

Jharkhand State Electricity Regulatory Commission



Order on
Annual Performance Review Petition
for
FY 2013-14
(Including revised true up for FY 2011-12 and
True up for FY 2012-13)
for
Tata Power Company Limited
(TPCL)

Ranchi

31st May 2015

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List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
COD	Date of Commercial Operation
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoI	Government of India
JSERC	Jharkhand State Electricity Regulatory Commission
Kcal	Kilocalorie
Kg	Kilogram
kWh	Kilowatt-hour
MAT	Minimum Alternative Tax
MCL	Mahanadi Coalfields Ltd. (IB Valley Coalfields)
ml	Millilitre
MT	Million Tonnes
MUs	Million Units
MW	Megawatt
O&M	Operations and Maintenance
PLF	Plant Load Factor
PPA	Power Purchase Agreement
RJC	Reprocessed Jig Coal
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
TPCL	Tata Power Company Limited
TSL	Tata Steel Limited
WB	West Bokaro

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BEFORE

**Jharkhand State Electricity Regulatory Commission,
Ranchi**

Case No.: 16 of 2014

In the matter of:

Petition for Revised True up for FY 2011-12;

And

Petition for True up for FY 2012-13;

And

Annual Performance Review for FY 2013-14;

And

For Revised ARR for FY 2014-15 to FY 2015-16;

And

In the matter:

Tata Power Corporation Limited (TPCL), Jojobera Power Plant,
PO Rahargora, Jamshedpur - 831 016 Petitioner

PRESENT

Hon'ble Mr Justice Narendra Nath Tiwari - Chairperson

Hon'ble Mr Sunil Verma - Member (F)

Order dated 31st May 2015

In this Petition, Tata Power Corporation Limited (hereinafter referred to as TPCL) has prayed for Order of Revised True Up for FY 2011-12, True up for FY 2012-13, Annual Performance Review of FY 2013-14 and for revised ARR for FY 2014-15 to FY 2015-16.

A1: INTRODUCTION

Jharkhand State Electricity Regulatory Commission

- 1.1 The Jharkhand State Electricity Regulatory Commission (hereinafter referred to as the “JSERC” or “the Commission”) was established by the Government of Jharkhand under Section 17 of the Electricity Regulatory Commission Act, 1998 on August 22, 2002. The Commission became operational with effect from April 24, 2003. 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 had defined the functions of JSERC as per Section 22 of the Electricity Regulatory Commission Act, 1998 to be the following, namely:-
- (a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in section 29;
 - (b) to determine the tariff payable for the use of the transmission facilities in the manner provided in section 29;
 - (c) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
 - (d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.
- 1.3 After the Electricity Act, 2003 came into force, the earlier Electricity Regulatory Commission Act of 1998 stands repealed and the functions of SERCs are now defined under Section 86 of the Act.
- 1.4 In accordance with Section 86 (1) of the Act, the JSERC discharges the following functions: -
- (a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:
- Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

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

1.5 The Commission has to also advise the State Government as per sub section 2 of Section 86 of the Act, on all or any of the following matters, namely :-

- (a) promotion of competition, efficiency and economy in activities of the electricity industry;
- (b) promotion of investment in electricity industry;
- (c) reorganisation and restructuring of electricity industry in the State;
- (d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.

- 1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.
- 1.7 In discharge of its functions, the State Commission is also guided by the National Tariff Policy as brought out by GoI in compliance to Section 3 of the Act. The objectives of the National Tariff Policy are to:
- (a) ensure availability of electricity to consumers at reasonable and competitive rates;
 - (b) ensure financial viability of the sector and attract investments;
 - (c) promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;
 - (d) promote competition, efficiency in operations and improvement in quality of supply.

The Petitioner - Tata Power Company Limited

- 1.8 The Petitioner, Tata Power Company Limited (hereinafter referred to as 'TPCL' or the 'Petitioner'), is a company incorporated under the Indian Companies Act, VII of 1913 and is engaged in the generation, transmission and distribution of electricity in the country.
- 1.9 TPCL operates two units (Unit 2 and Unit 3) of Jojobera Power Plant, which are the subject matter of tariff determination in this Tariff Order. Both Units have a capacity of 120 MW each. Unit 2 commenced its operations on February 1, 2001 and Unit 3 on February 1, 2002.
- 1.10 Tata Steel Limited (TSL), which is engaged in the production of iron and steel and is also a distribution licensee in Jamshedpur (Jharkhand), obtained permission from the Government of Bihar to establish power plants in Jojobera in 1991 through its subsidiary company named Jamshedpur Power Company Ltd. (JAPCOL) which was subsequently transferred to Tata Power Company Limited. TPCL thereafter commissioned the two Units of 120 MW each at Jojobera for supply of power to TSL.

Scope of the Present Order

- 1.11 The Petitioner in the Annual Performance Review (APR) petition for FY 2013-14 dated August 26, 2014 has prayed before the Commission:
- (a) To approve the revised Energy Charges based on the actual Transit Loss in Middling Coal for Unit 2 and Unit 3 of Jojobera for FY 2011-12;

- (b) To approve the Operational, Fuel and Financial Parameters, Additional Capitalization, Annual Revenue Requirement and Generation Tariff for Unit 2 and Unit 3 of Jojobera for Truing-up for FY 2012-13;
 - (c) To approve the Operational, Fuel and Financial Parameters, Additional Capitalization, Annual Revenue Requirement and Generation Tariff for Unit 2 and Unit 3 of Jojobera for Annual Performance Review for FY 2013-14;
 - (d) To approve the Revised Estimates of Operational, Fuel and Financial Parameters, Additional Capitalization, Revenue and Generation Tariff for Unit 2 and Unit 3 of Jojobera proposed for the balance of the Control Period FY 2014-15 to FY 2015-16;
- 1.12 The Petitioner filed for truing up of Energy charges for FY 2011-12 in lieu of actual transit loss of Middling Coal at 3.73% instead of 0.8% approved by the Commission in the APR order dated 28th April 2014.
- 1.13 The Petitioner filed for the truing up for FY 2012-13 based on the actual information and audited accounts (including the requisite auditor certifications) for FY 2012-13.

Basis of consideration

- 1.14 The Commission in this order has revised the true-up for FY 2012-13 and conducted the truing up for FY 2012-13 after thorough scrutiny of the information submitted by the Petitioner.
- 1.15 While conducting the revised true up for FY 2011-12 and truing up for FY 2012-13 the Commission has taken into consideration:
- (a) Provisions of the Electricity Act, 2003,
 - (b) Provisions of the National Electricity Policy,
 - (c) Provisions of the Tariff Policy;
 - (d) Principles and provisions laid down in the JSERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2010 (hereinafter referred to as 'Generation Tariff Regulations, 2010').

A2: PROCEDURAL HISTORY

Background

- 2.1 TISCO, now TSL, was accorded sanction under section 28(1) of the Indian Electricity Act 1910 for distribution of electricity in the Jamshedpur township area in 1923. Subsequently by Government of Bihar notification dated February 5, 1993 permission was granted for the establishment of Jamshedpur Power Generating Co. Ltd (JAPCOL) as proposed by TISCO in order to set up Units 2 and Unit 3 at Jojobera, Jamshedpur.
- 2.2 The two parties, signed a PPA on September 12, 1997 under which both the parties agreed to set up, in a phased manner, a power plant with a total capacity of up to 500 MW at Jojobera. The PPA contained certain provisions which govern the determination of tariff for power generated at Jojobera power plant and purchased by TSL.
- 2.3 In April 2000, JAPCOL was amalgamated into TPCL (the Petitioner) as its subsidiary. Currently, the Petitioner operates five units at the Jojobera Power Plant, out of which two Units (Units 2 and Unit 3) have been subject to tariff determination by the Commission. Both Units have a capacity of 120 MW each.

TSL and TPCL's prayer for treatment of Unit 2 and Unit 3 as captive units and ruling of APTEL

- 2.4 TSL and the Petitioner jointly filed a petition with the Commission for treatment of Unit 2 and Unit 3 at Jojobera power plant as captive units of TSL. The extract of the Appeal is as stated below

“The units 2 & 3 at Jojobera, Jamshedpur with a total installed capacity of 240 MW were conceived to meet the needs of steel works and are essentially captive power plants for steel works and related and associated activities of TSL i.e. steel works. The permission to establish the units 2 & 3 were granted to Jamshedpur Power Generating Co. Ltd. (JAPCOL for short) vide a notification issued by the Government of Bihar dated 05.02.93, subsequently amended on 22.03.96 under section 15-A, 43(A)(1)(C) and 44(1) of the Act of 1948. JAPCOL was later amalgamated into TPC in April 2000. The electricity generated from units 2 & 3 were from the very beginning primarily and essentially used for activities associated with manufacture of steel at TSL and for activities incidental and related thereto such as for supply to residential colonies of steel works. TSL became a sanction holder under section 28(1) of Act of 1910 and the area contiguous to the steel works forming part of the Jamshedpur city was taken over by TSL for electricity distribution. TSL is now distribution licensee in the area of Jamshedpur as an ancillary unit in principal business of production of steel. The electricity distribution and retail supply to consumers was done from the energy available after own consumption for TSL's principal business activity. TSL also purchases electricity from

TPCL's unit 1 at Jojobera for consumers of steel works. It also purchases electricity from the Damodar Valley Corporation (DVC for short) to supplement the electricity generated at TPCL's generating units. The supply of electricity to steel works from units 2 & 3 be not considered as supply of electricity by TSL as distribution licensee and therefore be not made part of annual revenue requirement and tariff proposal of TSL's activity as distribution licensee."

- 2.5 The Commission, in its order dated November 2, 2007, dismissed the appellants' contention that Units 2 and Unit 3 of the Jojobera plant be treated as captive power plants, on the basis of Section 9 of the Electricity Act 2003 and Rule 3 of the Electricity Rules 2005.
- 2.6 Dissatisfied with the Commission's order on the Joint petition filed by TSL and the Petitioner, the two appellants went in appeal before the Hon'ble ATE.
- 2.7 The Hon'ble ATE, too, ruled that the generating Units in question could not be treated as CPPs and upheld the Order of the Commission. The two appellants subsequently submitted a petition in the Hon'ble Supreme Court to get a stay on the Hon'ble ATE's Judgment, which was refused by the Hon'ble Court. The matter is still pending in the Hon'ble Supreme Court.

