2.25 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. Last date for submission of objection/comments/suggestions was March 23, 2014.

Table 1: List of newspapers and dates on which the public notice by TVNL appeared

Sl. No.	Newspaper (Jharkhand edition)	Date of Publication
1	The Pioneer	25.02.2014 & 26.02.2014
2	The Times of India	25.02.2014 & 26.02.2014
3	Hindustan	25.02.2014 & 26.02.2014
4	Prabhat Khabar	25.02.2014 & 26.02.2014
5	Sanmarg	25.02.2014 & 26.02.2014
6	Dainik Bhaskar	25.02.2014 & 26.02.2014

- 2.26 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 (Jharkhand edition)	Date of Publication
1	Ajj	07.05.2014
2	Hindustan	07.05.2014
3	Dainik Bhaskar	07.05.2014
4	Pioneer	07.05.2014
5	Ranchi Express	08.05.2014
6	Phabhat Khabar	08.05.2014
7	Dainik Jagran	08.05.2014
8	The Hindustan Times	08.05.2014
9	Siyasi Ufuque	08.05.2014

Submission of Comments/Suggestions and Conduct of Public Hearing

2.27 A public hearing was held on May 12, 2014 at the Commission's office in Ranchi and respondents voiced their views on the ARR and tariff petition filed by the Petitioner. The comments/suggestions voiced by the respondents and the Petitioner's response thereon along with the Commission's analysis on the response provided by the Petitioner are detailed in the Section A4: of this Order.

A3: SUMMARY OF THE PETITION

Overview of the Thermal Stations

3.1 The Petitioner operates two Units (Units I and II) of Tenughat Thermal Power Station (TTPS) that are the subject of tariff determination in the petition filed by it. Each unit has an installed power generation capacity of 210 MW. Unit I commenced its operations in September, 1996 and Unit II in September, 1997. With the creation of State of Jharkhand on November 15, 2000, the Petitioner is an undertaking of Government of Jharkhand.

Truing Up for FY 2011-12

3.2 The Petitioner has requested for true up for FY 2011-12 based on the actual performance of Unit I and Unit II on various operational and financial related parameters.

3.3 The energy charges and fixed cost as proposed by the Petitioner for FY 2011-12, are summarised in the following table:

Table 3 Submitted Energy Charge for FY 2011-12 (Rs Cr)

Parameters	Units	Unit I & II
Gross Generation	MU	2280.42
Heat Rate	KCal/kWh	3032
Specific Oil Consumption	ml/kWh	2.05
Calorific Value of Oil	KCal/l	9359
Calorific Value of Coal	kCal/kg	4305
Energy Charge Rate	Rs/kWh	1.26
Fuel Cost	Rs Cr	258.65

Table 4 Submitted Fixed Charges and Total Charges for FY 2011-12 with Revenue Gap/Surplus (Rs Cr)

Parameters	Units	Unit I & II
O&M charges	Rs Cr	84.63
Depreciation	Rs Cr	68.75
Interest on Loan	Rs Cr	83.14
Return on Equity	Rs Cr	25.29
Cost of Secondary Fuel	Rs Cr	25.80
Interest on Working Capital	Rs Cr	21.75
Annual Fixed Charges	Rs Cr	309.36
Energy Charge Rate (ECR)	Rs/kWh	1.26
Fuel Cost	Rs Cr	258.65
Other Income	Rs Cr	-
Total Cost	Rs Cr	568.01
Revenue at Existing Tariff	Rs Cr	490.38
(Gap)/Surplus for the year	Rs Cr	(77.63)

Review of Operational Performance of FY 2012-13

- 3.4 In its petition the Petitioner has requested for the Review of Operational Performance of FY 2012-13 based on the actual performance from April 2012 to September 2012.
- 3.5 The Plant Parameters and Fuel Cost Determinants as submitted by the Petitioner for FY 2012-13 are shown in the table below.

Table 5 Submitted Plant parameters & Fuel Cost Determinants for FY 2012-13 (Apr 12 - Sept 12)

Particulars	Units	Unit I & II
Normative Availability	%	84%
PLF	%	75.54%
Gross Generation	MU	1393
Auxiliary Consumption	%	10.19%
Net Generation	MU	1251
Station Heat Rate	kCal/kWh	2924
Gross Calorific Value of Coal	kCal/kg	4036
Specific Oil Consumption	ml/kWh	2.02

Table 6 Submitted Cost of Secondary Fuel Oil for FY 2012-13 (Apr 12 - Sept 12)

Particulars	Units	Unit I & II
Normative Gross Generation	MU	1393
Secondary Fuel Oil Consumption	ml/kWh	2.02
Gross Calorific Value of Oil	kCal/L	9359.00
Cost of Oil	Rs/kL	60968
Oil Consumption	kL	2814
Total Cost of Oil	Rs Cr	17.15

A4: PUBLIC CONSULTATION PROCESS

- 4.1 The public hearing on the tariff petition filed by the Petitioner was held on May 12, 2014 at the Commission's office in Ranchi. The list of participants is attached as **Annexure 1**.
- 4.2 The comments and suggestions of the members of the public along with the response thereon of the Petitioner and the views of the Commission are detailed hereunder:

Operation and Maintenance Expenses

Public Comments/Suggestions

- 4.3 The Commission had approved employee expenses of Rs 31.57 Cr for FY 2012-13 and Rs 33.84 Cr for FY 2013-14 against the submissions of Rs 37.12 Cr and Rs 40.17 Cr for FY 2012-13 and FY 2013-14 respectively.
- 4.4 The objector has highlighted that few employees of TVNL are working with other establishments like JREDA/Energy Dept on deputation.
- 4.5 In this regard, the objector has asked for appropriate direction under Regulation 7.40 of the Generation Tariff Regulations, 2010, either to recover money on account of such employee expenses from JREDA or take back engineers to work exclusively for TVNL.

Petitioner's response

- 4.6 The Energy Department, GoJ is the controlling department of TVNL. On the order of Energy Department, some of the officers were allowed to work in Energy Department/JREDA. Hence such employees are allowed to work in Energy Department/JREDA either on deputation basis or in addition to his assigned duty in TVNL. However, TVNL has made a request to Energy Department for reimbursement of their expenditure to TVNL.

Commission's view

- 4.7 The Commission approves the employee expenses as part of the O&M expenses on normative basis and not on actual basis. The calculation of allowed O&M expenses is detailed in para 5.52. Therefore, the transfer of employees shall have no bearing on tariff determined for the Petitioner.
- 4.8 However, reimbursement of such employee expenses from the energy department is in the interest of the Petitioner. The Petitioner is directed to follow up with the Energy Department for this and report compliance.

Ash Utilisation and Management

Public Comments/Suggestions

- 4.9 The Objector has highlighted that TVNL has not taken substantial steps to improve Ash Utilisation and Management.

Petitioner's response

- 4.10 In compliance of the directive of the Commission regarding ash utilization, TVNL has approached to cement manufacturers like Ultratech Cement Co. and Burnpur Cement Co. for setting up Cement Plant nearby Tenughat TPS. Both cement manufacturers visited site for setting up Cement Plant nearby areas of Tenughat TPS. But it has not materialised till date. TVNL is planning for setting up dry fly ash collection system. Presently, Ash generated from Tenughat TPS is utilized for filling low land near the plant.

Commission's view

- 4.11 The Commission, in the past tariff order directives, has directed the Petitioner to take steps towards achieving 100% ash utilisation level in a phased manner by FY 2013-14 in accordance with MoEF notification dated September 14, 1999. The Petitioner is directed to take concrete steps towards issue of Ash Utilisation and Management. The Commission has issued a directive regarding the same in the directive section of this Order.

Secondary Fuel Oil Consumption

Public Comments/Suggestions

- 4.12 The Objector has highlighted that TVNL has neither initiated nor executed adequate steps to curtail utilisation of Secondary Fuel Oil (LDO) Consumption which adds to substantial cost to generation.

Petitioner's response

- 4.13 TVNL is making all effort to reduce the specific oil consumption. Higher Secondary Fuel Oil (LDO) Consumption (ml/kWh) is mainly attributed due to following reasons:
- a) Frequent tripping of Units due to poor quality & quantity of coal.
 - b) Grid Backing Down by JSEB
 - c) Tripping of Transmission Lines: Arrangement for evacuation of power from Tenughat TPS is through the two transmission lines:
 - 1) Tenughat TPS to BSEB grid of Biharsarif Single Circuit of 400 KV line
 - 2) Tenughat TPS to Patratu TPS grid of 400 KV.

Both lines are operating at 220 KV due to non readiness of 400 KV S/S at terminating ends. Due to constraints in existing two transmission lines, load on the units has to be regulated frequently.

Apart from the above, due to frequent tripping of transmission line especially in summer and rainy season, frequent tripping of units takes place which ultimately increases the consumption of primary and secondary fuel which is not under control of Tenughat TPS. TVNL is making all effort to reduce the specific oil consumption and getting positive response which can be seen from the reducing trend of SOC.

Commission's view

- 4.14 Under the provisions of the Generation Tariff Regulations, 2010, the Commission approves the Secondary Fuel Oil consumption on a normative basis and not on actual basis. The calculation of allowed Secondary Fuel Oil expenses is detailed in para 5.31. Therefore, the higher Secondary Fuel Oil expenses of the Petitioner are not being passed on to the consumers.
- 4.15 Further, the Commission, in the past, has repeatedly directed the Petitioner to take steps to reduce the consumption of Secondary Fuel Oil and has even allowed it in the ARR on normative basis. The Commission has issued a directive regarding the same in the directive section of this Order.

A5: TRUING UP FOR FY 2011-12

- 5.1 The Commission had approved the ARR and generation tariff for FY 2011-12 in its Order dated May 31, 2011 based on the projections for various cost parameters. Further, the Commission in its order dated May 30, 2012 for FY 2012-13 to FY 2015-16 carried out provisional truing up of ARR for FY 2011-12 based on the information provided by the Petitioner regarding the actual performance during the year. The Petitioner has now sought approval from the Commission for truing up of variation in certain elements of the ARR for FY 2011-12 which were earlier provisionally trued up in the said order.
- 5.2 The Commission has analysed the submission of the Petitioner with respect to the ARR for FY 2011-12, and has undertaken the true up exercise of various components. The component-wise description of the Petitioner's submission and the Commission's analysis thereof is provided hereunder.

Operational Performance

Plant Availability Factor (PAF) and Plant Load Factor (PLF)

Petitioner's submission

- 5.3 The Petitioner submitted the actual PAF and PLF on running hour basis as 63.81% and 61.81% respectively during FY 2011-12.
- 5.4 The Petitioner submitted that it could not achieve high availability factor due to following reasons:
- **Non Availability due to Force Majeure:** Collapse of Transmission towers in FY 2011-12 due to Cyclone had resulted in loss of around 485.33 MU.
 - **Non Availability of Coal** as TVNL had been unable to pay CCL on regular basis due to its precarious financial situation caused due to continuing default by JSEB.
 - Back-down in operations forced by JSEB resulting in loss of generation.
- 5.5 The Petitioner further submitted that considering above factors, the Plant Availability Factor based on declared capacity works out to 85.75% and has submitted PAF and PLF as 85.75% and 61.81% respectively for 2011-12.

Commission's analysis

- 5.6 As per Regulation 8.4 of the Generation Tariff Regulations, 2010, the normative availability allowable for the Power Plant for FY 2011-12 is 85%, as was also approved by the Commission in the previous Tariff Orders.

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- 5.7 The Commission scrutinised the submissions of the Petitioner and also asked for the details of the shutdown and back-down in operations during FY 2011-12. Based on the information provided by the Petitioner, the Commission observed that backing down of the power stations by JSEB and collapse of transmission towers due to cyclone resulted in considerable loss of generation. TTPS – Biharsarif line was under shutdown from May 18, 2011 to September 16, 2011 (120 days) due to collapse of five towers in Cyclone near Rajauli in Bihar.
- 5.8 In the MYT Order, the Commission had asked the Petitioner to submit a certificate from the SLDC regarding the actual average availability of the plant during FY 2011-12. However, the Petitioner has not been able to submit SLDC certificate to verify the actual availability. The Commission had also stated that, in case, the Petitioner fails to provided details on the actual availability with the next petition, the Commission would make an assessment of the availability for FY 2011-12 and reduce the capacity charges in accordance with the Regulation 8.11 of the Generation Tariff Regulation, 2010. The Petitioner has submitted that it has started getting SLDC reports from FY 2012-13 onwards and will furnish the same for future period.
- 5.9 The Commission has analysed the actual availability for the Power Plant based on the additional information provided by the Petitioner. The Plant suffered generation loss of 485.33 MU due to grid back down. Further generation loss of about 607 MU was faced due to collapse of towers of TTPS - Biharsarif line in Cyclone leading to 120 days outage. Besides this, there have been various shorter period transmission line outages which led to further generation loss. Considering the backing down by JSEB, collapse of transmission towers and failure of transmission system during FY 2011-12, the Commission approves the PAF at 85%. The Commission directs the Petitioner to submit certificate from the SLDC regarding the actual average availability of the plant in future petitions.
- 5.10 With regards to the Plant Load Factor for computation of gross generation, the Commission has considered the PLF for the year at 61.81% as submitted by the Petitioner.

Table 7 Approved PAF and PLF

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Plant Availability Factor (%)	85%	85%	85.75%	85%
Plant Load Factor (%)	75%	61.74%	61.81%	61.81%

Gross Generation

Petitioner's submission

5.11 The Petitioner submitted the gross generation of 2280.42 MU for FY 2011-12 based on the PLF of 61.81%.

Commission's analysis

5.12 The Commission approves the gross generation of 2280.42 MU, as submitted by the Petitioner for FY 2011-12.

Table 8 Approved Gross Generation

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Gross Generation (MU)	2759.40	2277.76	2280.42	2280.42

Auxiliary Consumption

Petitioner's submission

5.13 The Petitioner submitted the auxiliary consumption of 9.71% for FY 2011-12.

Commission's analysis

5.14 Auxiliary consumption refers to the quantum of energy consumed by the auxiliary equipment of the generating station. Higher auxiliary consumption reduces the net generation of a generating station and leads to higher cost per unit of generation.