Filing of ARR and Tariff petition by TPCL and Tariff Order for FY 2009-10

- 2.8 In view of the Hon'ble ATE's Judgement and in accordance with the JSERC 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 2 and Unit 3) at Jojobera.
- 2.9 TPCL filed the petition for determination of ARR for FY 2007-08, FY 2008-09 and FY 2009-10. The norms and guiding principles for tariff determination adopted by TPCL were not as per the JSERC Generation Tariff Regulations, 2004 but in accordance with the Power Purchase Agreement of 30 years signed with TISCO/TSL as sanction holder for distribution and generation of electricity at Jamshedpur.
- 2.10 During the tariff determination exercise for FY 2009-10 the Petitioner submitted that "as the PPA is legally binding on both parties, the Commission is requested to determine generation tariff for sale of power from both the Units, as per the provisions of the existing PPA."
- 2.11 The Commission accepted TPCL's request and determined the tariff for the FY 2009-10 as per the provisions of the PPA between TPCL and TSL. The Commission, however, directed the two parties to re-negotiate the PPA as under:

“10.1 The Petitioner had signed a Power Purchase Agreement (PPA) with TSL Limited (TSL) on 12th September, 1997 under which the Petitioner and TSL agreed to set up, in a phased manner, a power plant with a total capacity up to 500 MW at Jojobera. The PPA laid down certain provisions governing the determination of tariff for power generated by TPCL’s Jojobera Power Plant and purchased by TSL.

10.2 Since the tariff period for FY 2007-08 and FY 2008-09 is effectively over and the tariff period remaining for FY 2009-10 is also not adequate to enforce any changes in the PPA, the Commission has decided to accept the provisions of the PPA for the tariff determination exercise for FY 2007-08, FY 2008-09 & FY 2009-10 for power generated from Unit 2 and Unit 3 of Jojobera Plant.

10.3 Furthermore, since the petition for FY 2010-11 is already due for submission by TPCL, the Commission has decided to continue with the provisions of the PPA for the tariff period FY 2010-11 as well.

10.4 Meanwhile, for future tariff periods, the Commission directs the Petitioner to renegotiate the terms and conditions for the determination of tariff specified in the PPA with TSL within 6 months of the issue of this order and submit the ARR filing for FY 2011-12 as per the new agreement (to be ratified by the Commission). The terms and conditions of the tariff determination in the new agreement between TPCL and TSL should be guided by ‘Generation Tariff Regulations, 2004’ as amended from time to time.”

Tariff Order for FY 2010-11

- 2.12 During the tariff determination exercise for FY 2010-11 the Petitioner reiterated its request that the Commission determine the generation tariff for sale of power from both the Units (Unit 2 and Unit 3), as per the provisions of the existing PPA.
- 2.13 The Commission in its previous tariff order of FY 2009-10 had accepted the Petitioner’s request and had decided to follow the provisions of PPA for determination of tariff up to the FY 2010-11 for power generated by Unit 2 and Unit 3. Thus the Commission decided to determine the tariff for FY 2010-11 as per the provisions of the PPA.
- 2.14 However, the Commission reiterated that from FY 2011-12 onwards, the tariff for Unit 2 and Unit 3 must be determined in accordance with the Generation Tariff Regulations 2010 of the Commission. It was clarified in the Tariff Order for FY 2010-11, thus;

“The Commission is in the process of revising the Generation Regulations and the same would be applicable to all the generation stations.”

Tariff Order for FY 2011-12

- 2.15 The Commission in its previous Tariff Order for FY 2011-12 determined the ARR and generation tariff for Unit 2 and Unit 3 of TPCL for FY 2011-12 in accordance with the provisions and principles laid down in the Generation Tariff Regulations, 2010.

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

- 2.16 The Petitioner filed the petition for Business Plan, Annual Revenue Requirement and Determination of Generation Tariff for the control period FY 2012-13 to 2015-16 on November 30, 2011.
- 2.17 The Commission in its order dated May 31, 2012 approved the petition filed by the Petitioner regarding Business Plan, Annual Revenue Requirement and Determination of Generation Tariff for the control period FY 2012-13 to 2015-16, including truing up for FY 2010-11 and provisional truing up for FY 2011-12.

Tariff Order on Annual Performance Review for FY 2012-13 including Truing up of FY 2011-12 and Revised Estimates for FY 2013-14 - FY 2015-16

- 2.18 The Commission in its previous Tariff Order, in accordance with the provisions and principles laid down in the Generation Tariff Regulations, 2010, carried out truing up of ARR parameters for FY 2011-12 and directed the Petitioner to file fresh petition regarding Truing up for FY 2012-13, APR for FY 2013-14 and Revised Estimates for FY 2014-15 to FY 2015-16.

Filing of the Petition by the Petitioner

- 2.19 The Petitioner filed the petition for Annual Performance Review for 2013-14 along with True Up for FY 2011-12 (Revised energy charges), True Up of FY 2012-13 and revised estimates for FY 2014-15 to 2015-16 on 26th August, 2014.
- 2.20 The Petitioner in the present petition has requested to approve:
- (a) Revised Energy Charges based on the actual Transit Loss in Middling Coal for Unit 2 and Unit 3 of Jojobera for FY 2011-12;
 - (b) Operational, Fuel and Financial Parameters, Additional Capitalization, Annual Revenue Requirement and Generation Tariff for Unit 2 and Unit 3 of Jojobera for Truing-up for FY 2012-13;
 - (c) Operational, Fuel and Financial Parameters, Additional Capitalization, Annual Revenue Requirement and Generation Tariff for Unit 2 and Unit 3 of Jojobera for Annual Performance Review for FY 2013-14;

- (d) Revised Estimate of Operational, Fuel and Financial Parameters, Additional Capitalization, Revenue and Generation Tariff for Unit 2 and Unit 3 of Jojobera proposed for the balance of the Control Period FY 2014-15 to FY 2015-16;

Information Gaps in the APR Petition

- 2.21 In accordance with Section 64(3) of the Act, the State Electricity Regulatory Commission, within one hundred and twenty days of the filing of application for determination of tariff, is required to either accept it and issue a tariff order or reject the application for reasons to be recorded in writing. The Commission accepted the application submitted by the Petitioner for determination of tariff. As part of tariff determination exercise for the Control Period, several deficiencies/information gaps were observed in the tariff petition submitted by the Petitioner.
- 2.22 Those information were pointed out and communicated to the Petitioner vide letter nos.
- (a) JSERC/16 of 2014/474 dt. 9th October 2014
- (b) JSERC16 of 2014/123 dt. 18th May 2015
- 2.23 The Petitioner submitted its response to the aforesaid letters and furnished additional data/information vide letter nos.
- (a) JPP/REG/JSERC/153/14 dt. 6th November 2014
- (b) JPP/REG/JSERC/102/15 dt. 26th May 2015
- 2.24 The Commission scrutinized the said additional data/information and also considered the same while passing this Order on the petition filed by the Petitioner.

Inviting Public Comments/Suggestions

- 2.25 The Commission directed the Petitioner to make available copies of the petition to the members of general public on request, and also issue a public notice inviting comments/suggestions on the petition for Truing Up of energy charges for FY 2011-12, Truing up of FY 2012-13, APR for FY 2013-14 and revised estimates for FY 2014-15 to FY 2015-16.
- 2.26 The aforesaid public notice was issued by the Petitioner in various newspapers and a period of twenty one (21) days was given to the members of the general public for submitting their comments/suggestions.

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

Sl. No.	Newspaper (Jamshedpur edition)	Date of Publication
1.	The Hindustan Times (English)	25 th & 26 th December 2014
2.	Telegraph (English)	25 th & 26 th December 2014

Sl. No.	Newspaper (Jamshedpur edition)	Date of Publication
3.	Prabhat Khabar (Hindi)	25 th & 26 th December 2014
4.	Dainik Bhaskar (Hindi)	25 th & 26 th December 2014

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

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

Sl. No.	Newspaper (Jharkhand edition)	Date of Publication
1	Hindustan (Hindi)	10 th April 2015
2	Prabhat Khabar	10 th April 2015
3	Dainik Bhaskar	10 th April 2015
4	The Pioneer (English)	10 th April 2015
5	Farooqui Tanzeem (Urdu Daily)	10 th April 2015
6	Dainik Jagran	11 th April 2015
7	UditVani	11 th April 2015
8	Ranchi Express	11 th April 2015
9	The Hindustan Times (English)	11 th April 2015

Submission of Comments/Suggestions and Conduct of Public Hearing

2.28 A public hearing was held on April 11th, 2015 at Jamshedpur and many 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 Commissions analysis on the response provided by the Petitioner are detailed in the **Section 4** of this Order.

A3: SUMMARY OF THE PETITION FOR ANNUAL PERFORMANCE REVIEW FOR FY 2013-14 INCLUDING TRUING UP OF ENERGY CHARGES FOR FY 2011-12, TRUING UP FOR FY 2012-13 AND REVISED ESTIMATES FOR FY 2014-15 TO FY 2015-16

Overview of the Thermal Stations

3.1 The Petitioner currently operates five units at the Jojobera power plant. Of these, two units i.e. Unit 2 and Unit 3 are the subject of ARR and tariff determination in the petition filed by it. The following table summarizes the information pertaining to both the units.