5.15 As per the Generation Tariff Regulations, 2010, the auxiliary consumption specified for the Petitioner for FY 2011-12 is 9.50%. Further, as per the said regulations the auxiliary consumption is a "controllable parameter". Therefore, the Commission has considered the auxiliary consumption at 9.50% for calculation of energy charge rate for the year.

5.16 However, for computation of net generation for the year, the Commission has considered the Auxiliary Consumption for FY 2011-12 as per the actual auxiliary consumption observed during the year i.e. 9.71% as submitted by the Petitioner.

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Table 9 Approved Auxiliary Consumption

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Auxiliary Consumption for calculation of net generation(%)	9.50%	10.29%	9.71%	9.71%
Auxiliary Consumption for calculation of energy charge rate(%)	9.50%	9.50%	-	9.50%

Net Generation

Petitioner's submission

5.17 The Petitioner submitted that the net generation of the Power Plant was 2059.08 MU for FY 2011-12.

Commission's analysis

5.18 The Commission has computed and approves the net generation at 2058.99 MU for FY 2011-12 considering the actual values of PLF and auxiliary consumption of 9.71%.

Table 10 Approved Net Generation

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Net Generation (MU)	2497.26	2043.38	2059.08	2058.99

Station Heat Rate

Petitioner's submission

5.19 The Petitioner submitted the actual station heat rate for the power plant at 3032 kCal/kWh for FY 2011-12 against the approved figures of 2930 kCal/kWh for FY 2011-12 in the MYT order dated May 30, 2012.

5.20 The Petitioner further submitted that the Generation Tariff Regulations, 2010 specify SHR of 3043 kCal/kWh for the power plant for FY 2011-12 and actual station heat rate of 3032 kCal/kWh for FY 2011-12 is within the limits as specified in the given regulations.

Commission's analysis

- 5.21 Regulation 8.3 of the Generation Tariff Regulations, 2010 specify SHR of 3043 kCal/kWh for the power plant of the Petitioner for FY 2011-12. It clarifies that the norms of operation specified under the regulations are the threshold norms and this shall not preclude the generating company and the beneficiaries from agreeing to improved norms of operation and in such case improved norms shall be applicable for the determination of tariff.
- 5.22 In provisional true up for FY 2011-12, the Petitioner had provisionally estimated SHR for FY 2011-12 at 2930 kCal/kWh and same was approved by the Commission. However, the Petitioner has revised the SHR in the petition submitted for final truing up based on the actual information for the year. As the actual SHR submitted for the final truing up for FY 2011-12 is within the limits as specified by the Generation Tariff Regulations, 2010, (3043 kCal/kWh), the Commission approves the SHR of 3032 kCal/kWh as submitted by the Petitioner.

Table 11 Approved Station Heat Rate

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Station Heat Rate (kCal/kWh)	3043	2930	3032	3032

Specific Oil Consumption

Petitioner's submission

- 5.23 The Petitioner submitted the actual Specific Oil Consumption for FY 2011-12 is 2.05 ml/kWh.
- 5.24 The Petitioner also submitted that the Commission had approved figures of 1 ml/kWh for FY 2011-12 in the MYT Order against the projection of 2.87 ml/kWh based on the Generation Tariff Regulations, 2010, where the normative specific oil consumption for the Power Plant has been specified as 1 ml/kWh.
- 5.25 The Petitioner further submitted that the Commission rejected the plea for allowance of 2 ml/kWh in review petition on account of quality repair and maintenance works to be carried out by the petitioner and remedial measures to be taken by the petitioner.
- 5.26 The Petitioner has also submitted that historically the actual specific oil consumption for the Power Plant has been in the range of 2.5-3.5 ml/kWh and with quality repair and maintenance works it has managed to achieve the specific oil consumption level at 2.05 ml/kWh which is much below than its past trend.

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- 5.27 The Petitioner has provided example of other similar plants in other states where the Regulatory Commissions have approved specific oil consumption in the range of 2.0-3.5 ml/kWh and has requested for relaxation of norms.

Table 12 Approved Specific Oil Consumption of Other Plants as submitted by the Petitioner

Station	Capacity (MW)	CoD	State	Year	Specific Oil Consumption (ml/kWh)
Gandhinagar (Unit 5)	210	17-03-1998	Gujarat	FY 2011-12 to FY 2015-16	3.50
Wanakbori 7 TPS	210	31-12-1998	Gujarat	FY 2011-12 to FY 2015-16	3.50
Kolaghat (Unit 5)	210	17-03-1991	West Bengal	FY 2011-12	2.05
Kolaghat (Unit 6)	210	16-01-1993	West Bengal	FY 2010-11	2.05
Mejia (Unit 1)	210	March 1996	West Bengal	FY 2009-14	2.00
Mejia (Unit 2)	210	March 1998	West Bengal	FY 2009-14	2.00

Commission's analysis

- 5.28 The specific oil consumption is the amount of secondary fuel (in ml) consumed in the process of generation of one unit of power produced (in kWh). A lower specific oil consumption represents a lower consumption of the secondary fuel in the generation process leading to lower cost.
- 5.29 In the Review Petition Order of November 2012, the Commission had given following order regarding specific oil consumption:

".....JSERC (Terms and Condition for Determination of Generation Tariff) Regulations, 2010 have been framed after following the procedure of prior publication including consultation with all stakeholders. There is no reason to deviate or relax the said Regulations. The petitioner submits that the plant is more than 15 years old and for various reasons secondary oil consumption is high. The Commission feels that the norms laid down in the relevant Regulations remind the generating station to take remedial measures to improve their operational parameters, so that the cost of generation of electricity is reasonable and within the reach of the consumers. Moreover, as stated earlier, the provisions of deviation for norms or power to relax the Regulations cannot be exercised in a review petition.

In the written submission the petitioner has stated that their consumption of auxiliary fuel is higher because of frequent tripping and grid break down by JSEB. And has also added that ageing of equipments and poor repair and maintenance work is another reason for higher secondary fuel consumption. The Commission feels that the plea taken by the petitioner only speaks about their inefficiencies. The petitioner must carry out quality repair and maintenance works, and should study frequent tripping and take remedial measures. Same is the case of grid break down of the JSEB. The petitioner must cooperate properly with the

JSEB to avoid such situation. In view of the above, the second plea is also rejected being without any merit."

- 5.30 The Petitioner in this petition has claimed a specific oil consumption of 2.05 ml/kWh. The Petitioner has also claimed that other Regulatory Commissions have approved specific oil consumption in the range of 2.0-3.5 ml/kWh for similar plants. However, the Commission notes that most of the NTPC plants, even older than that of the Petitioner, have been able to achieve specific oil consumption even lower than 0.75 ml/kWh. As per 'Recommendations on Operation Norms for Thermal Power Stations January 2014' by CEA, the overall SFC for all stations under analysis for the period 2008-09 to 2012-13 works out to only 0.37 ml/kWh.
- 5.31 Therefore, the Commission does not find any merit in relaxing the norm for the Petitioner and approves the specific oil consumption of 1 ml/kWh for FY 2011-12. It further directs the Petitioner to take necessary measures to reduce the specific oil consumption.