Table 3: Overview of Unit 2 and Unit 3

S. No.	Unit	Installed Capacity(MW)	Status of Operation	Commercial Date of Operation
1	Unit 2	120	Operational	February 1, 2001
2	Unit 3	120	Operational	February 1, 2002

Truing Up for Energy Charges for FY 2011-12

3.2 The Petitioner has requested for revised true up for energy charges for FY 2011-12 based on the actual transit loss for Middling Coal in FY 2011-12. The energy charges as proposed by the Petitioner for FY 2011-12 are summarised in the following table:

Table 4 Operational performance, fixed cost, energy charges and annual revenue requirement for FY 2011-12

Particulars	Units	Actuals for FY 2011-12 (Unit 2)	Actuals for FY 2011-12 (Unit 3)
Gross Generation	MUs	798.55	824.69
Plant Load Factor	%	75.76%	78.24%
Aux Power Consumption	%	9.55%	9.35%
Ex-Bus Generation	MUs	722.27	747.62
Normative Heat Rate	kcal/kWh	2567	2577
Normative Sp. LDO Consumption	ml/kWh	1.00	1.00
Depreciation	Rs Crores	3.81	5.53
Interest on Loan	Rs Crores	0.36	0.31
O&M Expenses	Rs Crores	22.98	21.29
Return on Equity (Pre-Tax)	Rs Crores	25.31	24.52
Interest on working Capital	Rs Crores	7.68	7.61
LDO Expenses at Normative Availability	Rs Crores	4.39	4.29
Annual Fixed Charges	Rs Crores	64.54	63.55
Incentive	Rs Crores	6.52	4.65
Annual Fixed Charges (including Incentive)	Rs Crores	71.06	68.20

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Particulars	Units	Actuals for FY 2011-12 (Unit 2)	Actuals for FY 2011-12 (Unit 3)
Rate of Energy Charges	Rs/kWh	1.894	1.892
Energy charges	Rs Crores	136.78	141.43
Annual Revenue Requirement	Rs Crores	207.84	209.64
Less: Sharing of Gain on LDO Consumption with Licensee	Rs Crores	1.10	0.34
Add: Tax on the Gain on LDO Consumption retained by TPCL	Rs Crores	0.28	0.09
Add: Tax on the Gain on Auxiliary Power Consumption	Rs Crores	0.17	0.26
Annual Revenue Requirement (including sharing of efficiency gains)	Rs Crores	207.18	209.64

Truing up of FY 2012-13

3.3 In its petition the Petitioner has requested for the Truing up of FY 2012-13 based on the actual information for the period from April 2012 to March 2013. The energy charge and fixed charge submitted by the Petitioner for FY 2012-13 are shown in the table below:

Table 5 Operational performance, fixed cost, energy charges and annual revenue requirement for FY 2012-13

Particulars	Units	Actuals for FY 2012-13 (Unit -2)	Actuals for FY 2012-13 (Unit -3)
Gross Generation	MUs	866.87	886.50
Plant Load Factor	%	82.47%	84.33%
Aux Power Consumption	%	9.40%	10.00%
Ex-Bus Generation	MUs	785.35	797.85
Availability	%	94.10%	98.81%
Gross Heat Rate	kcal/kWh	2591	2601
Normative Sp. LDO Consumption	ml/kWh	1.00	1.00
Depreciation	Rs Crores	4.31	5.88
Interest on Loan	Rs Crores	1.15	0.81
O&M Expenses	Rs Crores	33.87	25.27
Return on Equity (Pre-Tax)	Rs Crores	25.85	24.89
Interest on working Capital	Rs Crores	11.12	10.44
Cost of Secondary Fuel Oil	Rs Crores	5.22	5.26
Revenue Gap of FY 2010-11	Rs Crores	5.32	1.38
Annual Fixed Charges	Rs Crores	86.85	73.94
Projected Incentive (Pre-tax)	Rs Crores	11.62	15.02
Annual Fixed Charges (including Incentive)	Rs Crores	98.47	88.96

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Particulars	Units	Actuals for FY 2012-13 (Unit -2)	Actuals for FY 2012-13 (Unit -3)
Rate of Energy Charges	Rs/kWh	2.210	2.243
Energy charges	Rs Crores	173.55	180.41
Annual Revenue Requirement	Rs Crores	272.02	269.37
Add: Tax on the Gain on LDO Consumption retained by TPCL	Rs Crores	0.91	0.87
Add: Tax on the Gain on Auxiliary Power Consumption	Rs Crores	0.29	0.36
Annual Revenue Requirement (including Tax on Efficiency Gains)	Rs Crores	273.22	270.59

3.4 In addition to above, the Petitioner by filing Interlocutory Application No. 05 of 2015 in Petition No. 16 of 2014 dated January 30, 2015 requested the Commission not to consider the recovery amount on account of FY 2010-11 while approving true up for FY 2012-13, as the same had been recovered through supplementary bills in accordance with the provisions of previous PPA dated 12.09.1997.

Annual Performance Review for FY 2013-14

3.5 In its petition, the Petitioner has requested for Annual Performance Review for FY 2013-14 based on the actual information from April 2013 to March 2014. The following table shows the energy charge and fixed charge for FY 2013-14 submitted by the Petitioner for performance review:

Table 6 Annual Performance Review for FY 2013-14 submitted by the Petitioner

Particulars	Units	Unit -2	Unit 3
Gross Generation	MUs	823.23	742.10
Plant Load Factor	%	78.31%	70.60%
Aux Power Consumption	%	9.18%	9.79%
Ex-Bus Generation	MUs	747.66	669.44
Availability	%	98.88%	92.07%
Gross Heat Rate	kcal/kWh	2573	2597
Normative Sp. LDO Consumption	ml/kWh	1.00	1.00
Depreciation	Rs Crores	4.84	6.47
Interest on Loan	Rs Crores	1.97	1.71
O&M Expenses	Rs Crores	33.15	32.66
Return on Equity (Pre-Tax)	Rs Crores	26.78	25.87
Interest on working Capital	Rs Crores	15.06	13.31
Cost of Secondary Fuel Oil	Rs Crores	5.46	5.51
Annual Fixed Charges	Rs Crores	87.26	85.54

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Particulars	Units	Unit -2	Unit 3
Incentive (Pre-tax)	Rs Crores	18.02	9.00
Annual Fixed Charges (including Incentive)	Rs Crores	105.28	94.53
Rate of Energy Charges	Rs/kWh	2.655	2.663
Energy charges	Rs Crores	198.52	178.25
Add: Tax on the Gain on LDO Consumption retained by TPCL	Rs Crores	1.04	0.61
Add: Tax on the Gain on Auxiliary Power Consumption	Rs Crores	0.48	0.11
Annual Revenue Requirement (including Tax on Efficiency Gains)	Rs Crores	305.32	273.49

Revised Estimates for FY 2014-15 to FY 2015-16

3.6 In its ARR and tariff petition, the Petitioner has requested for revision of projections for Units 2 and Unit 3 for the remaining years of Control Period i.e FY 2014-15 to FY 2015-16, which takes into consideration the norms and principles outlined in Generation Tariff Regulations, 2010, MYT Business Plan and MYT Petition filed by the Petitioner for the Control Period FY 2012-13 to FY 2015-16, historical performance and cost trends of Units 2 and 3 in previous financial years and MYT Order for the Control Period.

3.7 The revised energy charges and fixed cost as submitted by the Petitioner for remaining control period i.e. FY 2014-15 to FY 2015-16, are summarised in the following tables:

Table 7 Submitted Energy Charges and Fixed Charges for FY 2014-15 to FY 2015-16 for Unit 2

Particulars	Units	Revised Estimate for FY 2014-15	Revised Estimate for FY 2015-16
Gross Generation	MUs	893.52	895.97
Normative Aux Power Consumption	%	10.00%	10.00%
Ex-Bus Generation	MUs	804.17	806.37
NAPAF	%	85.00%	85.00%
Gross heat Rate	kcal/kWh	2573	2573
Normative Sp. LDO Consumption	ml/kWh	1.00	1.00
Depreciation	Rs Crores	5.64	6.80
Interest on Loan	Rs Crores	3.21	5.31
O&M Expenses	Rs Crores	35.86	38.67
Return on Equity (Pre-Tax)	Rs Crores	27.72	29.30
Interest on working Capital	Rs Crores	14.58	14.93
Cost of secondary fuel oil	Rs Crores	5.46	5.47
Total Annual Fixed Charges	Rs Crores	92.47	100.48

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Particulars	Units	Revised Estimate for FY 2014-15	Revised Estimate for FY 2015-16
Incentive (Pre-tax)	Rs Crores	11.22	19.57
Annual Fixed Charges (including Incentive)	Rs Crores	103.69	120.05
Rate of Energy Charges	Rs/kWh	2.550	2.550
Energy charges	Rs Crores	205.03	205.59
Annual Revenue Requirement	Rs Crores	308.72	325.64
Revenue Gap/(Surplus) of FY 12 & FY 13	Rs Crores	24.90	-
Revenue Gap/(Surplus) of FY 14	Rs Crores	14.73	-
Total Annual Revenue Requirement	Rs Crores	348.35	325.64

Table 8 Submitted Energy Charges and Fixed Charges for FY 2014-15 to FY 2015-16 for Unit 3

Particulars	Units	Revised Estimate for FY 2014-15	Revised Estimate for FY 2015-16
Gross Generation	MUs	893.52	895.97
Normative Aux Power Consumption	%	10.00%	10.00%
Ex-Bus Generation	MUs	804.17	806.37
NAPAF	%	85.00%	85.00%
Gross heat Rate	Kcal/kWh	2597	2597
Normative Sp. LDO Consumption	ml/kWh	1.00	1.00
Depreciation	Rs Crores	7.30	8.48
Interest on Loan	Rs Crores	2.95	4.63
O&M Expenses	Rs Crores	35.49	38.26
Return on Equity (Pre-Tax)	Rs Crores	26.84	28.21
Interest on working Capital	Rs Crores	14.30	14.63
LDO Expenses at Normative Availability	Rs Crores	5.59	5.61
Total Annual Fixed Charges	Rs Crores	92.47	99.81
Projected Incentive (Pre-tax)	Rs Crores	18.01	12.11
Annual Fixed Charges (including Incentive)	Rs Crores	110.48	111.92
Rate of Energy Charges	Rs/kWh	2.527	2.527
Energy charges	Rs Crores	203.24	203.79
Annual Revenue Requirement	Rs Crores	313.72	315.71
Revenue Gap/(Surplus) of FY 12 & FY 13		16.74	-
Revenue Gap/(Surplus) of FY 14	Rs Crores	18.77	-
Total Annual Revenue Requirement	Rs Crores	349.22	315.71

A4: PUBLIC CONSULTATION PROCESS

- 4.1 The public hearing on the tariff petition filed by the Petitioner was held on 11th April 2015 in Jamshedpur. The list of participants is enclosed as **Annexure-I**.
- 4.2 The comments and suggestion of the members of the public along with the response thereon of the Petitioner and the views of the Commission are detailed hereunder:

Non-submission of unit-wise audited accounts for FY 2011-12 and FY 2012-13

Public Comments/Suggestions

- 4.3 The Objector commented that despite the clear directive of the Hon'ble Commission, the Petitioner has not submitted unit-wise audited accounts for FY 2011-12 and FY 2012-13. The objectors further stated that the Petitioner has attached an incomplete Auditors' Certificate which was issued by the Auditors for some other purpose and referred these incomplete extracts as "Audited Accounts" at many places in the Petition, and tried to mislead and believe the Commission to believe the incomplete extracts of an Auditors' Certificate as audited accounts.

Petitioner's Response

- 4.4 The Petitioner submitted that Audited Financial Accounts for every financial Year are prepared at the Company Level and the same is published in the Annual Report of the Company which is available in the Public Domain. The Petitioner further submitted that as per the directive of the Hon'ble Commission in the Tariff Order dated 28.04.2014, it has submitted the extracts of the Section 80IA Certificates provided by the Auditors of the Company containing the details of the unit-wise audited accounts for Unit 2 and Unit 3 in Annexure 6 & Annexure 12 for FY 2011-12 and FY 2012-13 respectively in the present petition. The Petitioner also submitted that no separate certificate of unit-wise audited accounts has been obtained for the purpose of submission before the Hon'ble Commission.