Table 13 Approved Specific Oil Consumption

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Specific Oil Consumption (ml/kWh)	1.00	1.00	2.05	1.00

Gross Calorific Value (GCV) of Primary and Secondary Fuel

Petitioner's submission

- 5.32 The Petitioner submitted the GCV of Primary Fuel at 4305 kCal/kg and of Secondary Fuel at 9359 kCal/kL.

Commission's analysis

- 5.33 Calorific value of a fuel refers to the amount of heat released on burning one unit of the fuel. Thus, a higher GCV indicates better quality of fuel and also lowers fuel cost, since it lowers the consumption of fuel needed for producing the required amount of energy.
- 5.34 The Commission asked the Petitioner to submit the consumption and GCV of coal and oil for complete year of FY 2011-12. The Commission has analyzed the additional information submitted by the Petitioner and accordingly approves the GCV of coal as 4305.40 kCal/kg and GCV of oil as 9359 kCal/kL respectively for FY 2011-12.

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Table 14 Approved Gross Calorific Value

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
GCV of Coal (kCal/kg)	4132.43	4305	4305	4305.40
GCV of Oil (kCal/kL)	9359	9359	9359	9359

Price of Primary Fuel

Petitioner's submission

5.35 The Petitioner submitted the delivered coal price as Rs 1621/MT for FY 2011-12.

Commission's analysis

5.36 The Commission asked the Petitioner to submit the month-wise consumption and price of coal for FY 2011-12. The Commission has analysed the additional information submitted by the Petitioner and has accordingly considered the price of coal as Rs 1620.82/MT for FY 2011-12.

Table 15 Approved Price of Coal

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Landed price of coal including transit loss (Rs/MT)	1505	1618	1621	1620.82

Transit Loss

Petitioner's submission

5.37 The Petitioner submitted 0.2% as transit loss of coal for FY 2011-12.

Commission's analysis

5.38 Regulation 8.19 of the Generation Tariff Regulations, 2010 allow transit loss of 0.2% for pithead generating stations. Since the transit loss submitted by the Petitioner is in line with the said Regulations, the Commission approves the transit loss of 0.2% for FY 2011-12.

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Table 16 Transit Loss

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Transit Loss (%)	0.2%	0.2%	0.2%	0.2%

Summary of Plant Parameters & Fuel Cost Determinants

5.39 The summary of plant parameters and fuel cost determinants for the two units of TTPS as submitted by the Petitioner and approved by the Commission for FY 2011-12 is given below:

Table 17 Plant parameters & Fuel Cost Determinants for FY 2011-12

Parameters	Unit I&II				
	Units	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Capacity	MW	420	420	420	420
Availability	%	85%	85%	85.75%	85%
PLF	%	75%	61.74%	61.81%	61.81%
Gross generation	MU	2759.4	2277.76	2280.42	2280.42
Auxiliary Consumption	%	9.50%	9.50%	9.71%	9.50%
Actual auxiliary consumption	%	-	10.29%	-	9.71%
Net units sent out	MU	2497.26	2043.38	2059.08	2058.99
Gross station heat rate	KCal/kWh	3043	2930	3032	3032
Specific oil consumption	ml/kWh	1.00	1.00	2.05	1.00
Calorific value of secondary fuel	KCal/kL	9359	9359	9359	9359
Weighted average landed price of coal	Rs/MT	1505	1617.8	1621	1620.82
Calorific value of Coal	KCal/kg	4132.43	4305.40	4305.40	4305.40
Energy charge rate	Rs/kWh	1.2205	1.213	1.26	1.2574

Determination of Fixed Cost

Capital expenditure and capitalization

Petitioner's submission

- 5.40 The Petitioner had in earlier petitions submitted that all the papers relating to Tenughat Thermal Power Station (TTPS) are still lying at the erstwhile office of the Petitioner located in Patna and in spite of the orders of the Jharkhand High Court, the Petitioner has not been able to access these documents. As such the details of the estimated costs of various items related to the project are not available to the Petitioner.
- 5.41 However, based on the expenditure details available with TTPS and discussions with the Petitioner, the total cost of the project at the time of CoD, including interest during construction (IDC), was approved as Rs 1247.04 Cr for FY 1996-97 by the Commission in its previous Tariff Orders.
- 5.42 From FY 1996-97 to FY 2010-11, a total additional capitalisation of Rs 132.02 Cr have been approved.
- 5.43 For FY 2011-12, addition capitalisation of Rs 7.90 Cr was approved during provisional True Up in MYT order of May 2012. In the final True Up petition, the Petitioner has submitted an addition capitalisation of Rs 12.57 Cr.

Commission's analysis

- 5.44 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 Generation Tariff Regulations, 2010. The Regulation is 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.*

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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;”*

5.45 As per the aforementioned provisions of the Generation Tariff Regulations, 2010, the Commission may approve additional capitalisation for meeting un-discharged liabilities or any other expenditure that has become necessary for efficient running of the plant.

5.46 In the final True Up petition, the Petitioner submitted an addition capitalisation of Rs 12.57 Cr. During the Technical Validation Sessions, the Commission directed the Petitioner to provide item-wise break up of the capitalisation claimed. However, the Petitioner has submitted details corresponding to only Rs 8.42 Cr of additional capitalisation. Accordingly, after scrutiny of the information provided by the Petitioner, the Commission provisionally approves the following additional capitalisation for Unit I and Unit II of the Petitioner:

Table 18 Approved additional capitalisation for the Plant for FY 2011-12 (Rs Cr)

Particulars	Cost (Rs Cr)
Plant and Machinery	7.803
Headquarter	0.254
Others	0.369
Total	8.426

Operation & Maintenance (O&M) Expenses

Petitioner's submission

5.47 The Petitioner submitted O&M Expenses for FY 2011-12 at Rs 84.63 Cr.

5.48 The Petitioner further submitted the details of O&M Expenses with break up into A&G Expenses, R&M Expenses and Employee Expenses. The Petitioner submitted that it includes the amount of 6th pay revision arrear paid during FY 2011-12.

Table 19 O&M Expenses submitted for FY 2011-12 (Rs Cr)

O & M Expenses	Submitted by the TVNL for provisional True Up	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up
A&G Expenses	17.50	80.20	15.98
R&M Expenses	73.76		39.78
Employee Expenses	29.47		28.86
Total	120.73		84.63

Commission's analysis

5.49 As per Regulation 7.41 of the Generation Tariff Regulations, 2010, for the Existing Thermal Generating Stations, the O&M expenses for the Transition Period i.e. FY 2011-12 shall be as per the JSERC (Terms and Conditions of Determination of Generation Tariff) Regulations, 2004. The said Regulations lay down the following norm for O&M expenses:

“21 (iv) Operation and Maintenance expenses

(i) The Operation and Maintenance expenses (hereinafter referred to as O&M expenses) shall include the following:

- *Consumption of Stores and Spares*
- *Administration expenses*
- *Repair and Maintenance*
- *Employee cost*
- *Corporate Office Expenses allocated proportionately*
- *Insurance*

(ii) ... The O&M expenses will be limited to 2.5 % of Capital Cost (for plants set up prior to 1.04.2004.) escalated at 6% per annum from the year of Commissioning”.

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- 5.50 The Commission had approved the O&M expenses at Rs. 80.20 Cr for FY 2011-12 in line with the said regulations. The O&M expenses of Rs 80.20 Cr was based on 2.50% of initial project cost of Rs 1247.04 Cr, average capitalisation each year till FY 2010-11 and approved average capitalisation of Rs 7.90 Cr for FY 2011-12, escalated at the rate of 6% per annum till the end of FY 2011-12.
- 5.51 After analysing the final true up petition, the Commission approves the normative O&M expenses at Rs 80.21 Cr considering approved capitalisation of Rs 8.42 Cr for FY 2011-12.
- 5.52 The Petitioner has requested for additional expenditure on 6th Pay Commission arrears to be allowed separately. It is to be noted that the arrears of the Pay Commission relate to the period 2006-2011. Since the Commission has been allowing O&M expenses on a normative basis, irrespective of the actual O&M expenses since 2004, there seems to be no rationale for consideration for arrears of 6th Pay Commission separately.

Table 20 O&M expenses approved for FY 2011-12 (Rs Cr)

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
O&M Expenses	80.29	80.20	84.63	80.21

Depreciation

Petitioner's submission

- 5.53 The Petitioner submitted the depreciation expense of Rs 68.75 Cr for FY 2011-12.

Commission's analysis

- 5.54 The Generation Tariff Regulations, 2010 have specified the following methodology for the calculation of depreciation expense for existing generating stations:
- (a) Depreciation shall be allowed upto a maximum of 90% of the capital cost of the asset and the salvage value of the asset shall be considered as 10%.
 - (b) Depreciation shall be calculated annually as per the straight line method and at the rates specified in the Appendix-I of the said Regulations.
 - (c) In case of existing generating stations, during the transition period, the balance depreciable value as on April 1, 2011 shall be worked out by deducting the cumulative depreciation including AAD as admitted by the Commission upto March 31, 2011 from the gross depreciable value of the assets.

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- (d) The rate of depreciation shall be continued to be charged at the rate specified in Annexure-I till the 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%.

5.55 The Commission in the MYT order dated May 30, 2012 approved depreciation on original cost of the Power Plant at Rs 69.06 Cr which included depreciation for additional capitalisation of Rs 7.90 Cr for the year.

5.56 The Commission has now calculated depreciation for FY 2011-12 at Rs 69.07 Cr which includes depreciation for additional capitalisation of Rs 8.42 Cr.

Table 21 Depreciation for FY 2011-12 (Rs Cr)

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Depreciation for Plant	68.73	68.73	68.34	68.73
Depreciation for HO	0.12	0.12	0.07	0.12
Depreciation on Additional Assets during the year	0.43	0.20	0.33	0.21
Total Depreciation	69.28	69.06	68.75	69.07

Return on Equity (RoE)

Petitioner's submission

5.57 The Petitioner has submitted the RoE at 15.50% which is same as that approved by the Commission at the time of provisional true up FY 2011-12 in the order dated May 30, 2012. The details are shown in the table below.

Table 22 Return on Equity submitted by the Petitioner (Rs Cr)

Particulars	Unit	Submitted by the TVNL for provisional True Up	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up
Equity - Opening balance	Rs Cr	161.29	161.28	161.29
Net Additions during the year	Rs Cr	41.19	7.90	3.77
Equity - Closing Balance	Rs Cr	202.48	169.18	165.06
Average Equity	Rs Cr	181.88	165.23	163.18
Rate of Return on Equity	%	15.50%	15.50%	15.50%
Applicable Tax Rate	%			
Return on Equity	Rs Cr	28.19	25.61	25.29

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Commission's analysis

- 5.58 The Commission has worked out the gross normative equity for FY 2011-12 as per Regulation 7.13 and 7.14 of the Generation Tariff Regulations, 2010. The Commission has considered the return on equity at 15.50%. The Petitioner is not paying any taxes for FY 2011-12 and hence the ROE has not been grossed up.
- 5.59 The Commission approves the return of equity at Rs 25.19 Cr for FY 2011-12 and the calculation of the same is shown in the table below:

Table 23 Return on Equity approved for 2011-12 (Rs Cr)

Particulars	Unit	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Equity - Opening balance	Rs Cr	110.78*	161.28*	161.29	161.28
Net Additions during the year	Rs Cr	5.58	7.90	3.77	2.53
Equity - Closing Balance	Rs Cr	116.36	169.18	165.06	163.81
Average Equity	Rs Cr	113.57	165.23	163.18	162.54
Rate of Return on Equity	%	15.50%	15.50%	15.50%	15.50%
Applicable Tax Rate	%	-	-	-	-
Return on Equity	Rs Cr	17.60	25.61	25.29	25.19

* Equity base was revised in provisional true up after scrutinising the submissions made by the Petitioner

Interest on Loan

Petitioner's submission

- 5.60 The Petitioner has submitted the interest and financing charges at Rs 83.14 Cr for FY 2011-12.

Table 24 Interest and Finance Charges submitted by the Petitioner for FY 2011-12 (Rs Cr)

Interest and Finance Charges	In Rs Cr
Interest on State Government Loan - Jharkhand	3.98
Interest on State Government Loan - Bihar	79.16
Bank Charges	0.01
Total	83.14

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Commission's analysis

- 5.61 The Commission notes that the interest on loan submitted by the Petitioner is higher compared to that approved by the Commission in the MYT Order. During the technical validation sessions, the Petitioner clarified that it could not make repayment for the loan on account of non payment of dues from JSEB leading to high interest burned.
- 5.62 The Commission notes with concern the non-payment of dues by JSEB and directs the Petitioner to submit details of the outstanding dues to the Commission within one month of this Order.
- 5.63 However, the Commission is of the view that it is the responsibility of the Petitioner to actively pursue the non payment of dues by JSEB or raise funds through alternate sources to ensure that its loan repayments are not affected. As such any increase in the interest burden on account of delay in repayment of loan cannot be passed to the consumers.
- 5.64 The Commission has worked out Interest and Finance Charges for FY 2011-12 as per Regulation 7.20 and 7.21 of the Generation Tariff Regulations, 2010 as quoted below

"7.20 The normative loan outstanding as on 1.4.2011 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2011 from the gross normative loan for the Transition period.

During Control Period, the normative loan outstanding as on 1.4.2012 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2012 from the gross normative loan.

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

- 5.65 The below table details the interest on loan approved by the Commission on normative basis for FY 2011-12

Table 25: Approved Interest on Loan (Rs Cr)

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Normative Opening Loan	652.73	604.17		604.17
Repayment (Equal to depreciation)	69.28	69.06		69.07
Additions (Debt component of Adtl. Capitalisation)	13.03	0.00		5.90
Normative Closing Loan	596.47	535.11		540.99
Normative Average Loan	624.60	535.11		538.05
Rate of Interest	13.00%	13.00%		13.00%
Interest on loan	81.20	69.56		84.34

Interest on Working Capital

Petitioner's submission

5.66 The Petitioner while computing the working capital and Interest thereon as per the Generation Tariff Regulations, 2010 has considered the working capital as the sum of the following:

- (a) Cost of Coal for 1.5 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.