Views of the Commission

- 4.5 The Commission appreciates the concern of the Objector. The Commission has taken care thereof and conducted true-up only after proper prudence check, due diligence and verification of information from the other supporting documents.
- 4.6 The Commission, however, notes with concern that the information submitted by the Petitioner in the Auditor's Certificate for performance of Unit 2 & Unit 3 is incomplete and does not provide details of capital expenditure, loan balances, other balance sheet items, schedules for operating costs and revenue, etc.

- 4.7 The Commission directs the Petitioner to be careful in future and submit complete unit-wise audited accounts henceforth containing all relevant schedules and allocation statements along with the petitions for true up purposes.

Comments/ objections regarding suppression of information and misleading the Commission

Public Comments/Suggestions

- 4.8 The Objector suggested that the Auditors' Certificate as attached in Annexure 6 & 12 should be deemed to be null and void as they are not complete set of Auditors' Certificates and the main parts of Auditors' Report attached to these Certificates have wilfully been suppressed. The Objector commented that by attaching a certificate of its Auditors which was never issued by the Auditor of the Petitioner for the Petition, the Petitioner has misled the Commission.

Petitioner's Response

- 4.9 The Petitioner submitted that the relevant documents as mentioned by the Objector were submitted before the Hon'ble Commission with the clear intention to provide Audited Accounts for the purpose of Truing-up of the respective years. The Petitioner further stated that as extracts of 80 IA Certificates related to Unit 2 & Unit 3 have been submitted to the Hon'ble Commission hence the same cannot tantamount to wilful suppression. The Hon'ble Commission had in the past accepted such financial statements and passed the Tariff Order for FY 2011-12, MYT Order for FY 2013-16 and APR Order for FY 2012-13. The Petitioner further stated that the allegations of misleading the Hon'ble Commission and suppression of information are baseless and devoid of any merits.

Views of the Commission

- 4.10 The Commission finds the Auditors certificate incomplete, inadequate and insufficient for the purpose, even if the same may not intend to suppress the facts and mislead the Commission and as directed above. The Petitioner is cautioned not to furnish such half-baked and incomplete document in future not properly showing unit wise complete audited accounts with relevant schedules and allocation statements etc.

Regarding O&M Cost

Public Comments/Suggestions

- 4.11 The Objector submitted that the employee cost submitted by the Petitioner is inflated as the Petitioner hires a number of contract labourers and the actual employee expense is lower.

Petitioner's Response

4.12 The Petitioner submitted that it awards performance based contracts for day to day routine R&M activities of its generation units. These contract labourers are paid in accordance with the statutory provisions made by the State of Jharkhand wherein the minimum wages as notified by the Govt. of Jharkhand have increased over the past years and as such, no over projection has been done in employee costs with respect to such expenses.

Views of the Commission

4.13 The Commission has approved the O&M cost for the Petitioner in its MYT Order after undertaking detailed scrutiny of past expenses and due prudence check in line with provisions specified in the Generation Tariff Regulations 2010.

MoU with State Government

Public Comments/Suggestions

4.14 The Objector submitted that the Tata Power had signed an MoU with the State Government for supply of power at a lower rate. Accordingly the Commission should consider the approved rates as per the MoU for the whole of Jharkhand.

Petitioner's Response

4.15 The Petitioner submitted that Tata Power has executed an MoU with the Govt. of Jharkhand for supply of electricity from a different project of 3x660 MW proposed at Tiruldih in Saraikela Kharaswan district of Jharkhand. The Petitioner further submitted that the above MoU is not related to supply of power from Jojobera Unit-2 and Unit-3 to TSL.

Views of the Commission

4.16 As this Order pertains only to the supply of power from Jojobera Unit-2 and Unit-3 to TSL, the Commission accepts the submission made by the Petitioner.

Power Supply to JUSCO

Public Comments/Suggestions

4.17 The Objector submitted that TPCL supplies daily 65MW to JUSCO without the approval of the Commission and that these facts have not been submitted to the Commission as part of this Petition.

Petitioner's Response

4.18 The Petitioner submitted that there is no direct supply provided to JUSCO by the Petitioner.

Views of the Commission

4.19 The Commission has verified the net generation from TPCL Unit –II and Unit –III with the energy procured by TSL licensee and accepts the submission of the Petitioner

Water consumption in power station

Public Comments/Suggestions

4.20 The Objector submitted that while Tata Power has won awards in quality circles for reduction in water consumption, in its Tariff Petition it has shown higher water consumption. The Objector requested the Commission to verify the same.

Petitioner's Response

4.21 The Petitioner submitted that raw water expenses are computed in line with the Commission's Order dated November 21, 2012 on review petition filed by Tata Power in Case no. 12 of 2012. Further the raw water consumption has reduced for both Unit -2 and Unit -3 in FY 2013-14 leading to reduction in costs.

Views of the Commission

4.22 The Commission has taken note of the Objectors suggestions and has undertaken due prudence check before approving the costs of the Petitioner.

Imported Coal

Public Comments/Suggestions

4.23 The Objector submitted Tata Power imports coal form foreign countries but the same has not been disclosed in the Tariff Petition.

Petitioner's Response

4.24 The Petitioner submitted that it has not used imported coal in Unit -2 and Unit -3 for the period FY 2011-12 and FY 2012-13. The Petitioner further submitted that its coal is procured from Mahanadi Coalfields Limited and West Boakro Mines.

Views of the Commission

- 4.25 The Commission has reviewed and approved the fuel cost after verifying the relevant documents including audited statements and bills.

Fly Ash

Public Comments/Suggestions

- 4.26 The Objector submitted that the Petitioner sells ash at the rate of Rs 45/Ton and for the purpose of transportation and has also built platform for loading of ash and unloading of coal. The Objector suggested that the Commission should disallow the expenses towards road transportation of ash and consider the revenue from sale of ash in other income.

Petitioner's Response

- 4.27 The Petitioner submitted that it is supplying fly ash to M/s Lafarge and various cement companies in North East free of cost in order to achieve 100% fly ash utilization as per MOEF Notification and has not generated any revenue from such sale.

Views of the Commission

- 4.28 The Commission notes the suggestion of the Objector and directs the Petitioner to achieve 100% fly ash utilization as per MOEF notification.

A5: TRUING UP OF ENERGY CHARGES FOR FY 2011-12

- 5.1 The Commission notified Generation Tariff Regulations dated October 07, 2010 for the transition period commencing April 01, 2011 and extending up to March 31, 2012 and the Control Period starting thereafter from 1st April 2012 and up to 31st March 2016.
- 5.2 The Commission had approved the ARR and generation tariff for FY 2011-12 in its Tariff Order dated August 20, 2011 based on the projections for various cost parameters.
- 5.3 The Commission approved the ARR and generation tariff for the Control Period in its Tariff Order dated May 31, 2012 along with revised estimates for FY 2011-12.
- 5.4 The Commission had approved the truing up of ARR and generation tariff for FY 2011-12 in its Order dated August 28, 2014.
- 5.5 The Commission in its MYT order dated May 31, 2012 approved Transit Loss at 0.8% for both Unit 2 and Unit 3 for FY 2011-12 as per the norms specified in the Generation Tariff Regulation, 2010.
- 5.6 Against the said Order, the Petitioner appealed before Hon'ble APTEL being Appeal No 147/2012. The Hon'ble APTEL disposed off the said appeal with the following observations/ directions:

*“The facts of the case before us squarely fit in to the facts of Delhi Case in Appeal No. 26 of 2008. Accordingly, the ratio laid down in Appeal No. 26 of 2008 would be applicable to this case. **The State Commission is, therefore, directed to reconsider the issue of loss in washed coal transit afresh and issue consequential orders.**”*

In view our summary of findings above, the impugned order is set aside and the Appeal is allowed. However, there is no order as to costs.”

- 5.7 Subsequently, the Commission by Order dated August 28, 2014, while reconsidering true up for FY 2011-12, observed in Paragraphs 5.39 and 5.40 as under:

“As per the directions of the Hon'ble APTEL, the Commission has to reconsider the issue of loss to be allowed in washed coal transit afresh. The Commission is thus required to re-determine the norm for transit loss for washed coal for the Petitioner taking into account the actual transit loss incurred by the Petitioner, additional loss on account of washing of coal etc.

In view of the judgement of the APTEL and the interests of consumers the Commission believes that for reconsideration of the issue of transit loss it is necessary to undertake a detailed Fuel Audit Study of the actual transit loss of the Petitioner. Pending the results of such a study, for the time being, the Commission has considered the transit loss of coal at 0.8% and the Commission shall revise the norm for transit loss after the completion of the Fuel Audit Study.”

- 5.8 The Petitioner submitted that above order did not bring any relief to it and thus in the present petition has prayed for revising the energy charges for FY 2011-12 based on actual transit loss and revising the true up of FY 2011-12 in light of the Hon'ble APTEL judgement.
- 5.9 The Commission has analysed the submission of the Petitioner with respect to the revised ARR for FY 2011-12. However, as the essential Fuel Audit study has not been completed, the Commission has undertaken only a provisional true up exercise of various components subject to finalisation of Fuel Audit study. The component-wise description of the Petitioner's submission and the Commission's analysis thereof is provided hereunder.

Transit Loss

Petitioner's submission

- 5.10 The Petitioner submitted that the actual Transit Loss of Unit 2 and Unit 3 of the Jojobera generating station is 3.73% and proposed to factor the aforesaid transit loss in the Energy Charges for FY 2011-12.

Commission's analysis

- 5.11 In light of the Judgement of the Hon'ble APTEL in Appeal 147 of 2012 and considering that the fuel audit study has not been finalized yet, the Commission has decided to consider the prayer of the Petitioner with respect to the revision of true up for FY 2011-12 on account of revised approval for transit loss for FY 2011-12 on provisional basis subject to finalization on completion of the Fuel Audit study.
- 5.12 The Commission for the time being has analysed the issue for giving some relief to the Petitioner on the basis of analysis of the facts and circumstances and also considering the Order by the Punjab State Electricity Regulatory Commission (PSERC) passed in similar situation.
- 5.13 The Punjab State Electricity Regulatory Commission (PSERC) in its Tariff order for Punjab State Power Corporation Ltd (PSPCL) for FY 2015-16 also faced similar issue in case of transit loss for its GNDTP thermal station. PSPCL claimed that actual transit losses for the GNDTP stations is 1.50% and that loss in transportation of coal is beyond its control and had prayed to the Commission to adopt the same norm. However, the PSERC after considering the whole issue of transit loss, decided to cap the maximum transit loss of coal at 1.0% to be trued up at actual.
- 5.14 In the instant case, the Commission has analysed the trend of actual transit loss incurred by TPCL during preceding years. The following table summarises the actual transit loss achieved by TPCL during FY 2009-10 to FY 2013-14.

Table 9 Trend in actual transit loss for TPCL

Year	W.avg. Transit Loss(%)
2009-10	3.32%
2010-11	3.82%
2011-12	3.73%
2012-13	1.16%
2013-14	0.70%

5.15 As can be seen from the table above, the Transit Loss of the Petitioner in subsequent years has reduced drastically. While in the year of contention, i.e. FY 2011-12, the transit loss was 3.73%. In the subsequent year itself, i.e. FY 2012-13, the Petitioner was able to achieve 70% reduction in transit loss alone and actual transit loss stood at 1.16%. In FY 2013-14, a further reduction of 40% was made in transit loss and actual transit loss was only 0.7% which is even lower than the normative transit loss levels. Even though the Petitioner made drastic reduction in transit loss in subsequent years after FY 2011-12, the reasons explained by the Petitioner for the same were not supported by any material on record or any plausible analysis. In the given data on transit loss, it is difficult to find any trend or basis for such huge variations. Moreover, the Commission also scrutinised the monthly data of transit loss for the year under consideration i.e. FY 2011-12 and noticed that during the year, huge variations are recorded with minimum transit loss achieved at 0.55% and maximum at 7.78%. Again, the variations in months and in subsequent years gives reasons to the Commission to not rely on the data submitted by the Petitioner and there is a need to conduct a Fuel Audit to study to estimate the actual transit losses incurred.

5.16 Taking into consideration the above facts and also the instance of PSERC, the Commission provisionally allows transit loss subject to maximum of 1% in Middling Coal of Unit 2 and Unit 3 of the Jojobera generating station for FY 2011-12, subject to the final view which may be taken on completion of the fuel audit study.

Computation of Energy Charges

Petitioner's submission

5.17 The Petitioner submitted revised energy charges based on claimed actual transit loss of 3.73% in FY 2011-12.

Commission's analysis

5.18 The Commission provisionally approves the revised energy charges for FY 2011-12 considering the transit loss of 1% for middling coal in Unit -2 and Unit 3 of the Jojobera Power Station.

5.19 The detailed computation of energy charges and rate of energy charges is provided in the following table.

Table 10 Provisional approved Energy Charges for Unit -2 and Unit-3 for FY 2011-12

Particulars	Units	Unit-2		Unit -3	
		TPCL Proposed Now	Provisional Approval Now	TPCL Proposed Now	Provisional Approval Now
Gross Generation	MUs	798.54	798.54	824.69	824.69
Heat Rate	(Kcal/Kwh)	2567	2567	2577	2577
Auxiliary consumption	%	9.55%	9.55%	9.35%	9.35%
Normative Aux. Cons.	%	10.00%	10.00%	10.00%	10.00%
Transit loss of coal	%	3.73%	1.0%	3.73%	1.0%
MCL - IB Valley Coal	Rs/Ton	1582	1585	1570	1573
Middling - West Bokaro Coal	Rs/Ton	2974	2892	2969	2887
Weighted Average cost of Indian Coal	Rs/Ton	2489	2436	2474	2422
Energy Charge Rate (ECR)	Rs/kWh	1.894	1.854	1.892	1.852
Total Energy Charges	Rs Cr.	136.78	133.91	141.43	138.45

Annual Revenue Requirement for FY 2011-12

Petitioner's submission

5.20 The Petitioner submitted revised ARR for FY 2011-12 based on the ARR approved in True Up Order for FY 2011-12 dated April 28, 2014 and the revised proposal for energy charges. The Petitioner proposed an ARR of Rs 207.18 Cr for Unit -2 and Rs 209.64 Cr for Unit-3 respectively.

Commission's analysis

5.21 The Commission provisionally approves the revised ARR for FY 2011-12 considering the revised energy charges for Unit -2 and Unit 3 of the Jojobera Power Station. The detailed computation of ARR is provided in the following table:

Table 11 Provisional approved ARR for Unit -2 and Unit-3 for FY 2011-12 (Rs Cr.)

Costs	Unit -2			Unit -3		
	Approved in True UP FY12	TPCL Proposed Now	Provisional Approval Now	Approved in True UP FY12	TPCL Proposed Now	Provisional Approval Now
Total Fuel Cost	133.62	136.78	133.91	138.23	141.43	138.45

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Costs	Unit -2			Unit -3		
	Approved in True UP FY12	TPCL Proposed Now	Provisional Approval Now	Approved in True UP FY12	TPCL Proposed Now	Provisional Approval Now
Fixed Cost						
O&M Expenses	22.98	22.98	22.98	21.30	21.30	21.30
Depreciation	3.81	3.81	3.81	5.52	5.52	5.52
Interest on Loan	0.36	0.36	0.36	0.31	0.31	0.31
Return on Equity	25.31	25.31	25.31	24.52	24.52	24.52
Cost of Secondary Fuel	4.39	4.39	4.39	4.29	4.29	4.29
Interest on Working Capital	7.68	7.68	7.68	7.61	7.61	7.61
Annual Fixed Charges	64.54	64.54	64.54	63.55	63.55	63.55
Annual Revenue Requirement	198.16	201.32	198.45	201.78	204.98	202.0
Incentive	6.52	6.52	6.52	4.65	4.65	4.65
Less: Sharing of Gains on LDO consumption	1.10	1.10	1.10	0.34	0.34	0.34
Add: Tax on the Gain on LDO Consumption retained by Tata Power	0.28	0.28	0.28	0.09	0.09	0.09
Add: Tax on gain on aux. power consumption	0.17	0.17	0.17	0.26	0.26	0.26
Annual Revenue Requirement including incentive less sharing	204.02	207.18	204.31	206.44	209.64	206.67

Gap/Surplus for FY 2011-12

5.22 The Commission has calculated the gap taking into account the carrying cost for the period April 1, 2011 to April 1, 2015 and accordingly approved revenue gap/surplus for FY 2011-12 in table below. In accordance with Clause 6.18 of 'Generation Tariff Regulations, 2010' the Petitioner may recover the gap in 6 equal monthly instalments from the beneficiary starting within three months from the date of the tariff order issued by the Commission.

Table 12 Provisional approved Gap/Surplus for Unit -2 and Unit-3 for FY 2011-12 (Rs Cr.)

Costs	Unit -2			Unit -3		
	Approved in True Up FY12	TPCL Proposed Now	Provisional Approval Now	Approved in True Up FY12	TPCL Proposed Now	Provisional Approval Now
Annual Revenue Requirement	204.02	207.18	204.31	206.44	209.64	206.67
Revenue Recovered during the year	202.38	202.38	202.38	206.05	206.05	206.05

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Costs	Unit -2			Unit -3		
	Approved in True Up FY12	TPCL Proposed Now	Provisional Approval Now	Approved in True Up FY12	TPCL Proposed Now	Provisional Approval Now
Gap/(Surplus)	1.64	4.80	1.93	0.39	3.59	0.62
Carrying Cost	0.71	2.06	1.15	0.17	1.55	0.37
Total Gap to be C/f in True up for FY 2012-13	2.35	6.86	3.07	0.57	5.14	0.99

A6: TRUING UP FOR FY 2012-13

- 6.1 The Commission had approved the ARR and generation tariff for FY 2012-13 in its MYT Order dated May 31 2012 based on the projections for various cost parameters. The Petitioner has now sought approval from the Commission for truing up of variation in certain elements of the ARR for FY 2012-13.
- 6.2 The Commission has analysed the submission of the Petitioner with respect to the ARR for FY 2012-13, 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

Petitioner's submission

- 6.3 The Petitioner submitted month wise actual plant availability of Unit 2 and Unit 3 and has calculated the average annual availability of Unit 2 at 94.10% and that of Unit 3 at 98.81% during FY 2012-13

Commission's analysis

- 6.4 The Commission in the MYT Order dated May 31 2012 for FY 2012-13 had projected the availability for Unit 2 and Unit 3 as equal to the Normative Annual Plant Availability Factor (NAPAF) of 85% as specified in the Generation Tariff Regulation, 2010. Since the actual Availability of Unit 2 and Unit 3 as submitted by the Petitioner was 94.10% and 98.81% respectively which is greater than NAPAF of 85%, the Commission after scrutinising the certifications of SLDC regarding availability approves the actual availability for the purpose of truing up for FY 2012-13.

Auxiliary Consumption

Petitioner's submission

- 6.5 The Petitioner submitted the auxiliary consumption of Unit 2 and Unit 3 of the Jojobera generating station at normative 10% for FY 2012-13.

Commission's analysis

- 6.6 The Commission considers normative auxiliary consumption at 10% for both Unit 2 and Unit 3 for truing up of FY 2012-13 for computing the energy charge rate (ECR) for the year as per Generation Tariff Regulations, 2010.

Generation

Petitioner's submission

- 6.7 The Petitioner submitted that the actual generation of Unit 2 and Unit 3 of the Jojobera generating station was 866.87 MU and 886.50 MU respectively for FY 2012-13.

Commission's analysis

- 6.8 The Commission in the MYT Order dated May 31 2012 had approved Gross generation at 893.52 MU for Unit 2 and Unit 3 after considering PLF at normative level of 85%. The Petitioner has now submitted that the actual PLF for FY 2012-13 as 82.47% and 84.33% for Unit 2 and Unit 3 respectively. Hence for the purpose of truing up for FY 2012-13, the Commission after a prudence check has considered actual PLF and accordingly, approved Gross Generation at 866.92MU and 886.48 MU for Unit 2 and Unit 3 respectively.