5.67 The rate of interest for calculating the interest on working capital is taken at the prevalent SBI PLR rate of 2011 i.e. @ 13%. The details are shown in the table below:

Table 26 Interest on Working Capital for FY 2011-12 submitted by the Petitioner (Rs Cr)

Particulars	Submitted by the TVNL for provisional True Up	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up
Cost of Coal for 1.5 months	34.71	30.97	44.36
Cost of Secondary Fuel Oil for 2 months	7.86	2.88	4.32
O&M Expenses for 1 Month	10.06	6.68	7.05
Maintenance Spares @ 20% of O&M Expenses	24.15	16.04	16.93
Receivables - 2 months	85.21	86.40	94.67
Total Working Capital	161.99	143.01	167.32
Rate of Interest	13.25%	13.00%	13.00%
Interest on Working Capital	21.46	18.59	21.75

Commission's analysis

5.68 The Commission has computed the interest on working capital for FY 2011-12 for the Power Plant by considering values of related components. The working capital requirement for the Petitioner has been determined by considering the following components as per Regulation 7.34 of the Generation Tariff Regulations, 2010:

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- (a) Cost of Coal for 1.5 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.

5.69 Further Regulation 7.37 states that for calculation of working capital no fuel price escalation shall be provided during the tariff period.

“7.37 The cost of fuel in cases covered under clause 7.34 and 7.35 of these Regulations shall be based on the landed cost incurred (taking into account normative transit and handling losses) by the Generating Company and gross calorific value of the fuel as per actual for the three months preceding the first month for which tariff is to be determined and no fuel price escalation shall be provided during the tariff period.”

5.70 The rate of interest on working capital has been taken as 13.00% i.e. the short-term Prime Lending Rate of State Bank of India as on April 1, 2011.

5.71 Accordingly, the Commission has trued up the interest on working capital for the Power Plant for FY 2011-12 as shown in the tables below.

Table 27 Interest on Working Capital approved by the Commission for FY 2011-12 (Rs Cr)

Particulars	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Cost of coal- 1.5 months	38.10	30.97	44.36	32.36
Cost of secondary oil- 2 months	2.90	2.88	4.32	2.89
O&M- 1 month	6.69	6.68	7.05	6.68
Maintenance spares @ 20% of O&M	16.06	16.04	16.93	16.04
Receivables- 2 months	98.61	86.40	94.67	87.23
Total Working Capital	162.36	143.01	167.32	145.20
Rate of interest	13.00%	13.00%	13.00%	13.00%
Interest on Working Capital	21.11	18.59	21.75	18.88

Cost of Secondary Fuel

Petitioner's submission

- 5.72 The Petitioner submitted that cost of secondary fuel at Rs 25.80 Cr for the Power Plant for FY 2011-12.

Table 28 : Cost of Secondary Fuel Submitted for FY 2011-12

Particulars	Units	Submitted by the TVNL for provisional True Up	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up
Normative Gross Generation	MU	2278	2277.76	2280.42
Secondary Fuel Oil Consumption	ml/kWh	2.87	1.00	2.05
Gross Calorific Value of Oil	KCal/L	9359	9359	9359
Cost of Oil	Rs/kL	52503	55210.64	55211
Oil Consumption	kL	6528		4674
Total Cost of Oil	Rs Cr	47.18	17.27	25.80

Commission's analysis

- 5.73 The Commission has noted that the Petitioner has not used the methodology specified in the Regulation 7.49 of the Generation Tariff Regulations, 2010 for calculating the cost of secondary fuel.
- 5.74 The Commission has approved the cost of secondary fuel oil in accordance with Regulation 7.49 of the Generation Tariff Regulations, 2010 as quoted below:

“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:

$$= SFC \times LPSFi \times NAPAF \times 24 \times NDY \times IC \times 10$$

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

7.50 Initially, the landed cost incurred by the Generating Company on secondary fuel oil shall be taken based on actuals of the weighted average price of the three preceding

months and in the absence of landed costs for the three preceding months, latest procurement price for the generating station, before the start of the year.”

- 5.75 Accordingly, the consumption of Secondary Fuel Oil has been calculated considering the gross generation corresponding to the NAPAF (i.e. 85%) and Specific Normative Fuel Oil Consumption (i.e. 1 ml/kWh). The landed price of Secondary Fuel Oil has been computed considering the weighted average cost of Secondary Fuel Oil from April 2011 to March 2012. Accordingly the Commission approves the Secondary Fuel Oil cost at Rs 17.31 Cr for the Power Plant.

Table 29 : Cost of Secondary Fuel Approved for FY 2011-12

Particulars	Units	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by TVNL for Final True Up	Approved by JSERC in this order
Installed Capacity	MW	420	420	420	420
Plant Availability Factor	%	85%	85%	85.75%	85%
Secondary Fuel Oil Consumption	ml/kWh	1.00	1.00	2.05	1.00
No of Days in a year	Days				366
Cost of Oil	Rs/kL	55619.12	55210.64	55210.64	55210.64
Total Cost of Oil	Rs Cr	17.39	17.27	25.80	17.31

Non Tariff Income

Petitioner's submission

- 5.76 The Petitioner has submitted that non tariff income for FY 2011-12 is Rs 16.11 Cr.
- 5.77 The Petitioner has further requested not to adjust non tariff income against the Revenue gap as most of the costs to be recovered are based on normative basis for FY 2011-12, however non tariff income is based on actual audited accounts.

Commission's analysis

- 5.78 The Commission has scrutinised the non tariff income of the Petitioner from the submitted audited annual accounts. It is accrued through various income sources: Sale of BOQ/Tender Paper, house rent from employee, interest on fixed deposits, fee for RTI, sale receipts, other receipts etc. The major contribution is from interest on fixed deposits.
- 5.79 The Commission notes that as per Regulation 8.2 of the Generation Tariff Regulations, 2010, non-tariff income is not a part of the Annual Fixed Cost of the company, which is to be allowed to the Petitioner on a normative basis. Therefore, the Commission agrees with the Petitioner and has not included non-tariff income in calculation of Annual Fixed Charges.

Summary of Fixed Cost Determinants and Generation Tariff

5.80 Regulation 8.2 of the Generation Tariff Regulations, 2010 states that the annual fixed cost 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.

5.81 The tables below show the fixed cost determinants and energy cost for FY 2011-12, in terms of the Petitioner's submission and the Commission's trued up costs for the Power Plant.