Heat Rate

Petitioner's submission

- 6.9 The Petitioner claimed the Heat rate for Unit 2 and Unit 3 at 2644 kCal/kWh and 2621 kCal/kWh respectively. The Petitioner has claimed to achieve a reduction of 33 kCal/kWh and 6 kCal/kWh in Heat rate for Unit 2 and Unit 3 respectively within a span of one year owing to short-term measures during Annual Shutdowns of the Units as recommended by Central Power Research Institute (CPRI), Bangalore during Energy audit. The Petitioner further submitted that few other measures were also recommended by the CPRI which are yet to be implemented by the Petitioner as the Petitioner claims it requires incurring of Capital Expenditure.
- 6.10 The Petitioner further submitted that the schemes approved by the Commission in the order dated May 31, 2012 also include certain schemes which fulfil the above requirement and the implementation of the measures has to be performed only during the annual shutdown of the Units and may take a more than a year to put to effect.
- 6.11 The Petitioner has requested that a huge reduction of heat rate as envisaged is an uphill task and requires a certain time period to implement the identified measures. The Petitioner has claimed in the petition that the Petitioner has adopted internal initiatives and a detailed action plan based on CPRI Energy reports in pursuit of continual improvement to improve upon the heat rate of the above units.
- 6.12 Hence, the Petitioner requested the Commission to exercise its "Power to remove difficulties" and "Power of Relaxation" as specified in Regulations 17.3 and 17.4 respectively in the Generation Tariff Regulations, 2010 and approve actual heat rate at 2611 kCal/kWh for Unit 2 and 2615 kCal/kWh for Unit 3 for Truing-up of FY 2011-12.

- 6.13 The Petitioner has reiterated the concept of Sliding Heat rate introduced in the model Power Supply Agreement in the Standard Bid Documents for Case-1 projects. The following table shows the trajectory as laid out in the model PSA:

Table 13 Increase in Station Heat rate for part load operation in Cas-1 SBD as submitted by the Petitioner

Sl. No.	Dispatch as Proportion of Dedicated Capacity (%)	Increase in SHR (for super critical turbine)	Increase in SHR (for sub critical turbine)
1	85-100	Nil	Nil
2	75-84.99	1.25	2.25
3	65-74.99	2	4
4	55-64.99	3	6
5	45-54.99	4.5	9
6	35-44.99	7	13.5
7	25-34.99	10.5	21
8	15-24.99	14	30
9	5-14.99	19	40
10	Below 5	25	50

- 6.14 The Petitioner has requested the Commission to invoke Regulation 17.3 (Power to remove Difficulties) and Regulation 17.4 (Power of Relaxation) and approve the actual Heat Rate of 2591 kCal/kWh and 2601 kCal/kWh achieved by the Units 2 and Unit 3 respectively for FY 2012-13 for truing-up

Commission's analysis

- 6.15 As per the Generation Tariff regulations, 2010 the Station Heat Rate for the Petitioner is specified at 2567 kCal/kWh for Unit 2 and 2577 kCal/kWh for Unit 3.
- 6.16 The following are the extracts from the APR order dated 28 April 2014, wherein the Commission has cited the grounds for not considering the actual Station Heat Rate :

“5.18 In the tariff petition submitted by the Petitioner for FY 2011-12, the Petitioner had requested for relaxation of station heat rate approved by the Commission in the Generation Tariff Regulation, 2010. The Commission after considering the submissions made by the Petitioner in detail had however declined to relax the norm for station heat Rate. The relevant portion of the order is quoted below:

“9.15 The Commission specified the norms of operation for the two Units of Jojobera Plant in the Clause 8.4 of the Generation Tariff Regulations, 2010. It is pertinent to mention that the norms of operation were fixed by the Commission after study of the past performance for each plant in the state and as per the data made available by the Generation companies including TPCL for the two units - Unit 2 and Unit 3 of Jojobera Plant. Before finalization of the norms, the Commission had also conducted a public hearing in which all the stakeholders, including TPCL, participated. The Commission after due deliberation finalized the Regulations.

9.16 The Regulations have been notified accordingly and the norms of operation are applicable and binding on each of the generation plants covered under the Regulations. As per the said Regulations, the Station Heat Rate for the two units has been fixed at 2567kCal/kWh and 2577 kCal/kWh respectively.

9.18 The Commission notes with concern that the CPRI Report clearly indicates that principal deviation (274.8 kCal/kWh) is a controllable loss and better SHR than the 2577 kCal/kWh currently allowed is achievable.

9.19 In view of the above observations, the Commission does not find any merit in allowing deviation in the norms fixed for SHR, for Unit 2 at 2567 kCal/kWh and Unit 3 at 2577 kCal/kWh, as per the Generation Tariff Regulations, 2010.”

5.19 The Petitioner filed an appeal (Appeal no 189 of 2011) before the Hon'ble APTEL for relaxation of the norm for station heat rate. The Hon'ble APTEL however upheld the decision of the Commission not to relax the norm for station heat rate. The relevant portions of the judgement of the APTEL are quoted below:

“31. The principles laid down in these authorities cited by the Appellant are as follows:

(a) If the Station Heat Rate allowed by the Commission is not achievable, then the same would not be in anybody's interest. The entity would suffer by not recovering its reasonable cost of supply of electricity and consumers would not get right signal about the pricing of the product, they would be using.

(b) The Station Heat Rate is one of the most important factors for the purpose of determination of the cost of generation. If the targets given to the generating company are not achievable, no purpose would be served by setting such targets, because such approach would adversely impact the financial position of the generator.

(c) The reasonable time has to be given for completion of the medium term measures required for the improvement of the Station Heat Rate. In case any Regulation causes hardship to a party or works injustice to him, the Regulation can be relaxed.

(e) The tariff determination shall be consistent with Section 61 of the Act as well as the Government of India guidelines which shall strike a balance between the transparency, fairness, consumer interest and viability.

32. On-going through all the decisions, we are of the view that the principles which have been laid down by this Tribunal as well as Hon'ble Supreme Court as cited by the State Commission would squarely apply to the present case especially, when impugned order has given proper reasoning for not relaxing the norms. On the other hand, the reliance placed by the Appellant on 2010 DELR (APTEL) 0189 cited by him has no application to the present case. In that case, the Station Heat Rate was found to be unachievable and in that context the State Commission was not in a position to take a considered view on the subject. In the present case, the State Commission has fixed the norms of Station Heat Rate after studying in details the past performance for each plant in the State and after considering the data furnished by the Appellant for 2 units i.e. Unit No.2 and Unit No.3 of the Plant.

33. In the present case, the State Commission has considered the CPRI report in detail and studied that the major deviation between the design Heat Rate and the Test Heat Rate due to turbine deficiency. Similarly, in other cases also reported in 2011 ELR (APTEL) 1742, i.e. suo-moto action taken by this Tribunal and Essar Power Limited case reported in 2011 Energy Law Journal would not apply to this case since the issue in question has not been decided in those cases. In the present case, Station Heat Rate norms have been framed under the Regulation after studying the past performance of the Plants. That apart, the State Commission has given a detailed reasoning in the impugned order for not relaxing the norms laid down in the Regulation. Hence, we do not find any infirmity in the finding of the State Commission on this issue.

5.20 The Petitioner again sought relaxation in the heat rate its petition for truing up on the following grounds:

- (a) *The Petitioner claimed to achieve a reduction of 33 kCal/kWh and 6 kCal/kWh in Heat rate for Unit 2 and Unit 3 respectively within a span of one year owing to short-term measures like mill fineness optimization, turbine fin replacement and blade roughness reduction during Annual Shutdowns of the Units as recommended by Central Power Research Institute (CPRI), Bangalore during Energy audit.*

- (b) *The Petitioner has requested that such a huge reduction of Heat Rate to the tune of 50 kCal/kWh as envisaged in the above units is an uphill task and requires a certain time period to implement the identified measures.*

5.21 Further, in the interlocutory application filed by it, the Petitioner has reiterated that the Commission approved the actual Heat Rate achieved by the Units 2 and 3 for FY 2011-12 & FY 2012-13 for truing-up and revised estimate of Heat Rate for FY 2013-14 to FY 2015-16 at the actual Heat Rate achieved in FY 2012-13 subject to Truing-up at actual.

5.22 As mention earlier, the Commission has fixed the norms of operation for Unit 2 and Unit 3 after study of the past performance for each plant in the state and as per the data made available by the Generation companies including TPCL for the two units - Unit 2 and Unit 3 of Jojobera Plant. Before finalization of the norms, the Commission had also conducted a public hearing in which all the stakeholders, including TPCL, participated. The Commission after due deliberation finalized the Regulations.

5.23 It is to be noted that the Commission in its tariff orders prior to FY 2011-12 allowed the Petitioner a higher heat rate for the years FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11.

Table 14 Heat rate allowed by the Commission for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11

Financial Year	Heat Rate allowed (kCal/kWh)	
	Unit 2	Unit 3
FY 2007-08	2645	2676
FY 2008-09	2569	2592
FY 2009-10	2632	2648
FY 2010-11	2644	2621

5.24 Simultaneously, however, the Commission also directed the Petitioner in its orders to improve its operational performance. In the 'Tariff Order on ARR for FY 2007-08, 2008-09 & 2009-10 & Determination of Distribution Tariff for FY 2009-10 for TPCL', the Commission observed that "performance of the two Units of Jojobera plant with respect to some of the operational parameters is worse than other similarly placed plants in the country considering the age profile of the TPCL Units. In particular, the SHR, PLF, normative annual plant availability factor (as per CERC Tariff Regulations, 2009) and the auxiliary consumption can be improved further to the extent of CERC approved operational norms for thermal stations of such nature".

5.25 Further again in the 'Tariff Order on Annual Revenue Requirement and Determination of Generation Tariff for Financial Year 2010-11 for Tata Power Company Limited (TPCL)' the Commission directed "that the performance with respect to some of the operational parameters is lower than those of the other similarly placed plants in the country. In particular, the SHR, the PLF, normative annual plant availability factor (as per CERC Tariff Regulations, 2009) and the auxiliary consumption can be improved further to the extent of CERC approved operational norms for thermal stations of such nature."

5.26 Further, as pointed out by the Petitioner itself in its APR petition dated March 28, 2013, the capital expenditure schemes approved by the Commission in the order dated May 31, 2012 also included certain schemes for implementation of the measures for improvement of station heat rate. The financing cost and capital expenditure on account of this capital expenditure has already been allowed to the Petitioner in the tariff approved by the Commission.

5.27 In view of the Judgement of APTEL in Appeal No. 189 of 2011, the previous orders of the Commission in this regard and the reasons noted above, the Commission does not deem it appropriate to allow the actual SHR for Unit 2 and Unit 3 as requested by the Petitioner. The Commission therefore approves the station heat rate specified in the Generation Tariff Regulations, 2010 i.e. at 2567 kCal/kWh for Unit 2 and 2577 kCal/kWh for Unit 3."

- 6.17 Since all the points were considered in the previous Order and the same was also upheld by the Hon'ble APTEL, the Commission does not consider fit to change the same and for the purpose of truing up considers Station Heat Rate as laid out in Generation Tariff Regulations, 2010 i.e. at 2567 kCal/kWh for Unit 2 and 2577 kCal/kWh for Unit 3.

Operational Parameters Summary

- 6.18 The tables below show the operational parameters summary for FY 2012-13, in terms of the Petitioner's submission and the Commission's trued up costs for Unit 2 and Unit 3.

Table 15 Approved Operational Parameters for Unit 2 for FY 2012-13

Particulars	Approved in MYT order	Submitted by TPCL	Approved in True up
Gross Generation(MU)	893.52	866.87	866.92
PLF	85.00%	82.47%	82.47%
Aux. Power Consumption	10.00%	10.00%	10.00%
Net Generation(MU)	804.18	785.35	785.43
Heat Rate(kcal/kwh)	2567	2591	2567

Table 16: Approved Operational Parameters for Unit 3 for FY 2012-13

Particulars	Approved in MYT order	Submitted by TPCL	Approved in True up
Gross Generation(MU)	893.52	886.50	886.48
PLF	85.00%	84.33%	84.33%
Aux. Power Consumption	10.00%	10.00%	10.00%
Net Generation(MU)	810.55	804.18	804.12
Heat Rate(kcal/kwh)	2577	2601	2577

Fuel Cost Parameters

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

Petitioner's submission

- 6.19 The Petitioner submitted that during FY 2012-13 coal was procured from West Bokaro Colliery of Tata Steel (i.e. Middling Coal) and Mahanadi Coalfields, Orissa (i.e. MCL Coal). The proportion of the various types of coal used during FY 2012-13 has been computed as Middling Coal – 69.31%, MCL Coal – 30.69% for Unit 2 and Middling Coal – 69.19%, MCL Coal – 30.81% for Unit 3.
- 6.20 The Petitioner further submitted the actual weighted average Gross Calorific Value (GCV) for various types of coal consumed in both Units 2 and 3. The Petitioner has mentioned that the GCV of coal used in Unit 2 during FY 2012-13 was 4231 Kcal/kg in respect of Middling Coal and 2881 Kcal/kg in respect of MCL Coal. Whereas for Unit 3, the same was 4255 Kcal/kg in respect of Middling Coal and 2840 Kcal/kg in respect of MCL Coal.

Commission's analysis

- 6.21 The Commission computed the GCV for each type of coal by considering the actual weighted average GCV for FY 2012-13 after scrutinizing the actual monthly GCV submitted by the Petitioner. The following tables summarizes the weighted average GCV of coal as submitted by the Petitioner and approved by the Commission for both the Units and the Coal Mix submitted and approved by the Commission for both the units.

Table 17 Approved Coal Mix and GCV for Unit 2 for FY 2012-13

Particulars	Coal Mix(%)			GCV(kCal/kg)		
	Approved in MYT order	Submitted by TPCL	Approved in True up	Approved in MYT order	Submitted by TPCL	Approved in True up
MCL Coal	38.31%	30.69%	30.69%	2935	2881	2881
Middling Coal	61.69%	69.31%	69.31%	4156	4231	4231

Table 18 Approved Coal Mix and GCV for Unit 3 for FY 2012-13

Particulars	Coal Mix(%)			GCV(kCal/kg)		
	Approved in MYT order	Submitted by TPCL	Approved in True up	Approved in MYT order	Submitted by TPCL	Approved in True up
MCL Coal	36.88%	30.81%	30.81%	2940	2840	2840
Middling Coal	63.12%	69.19%	69.19%	4163	4225	4225

Transit Loss

Petitioner's submission

- 6.22 The Petitioner submitted that the Transit Loss for Middling Coal is an uncontrollable factor for the Petitioner. The Petitioner further submitted that the Transit Loss in Middling Coal has been comparatively lower in FY 2012-13 than in FY 2011-12 but still higher than the normative transit loss of 0.8%.
- 6.23 The Petitioner submitted the month wise details of actual transit loss in Middling Coal and claimed transit loss of 1.16% for FY 2012-13.
- 6.24 The Petitioner submitted that the Hon'ble Commission while disposing off the APR Petition FY 2012-13 through its Order dated 28th April 2014 had taken note of the prayer of the Petitioner with regards to the Transit Loss in Middling Coal and acknowledged to re-determine the norm for transit loss as per the Directive of the Hon'ble Tribunal. The Petitioner further submitted that the Hon'ble Commission had decided to deal with the matter after a detailed Fuel Audit Study of the actual Transit loss in coal.
- 6.25 The Petitioner submitted that pending such Fuel Audit Study, Petitioner has for the purpose of true-up of FY 2012-13 considered the actual transit loss of Middling Coal.
- 6.26 The Petitioner also prayed to the Commission to exercise its "Power to remove difficulties" and "Power for Relaxation" as specified in Regulations 17.3 and Regulation 17.4 respectively in the Generation Tariff Regulations, 2010 and approve actual transit loss in Middling Coal for truing up.

6.27 In the petition for Order dated May 31, 2012, the Petitioner had submitted the actual transit loss incurred at 1.8% which was rejected by the Commission and further the loss at normative level specified in the Generation Tariff Regulations, 2010 was approved by the Commission at 0.8%. However, owing to adverse financial impact, the Petitioner filed an appeal before the Hon'ble APTEL vide Appeal No-147/2012 dated 16.07.2012. Pending appeal the Petitioner has taken the normative transit loss for calculation purposes.

Commission's analysis

6.28 The Commission in the MYT order dated May 31, 2012 approved Transit Loss at 0.8% for both Unit 2 and Unit 3 for FY 2012-13 in accordance with the norms specified in the Generation Tariff Regulation, 2010.

6.29 As detailed in previous Section for Truing up of energy charges for FY 2011-12 of this Order, the Commission has provisionally approved transit loss up to maximum of 1% for Unit 2 and Unit 3 of Jojobera Power Station pending the completion of the fuel audit study. Accordingly, the Commission provisionally approves the transit loss at 1% for Unit 2 and Unit 3 for FY 2012-13.

Landed Cost of Coal

Petitioner's submission

6.30 The Petitioner submitted the landed cost of coal for MCL coal at Rs/Ton 1589 and Middling coal at Rs/Ton 3525 for Unit 2 and MCL Coal at Rs/Ton 1604 and Middling Coal at Rs/Ton 3550 for Unit 3.

Commission's analysis

6.31 The Commission arrived at the weighted average of the landed cost of coal from April 2012 to March 2013, using the following methodology :

- (a) The base price of coal, other charges and tax, transportation and handling charges as submitted by the Petitioner from April 2012 to March 2013.
- (b) Actual consumption of various types of coal during April 2012 to March 2013.
- (c) Transit loss as approved by the Commission in para 6.29

6.32 The Commission after due verification of the Certificate of the Auditor of the Petitioner regarding the Landed price of Coal , approves the Landed Cost of Coal as shown in the following table.

Table 19 Approved Weighted Average Landed Price of Coal for Unit 2

Particulars	Weighted Average Landed Price of the coal (Rs/ton)		
	Approved in MYT order	Submitted by TPCL	Approved in True up
MCL Coal	1671	1589	1586
Middling Coal	2921	3525	3519

Table 20 Approved Weighted Average Landed Price of Coal for Unit 3

Particulars	Weighted Average Landed Price of the coal (Rs/ton)		
	Approved in MYT order	Submitted by TPCL	Approved in True up
MCL Coal	1663	1604	1601
Middling Coal	2921	3550	3544

Energy Charge Rate (ECR)

Petitioner's submission

6.33 The Petitioner has calculated the energy charge taking into account the actual heat rate. Accordingly, energy charges for FY 2012-13 have been computed considering the actual heat rate of Unit 2 at 2591 kCal/kWh and of Unit 3 at 2601 kCal/Kwh. As per the Petitioner the energy charges for FY 2012-13 work out to Rs 173.55 Cr for Unit 2 and Rs 180.41 Cr for Unit 3.

Commission's analysis

6.34 As per the Generation Tariff Regulation, 2010, the energy (variable) charge shall cover primary fuel costs and shall be payable by every Beneficiary for the total energy scheduled to be supplied to such Beneficiary during the calendar month on ex-power plant basis, at the specified energy charge rate of the month (with fuel price adjustment).

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

“8.17 Total Energy charge payable to the Generating Company for a month shall be: = (Energy charge rate in Rs. /kWh) x {Scheduled energy (ex-bus) for the month in kWh.}

8.18 Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formula:

(a) For coal based stations

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

Where, AUX - Normative auxiliary energy consumption in percentage

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

CVSF - Calorific value of secondary fuel, in KCal per ml

ECR - Energy charge rate, in Rupees per kWh sent out.

GHR - Gross station heat rate, in KCal per kWh.

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

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

6.36 Accordingly, the Commission has calculated the ECR to be charged by the Petitioner as per the formula stated above and considering the Heat Rate as per the Generation Tariff Regulations, 2010. The Table below details the ECR and Fuel Cost for Units 2 and 3 for truing up of FY 2012-13 as submitted by the Petitioner and as approved by the Commission.