Table 30 Summary of Annual Fixed Cost and Generation Tariff for FY 2011-12

	Units	Approved by JSERC in Tariff Order for 2011-12	Approved by JSERC in Provisional True Up	Submitted by Petitioner for Final True Up	Approved by JSERC in this order
O&M charges	Rs Cr	80.29	80.20	84.63	80.21
Depreciation	Rs Cr	69.28	69.06	68.75	69.07
Interest on Loan	Rs Cr	81.20	69.56	83.14	69.95
Return on Equity	Rs Cr	17.60	25.61	25.29	25.19
Cost of Secondary Fuel	Rs Cr	17.39	17.27	25.80	17.31
Interest on Working Capital	Rs Cr	21.11	18.59	21.75	18.88
Annual Fixed Charges	Rs Cr	286.87	280.29	309.36	280.61
Energy Charge Rate (ECR)	Rs/kWh	1.2205	1.2127	1.26	1.2574

Gap/Surplus for FY 2011-12

- 5.82 The Commission has calculated the revenue gap taking into account the approved expenses for the year and the actual revenue billed by the Petitioner to the beneficiary during the year. The calculation of approved revenue gap of Rs 49.12 Cr for FY 2011-12 is shown in the table below. It is to be noted that the revenue gap is on account of the increase in the energy charge rate due to increase in cost of coal during the year.
- 5.83 The Commission further observes that the Petitioner has not collected Fuel Price Adjustment (FPA) from the beneficiary allowed as per the Regulations 8.20 - 8.23 of the Generation Tariff Regulations, 2010. The FPA mechanism has been provided in the said regulations to compensate the Petitioner automatically for any increase on account of increase in coal prices.
- 5.84 If the Petitioner had indeed billed FPA to the beneficiary in a timely manner it would not have faced a revenue gap for the year and there would be no need to provide it with a carrying cost on the same. The Commission believes that it is not prudent to pass on the burden of carrying cost on uncollected FPA by the Petitioner to the consumers and hence is not allowing any carrying cost on the approved revenue gap.

Table 31 Gap/Surplus for FY 2011-12

Particulars	Submitted by Petitioner for Final True Up	Approved by JSERC in this order
Fixed Cost	309.36	280.61
Variable Cost	258.65	258.89
Total Cost	568.01	539.50
Revenue collected during the year	490.38	490.38
(Gap)/Surplus	(77.63)	(49.12)

- 5.85 Accordingly, the Commission approves the gap for FY 2011-12 at Rs 49.12 Cr. In accordance with Regulation 6.18 of the Generation Tariff Regulations, 2010 the Petitioner is directed to recover the gap in 6 equal monthly instalments i.e. Rs 8.19 Cr from the beneficiary from July 2014 to December 2014.

A6: REVIEW OF OPERATIONAL PERFORMANCE OF FY 2012-13

Petitioner's submission

- 6.1 In its petition the Petitioner has requested for the Review of Operational Performance of FY 2012-13 based on the actual performance from April 2012 to September 2012.
- 6.2 The Petitioner submitted the operational parameters for first half of the first year of the control period i.e. FY 2012-13 based on the actual generation and plant parameters for April 2012 to September 2012.

Commission's analysis

- 6.3 As per Regulation 15 of the Generation Tariff Regulations, 2010 (as quoted below) the Commission is required to carry out periodic reviews of performance of a generation company during the control period.

“Review during Control period

15.1 To ensure smooth implementation of the Multi Year Tariff (MYT) framework, the Commission may undertake periodic reviews of Generating Company's performance during the Control Period, to address any practical issues, concerns or unexpected outcomes that may arise.

15.2 The Generating Company shall submit information as part of annual performance review on actual performance to assess the performance vis-à-vis the targets approved by the Commission at the beginning of the Control Period. This shall include annual statements of its performance and accounts including latest available accounting statements, norms achieved and the tariff worked out in accordance with these Regulations.

15.3 The Commission may also direct any modifications to the forecast of the Generating Company for the remainder of the Control Period, with detailed reasons for the same.”

- 6.4 The Petitioner filed for review of operational performance of FY 2012-13 based on operational parameters for first half of the first year of the control period i.e. FY 2012-13 based on the actual generation and plant parameters for April 2012 to September 2012. Later under additional information, it provided details of operational parameters for the whole year 2012-13.
- 6.5 The Petitioner subsequently submitted the actual operational data for FY 2012-13; however, audited statements for FY 2012-13 for TVNL and other requisite certifications of the Statutory Auditors, certifications regarding Availability from the SLDC, etc are not available with the Commission for truing up for FY 2012-13.

6.6 Since FY 2012-13 is already over, the Commission does not find it prudent to revise the tariff for the year at this stage. Hence, the Commission directs the Petitioner to submit a petition for truing up of FY 2012-13, annual performance review for FY 2013-14 and the revision of estimates/ tariff for FY 2014-15 to FY 2015-16 within 2 months of notification of this Order.

6.7 Further, Regulation 6.8 - 6.11 of Generation Tariff Regulations, 2010 (as quoted below) lay down the principles for revision of Capital Investment Plan for a generation company during the Control Period.

“6.8 The Commission shall review the actual capital investment at the end of each year of the Control Period as a part of the Annual Performance Review of the Generating Company. The Generating Company shall submit the actual capital expenditure incurred along with the Annual Performance Review Filing,

6.9 The Commission shall not revisit the approved Capital Investment Plan during the Control Period and any adjustment to depreciation, interest on working capital and return on equity for the actual capital investment undertaken vis-à-vis approved capital investment shall be done at the end of the Control Period.

6.10 The Commission shall also conduct a mid-term review at the end of second year of the Control Period. In case, the cumulative incurred capital expenditure and/or capitalisation deviates from the approved capital expenditure / capitalisation by more than 20% (cumulative), the Commission will make necessary changes to capital investment plan for the Control Period after consultation with Generation Company and adjust depreciation and financing cost, which includes cost of debt (interest), working capital interest, cost of equity (return) based on the actual capital expenditure and/or capitalisation vis-à-vis approved capital expenditure / capitalisation;

“6.11 In case the capital expenditure is required for emergency work which has not been approved in the Capital Investment Plan, the Generation Company shall submit an application (containing all relevant information along with reasons justifying emergency nature of the proposed work seeking approval by the Commission). The Licensee shall take up the work prior to the approval of the Commission provided that the emergency nature of the scheme has been certified by the Board of Directors.

Provided that for the purpose of the clause 6.11 above, such approved capital expenditure shall be treated as a part of actual capital expenditure incurred to the Generation Company as well as the approved capital expenditure by the Commission.”

6.8 As mentioned above as per Clause 6.10 of the said regulations, the Commission is required to carry out a review of the approved Capital Investment Plan at the end of the second year of the Control Period i.e. at the end of FY 2013-14 taking into account the actual cumulative capital expenditure and capitalisation incurred by the Petitioner up to FY 2013-14.

- 6.9 Considering the provisions of the said regulations, the Petitioner is directed to submit a petition for review of Capital Investment Plan including actual capital expenditure incurred up to FY 2013-14 and revised estimates for capital expenditure for FY 2014-15 and FY 2015-16, if any, along with the truing up petition for FY 2012-13.

A7: STATUS OF EARLIER DIRECTIVES

Directives as per MYT Order dated May 30, 2012	Status	Views of the Commission
<p>The Commission directs the Petitioner and JSEB to execute the PPA within one month of the issue of this Tariff Order. The Commission also directs the Petitioner that if JSEB doesn't comply within one month of the issue of this Order, then the Petitioner, after getting the PPA ratified by the Commission, can treat it as final.</p>	<p>The PPA has been signed with JSEB on 31st October 2012. The copy of the same has been provided to Hon'ble Commission vide letter no 925/2012-13 dated 1st November 2012</p>	<p>The directive has been complied with.</p>
<p>The Commission directs the Petitioner to submit the Detailed Project Report (DPR) and other related documents and take prior approval of the Commission for any capital scheme of value greater than or equal to Rs One Cr at least one month prior to commencement of proposed work.</p>	<p>The Petitioner will approach Hon'ble Commission for prior approval as per directives and guidelines at appropriate time when such schemes/ investments are planned to be undertaken.</p>	<p>The Petitioner is again directed to approach the Commission to submit DPR and other related documents and take prior approval for any capital scheme of value greater than or equal to Rs One Cr at least one month prior to the commencement of proposed work.</p>
<p>The Commission directs the Petitioner to procure equipment and services through competitive bidding process. The Commission shall also review the competitive processes followed by the Petitioner while reviewing the capital expenditure and capitalization at the end of each year of the Control Period.</p>	<p>The Petitioner has been following the same for all types of procurement including services.</p>	<p>The Commission appreciates that the Petitioner is following competitive bidding process for procurement of equipment and services. The Commission again directs the Petitioner to follow the same for future procurements. It shall be reviewed while reviewing the capital expenditure and capitalization.</p>
<p>The Petitioner has submitted that the coal quality is very poor because of which it unable to maintain the SHR at the normative levels. JSEB has enhanced the LC amount by 15 Cr from Apr'12 as submitted by the Petitioner and TVNL is in position to enter into FSA with CCL. The Petitioner is directed to negotiate</p>	<p>The Fuel Supply Agreement has been negotiated and signed with M/s.CCL on 30th May 2012.</p>	<p>The directive has been complied with.</p>

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Directives as per MYT Order dated May 30, 2012	Status	Views of the Commission
with CCL for procurement of good quality coal and inform the Commission in three months.		
The Petitioner should submit the steps taken to reduce the auxiliary consumption and an action plan for further reduction in auxiliary consumption within three months of the issuance of this Order.	The Petitioner submits that it has initiated the process of re-calibration of meters for measuring auxiliary consumption. Further petitioner also submits that it will install fresh energy meters at various locations to calculate area wise power consumption.	The Petitioner didn't submit the steps and action plan to reduce the auxiliary consumption as directed in the MYT Order. The Commission again directs the Petitioner to submit in detail the steps taken to reduce auxiliary consumption along with an action plan within 2 months of issue of this order.
The Petitioner should submit the loans details along with the repayment made against each of them within one month of the issuance of this Order.	The Petitioner submits that it is yet to make any loan repayment in this financial year as recovery from JSEB is not happening.	The Petitioner is directed to make every effort to make repayments at the earliest to avoid increasing interest cost and submit such details to the Commission.

A8: DIRECTIVES

Auditor's certificate for additional capitalization

- 8.1 With regards to the Additional Capitalization the Petitioner is directed get the Certificate of Completion and the listing of the Fixed Assets Register certified by the Statutory Auditors of the Company and submit the same to the Commission with the next tariff petitions for True Up exercises.

Prior Approval for Capital Schemes with value greater than or equal to Rupees One Crore

- 8.2 The Commission directs the Petitioner to submit the Detailed Project Report (DPR) and other related documents and take prior approval of the Commission for any capital scheme of value greater than or equal to Rs One Cr at least one month prior to commencement of proposed work.

SLDC certificate for Plant Availability Factor (PAF)

- 8.3 The Commission directs the Petitioner to submit SLDC certificate for Plant Availability Factor (PAF) achieved with future petitions, in absence of which, the Commission would make an assessment of the availability and reduce the capacity charges in accordance with the Regulation 8.11 of the Generation Tariff Regulations, 2010.

Auxiliary Consumption

- 8.4 The Commission directs the Petitioner to take necessary steps to reduce the auxiliary consumption for the plant and bring it within the specified normative range.

Secondary Fuel Oil Consumption

- 8.5 High secondary fuel oil consumption is one of the biggest concerns for the Petitioner. The consumption is very high when compared to similar plants being operated by NTPC. The Commission directs the Petitioner to take necessary measures to reduce it and bring it within the specified normative range.

Ash Utilisation and Management

- 8.6 The Commission views that the Petitioner has not taken the earlier directive of the Commission regarding ash utilisation seriously. In reply to the directive compliance, the Petition has provided same response in the petitions filed for Tariff Order of FY 2011-12 dated May 31, 2011 and MYT Order dated May 30, 2012. The Commission again directs the Petitioner to take concrete steps towards directive compliance and submit the status report of the same within two months of the issue of this Tariff Order.

Loan Details and Repayment

- 8.7 The Petitioner should submit the loans details along with the repayment made against each of them within one month of the issuance of this Order.
- 8.8 The Commission also directs the Petitioner to submit details of the outstanding dues with JSEB to the Commission within one month of this Order.

Adjustment of Bills & payments/receipt as per Revised Cost of Power Sold to JSEB

- 8.9 The Commission directs the Petitioner to reconcile the payment due/receipts with JSEB, in lieu of the revised Generation Tariff for power sold to JSEB for FY 2011-12, as determined by the Commission in this order. The Petitioner is required to generate a supplementary bill for the reconciled billed amount and submit the same to JSEB.
- 8.10 The Commission directs the Petitioner to recover the approved gap of Rs 49.12 Cr for FY 2011-12 in 6 equal monthly instalments i.e. Rs 8.19 Cr every month from the beneficiary from July 2014 to December 2014 and report the compliance.

Filing of True Up Petition for FY 2012-13, APR for FY 2013-14 and Revised Estimates for FY 2014-15 to FY 2015-16

- 8.11 The Commission directs the Petitioner to submit a petition for final truing up of FY 2012-13, annual performance review for FY 2013-14 and the revision of estimates/tariff for FY 2014-15 to FY 2015-16 within 2 months of this Order.

Data adequacy in next Tariff petition and timelines

- 8.12 The Commission directs the Petitioner to come up with the next tariff petition for FY 2014-15 removing the various data deficiencies highlighted throughout the tariff order along with the unit-wise audited accounts for FY 2012-13 and latest actual figures of FY 2013-14.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this the 2nd Day of July, 2014.

Date: 2nd July, 2014

Place: Ranchi

Sd/-
(T.MUNIKRISHNAIAH)
MEMBER (E)

Sd/-
(SUNIL VERMA)
MEMBER (F)

A9: ANNEXURES

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

Sl No.	Name	Address/ Organisation if any
1	S. R. Singh	EEE, TVNL
2	S. N. Singh	AD, TVNL
3	Girish Deveshwar	Feedback Infra, Gurgaon
4	J.K. Sinha	TVNL
5	Rajesh Ranjan	ESE, TVNL
6	D.K. Singh	CS, TVNL
7	T.S. Malhotra	TVNL
8	P.K. Mishra	ESE, TVNL
9	K. Mahto	JS (T), TVNL
10	Kedar Nath Das	14BIT STEP Industrial Estate, Mesra, Ranchi
11	Rishinandan	ESE, Coml. & Rev.
12	Anita Prasad	EEE (Coml.)