Table 21 Approved Energy Charge Rate and Fuel Cost for Unit 2

Parameters	UoM	Approved in MYT order	Submitted by TPCL	Approved in True up
Gross Generation	MU	893.52	866.87	866.92
Heat Rate	KCal/kWh	2567	2591	2567
Specific Oil Consumption	ml/kWh	1.00	1.00	1.00
Calorific Value of Oil	KCal/l	9100	9100	9100
Energy Charge Rate	Rs/kWh	1.882	2.210	2.180
Fuel Cost	Rs Cr	151.35	173.56	171.22

Table 22 Approved Energy Charge Rate and Fuel Cost for Unit 3

Parameters	UoM	Approved in MYT order	Submitted by TPCL	Approved in True up
Gross Generation	MU	893.52	886.50	886.48
Heat Rate	KCal/kWh	2577	2601	2577

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Parameters	UoM	Approved in MYT order	Submitted by TPCL	Approved in True up
Specific Oil Consumption	ml/kWh	1.00	1.00	1.00
Calorific Value of Oil	KCal/l	9100	9100	9100
Energy Charge Rate	Rs/kWh	1.889	2.243	2.213
Fuel Cost	Rs Cr	153.11	180.41	177.95

Summary of Fuel Cost

6.37 The following table provides the summary of Fuel Cost submitted by the Petitioner and approved by the Commission for True up of FY 2012-13

Table 23: Approved Parameters for fuel cost for Unit 2 for FY 2012-13

Particulars	UoM	Approved in MYT order	Submitted by TPCL	Approved in True up
LDO Consumption	MI/kWh	1	1	1
GCV – LDO	Kcal/Kg	9100	9100	9100
Weighted Average GCV – Middling Coal	Kcal/kWh	4156	4231	4231
Weighted Average GCV –MCL Coal	Kcal/kWh	2935	2881	2881
LDO cost	Rs Cr	5.33	5.22	5.22
Landed Price– Middling Coal	Rs/MT	2921	3525	3519
Landed Price–MCL Coal	Rs/MT	1671	1589	1586
Fuel Cost	Rs Cr	151.35	173.56	171.22

Table 24 : Approved Parameters for fuel cost for Unit 3 for FY 2012-13

Particulars	UoM	Approved in MYT order	Submitted by TPCL	Approved in True up
LDO Consumption	MI/kWh	1	1	1
GCV – LDO	Kcal/Kg	9100	9100	9100
Weighted Average GCV – Middling Coal	Kcal/kWh	4163	4225	4225
Weighted Average GCV –MCL Coal	Kcal/kWh	2940	2840	2840
LDO cost	Rs Cr	5.66	5.26	5.26
Landed Price– Middling Coal	Rs/MT	2921	3550	3544

Particulars	UoM	Approved in MYT order	Submitted by TPCL	Approved in True up
Landed Price–MCL Coal	Rs/MT	1663	1604	1601
Fuel Cost (Rs Cr)	Rs Cr	153.11	180.41	177.95

Determination of Fixed Cost

Interlocutory Application (Petition no. 16 of 2014) for revised Truing up of FY 2012-13

Petitioner's submission

- 6.38 The Petitioner has submitted an Interlocutory Application dated March 12, 2015 in the matter of Truing up of ARR for FY 2012-13
- 6.39 The Petitioner in the application submitted that the Commission in the MYT order dated 31st May 2012 after following due legal procedure and prudence check had approved Rs 5.32 Cr for Unit 2 and Rs 1.38 Cr for Unit 3 towards PLF incentive and corresponding Minimum Alternate Tax. The Commission in the above mentioned order had included this amount as part of Annual Fixed Charges for FY 2012-13.
- 6.40 Accordingly, in the APR petition for FY 2013-14 dated 28th April 2014, the Petitioner had requested the Commission to pass the impact of above order while undertaking truing up for FY 2012-13.
- 6.41 However, subsequent to the submission of APR petition the Petitioner revisited its documents/ records and observed that such differential amount has already been recovered through supplementary bill dated March 31, 2011. Accordingly the Petitioner has revised the parameters for determination of ARR vide the IA Petition No. 16 of 2014 which has been discussed in the relevant sections in this order.

Commission's analysis

- 6.42 The Commission notes that the Petitioner has recovered the differential amount and hence would consider the Interlocutory Application dated March 12, 2015 accordingly. After considering the changes proposed by the Petitioner which have been considered in the appropriate sections, the Commission has conducted Truing up for FY 2012-13.

Additional Capitalization

Petitioner's submission

The Petitioner has submitted that for FY 2011-12 onwards it has categorized these Additional Capitalisation under two broad categories as:

- i. Capitalization – Standalone: This category includes the Capitalized Costs incurred

for Assets/Schemes exclusively for Unit 2 & 3.

- ii. Capitalization – Common Facilities: Unlike the above-mentioned Capitalized Costs incurred for Assets/Schemes exclusively for Unit 2 & 3, this category includes the Capitalized Costs which have been incurred or proposed to be incurred for the whole Station. These Assets/Schemes provide facilities to the whole power station and therefore the Capitalized Cost of such Assets/ Schemes must be apportioned to the GFA of Unit 2 & 3 appropriately.

The same methodology has been adopted by the Petitioner for determining the additional capitalisation during the FY 2012-13

- 6.43 Following such methodology the Petitioner has worked out the apportionment ratio individually as well as the combined ratio for Unit 2 and Unit 3 based on the Installed Capacity of these Units with respect to the Installed Capacity of the Jojobera Power Plant as laid out in the following table:

Table 25 Apportionment ratio for additional Capitalisation of Common Facilities submitted by Petitioner

Facilities to Unit 2 & 3		
Installed Capacity of Unit1	MW	67.5
Installed Capacity of Unit2	MW	120
Installed Capacity of Unit3	MW	120
Installed Capacity of Unit4	MW	120
Installed Capacity of Jojobera Power Plant	MW	427.5
Contribution of Unit2 in Total Installed Capacity	%	28.07%
Contribution of Unit3 in Total Installed Capacity	%	28.07%
Combined Contribution of Unit 2 & 3 in Total Installed Capacity	%	56.14%

- 6.44 The Petitioner has accordingly included the Capitalized Costs of the Common Facilities to the GFA of Units 2 & Unit 3 by using the above Apportionment Ratio.
- 6.45 Using the above methodology the Petitioner arrived at the actual Additional Capitalization of Common Facilities apportioned to Unit 2 & 3 which amounts to 3.40 Cr for each unit for FY 2012-13.
- 6.46 The total capitalisation details submitted by the Petitioner including the additional capitalisation are shown in the following table.

Table 26 Total Capitalisation submitted by the Petitioner (Rs Cr)

Asset Class Description	Standalone Capitalisation		Apportioned for Common Facilities		Total Additional Capitalisation	
	Unit 2	Unit 3	Unit 2	Unit 3	Unit 2	Unit 3
Land	0.00	0.00	0.00	0.00	0.00	0.00
Building & Civil Engineering Works	0.06	0.06	0.64	0.64	0.70	0.70
Transformers & other Fixed Apparatus	0.06	0.06	0.00	0.00	0.06	0.06
Batteries	0.19	0.10	0.00	0.00	0.19	0.10
Plant and Machinery in Generating Stations	5.40	1.31	0.99	0.99	6.39	2.30
Switchgear, including Cable Connections	0.00	0.00	0.00	0.00	0.00	0.00
Air Conditioning Plants(Static)	0.00	0.00	0.01	0.01	0.01	0.01
Other Assets-Unclassified	1.27	0.39	0.55	0.55	1.82	0.94
Office Furniture, Furnishings & Office Equipment	0.00	0.00	0.04	0.04	0.04	0.04
Communication Equipment-Telephone Lines and Telephones	0.00	0.00	0.00	0.00	0.00	0.00
Self-Propelled Vehicles	0.00	0.00	1.16	1.16	1.16	1.16
IT Equipment's	0.01	0.01	0.00	0.00	0.01	0.01
Total	6.99	1.92	3.40	3.40	10.39	5.32

Commission's analysis

6.47 The Commission has outlined the provisions for approval of any additional capitalization, for a generating station in clause 7.5 of the Generation Tariff Regulation, 2010. The clause is outlined below

Additional Capitalisation

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

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions under clause 7.3,7.4 of these Regulations;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) *Change in law.*

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

(b) *'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;”*

6.48 In the MYT order dated May 31, 2012 the Commission had scrutinized the information provided by the Petitioner and after due prudence check approved the capital expenditure schemes and related capital expenditure plan.

6.49 As per clause 6.10 of the Generation Tariff Regulations,

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;”

6.50 After the adjustments to the additional capitalization as noted above, the Commission approves the additional capitalisation as shown in the following table:

Table 27 Approved Additional Capitalisation for Unit 2 (Rs Cr)

Particulars	Additional Capitalisation during FY 12-13		
	Approved in MYT order	Submitted by TPCL	Approved in True up
Building & Civil Engineering Works	-	0.70	0.70
Transformers & other Fixed Apparatus		0.06	0.06
Batteries		0.19	0.19

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Particulars	Additional Capitalisation during FY 12-13		
Asset Class Description	Approved in MYT order	Submitted by TPCL	Approved in True up
Plant and Machinery in Generating Stations		6.39	6.39
Switchgear, including Cable Connections		0.00	0.00
Air Conditioning Plants (Static)		0.01	0.01
Other Assets - Unclassified		1.82	1.83
Office Furniture, Furnishings & Office Equipment		0.04	0.04
Communication Equipment - Telephone Lines and Telephones		0.00	0.00
Self-Propelled Vehicles		1.16	1.16
IT equipment		0.01	0.01
Total Additional Capitalisation	12.74	10.39	10.39

Table 28 Approved Additional Capitalisation for Unit 3 (Rs Cr)

Particulars	Additional Capitalisation during FY 12-13		
Asset Class Description	Approved in MYT order	Submitted by TPCL	Approved in True up
Building & Civil Engineering Works		0.70	0.70
Transformers & other Fixed Apparatus		0.06	0.06
Batteries		0.10	0.10
Plant and Machinery in Generating Stations		2.30	2.30
Switchgear, including Cable Connections		0.00	0.00
Air Conditioning Plants (Static)		0.01	0.01
Other Assets - Unclassified		0.94	0.95
Office Furniture, Furnishings & Office Equipment		0.04	0.04
Communication Equipment – Telephone Lines and Telephones		0.00	0.00
Self-Propelled Vehicles		1.16	1.16
IT equipment		0.01	0.01
Total Additional Capitalisation	8.84	5.34	5.33

Depreciation

Petitioner's submission

6.51 The Petitioner submitted that the depreciation on additional capitalization calculation was determined as per the depreciation rates of various classes of assets as prescribed in Appendix-I of Generation Tariff Regulations, 2010. The submission made by the Petitioner for total depreciation for Units 2 and Unit 3 has been provided in the following Table:

Table 29 Submitted Depreciation on Additional Capitalisation for Unit 2 for FY 2012-13 (Rs Cr)

Asset Class Description	Depreciation in FY 13 on Additional Capitalisation of FY 13
Depreciation on Original Capital Cost	3.59
Depreciation on Additional Capitalization	0.72
Total Depreciation	4.31

Table 30 Submitted Depreciation on Additional Capitalisation for Unit 2 for FY 2012-13 (Rs Cr)

Asset Class Description	Depreciation in FY 13 on Additional Capitalisation of FY 13
Depreciation on Original Capital Cost	5.34
Depreciation on Additional Capitalization	0.54
Total Depreciation	5.88

Commission's analysis

6.52 The Generation Tariff Regulation, 2010 have specified the following methodology for the calculation of depreciation expense for existing generating stations:

- (a) Depreciation shall be allowed up to 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 up to March 31, 2011 from the gross depreciable value of the assets.
- (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%.

- 6.53 The Commission in the MYT order dated May 31, 2012 approved depreciation on original cost of power plant at Rs 3.59 Cr for Unit 2 and Rs 5.34 Cr for Unit 3. The Commission after conducting prudence check approves depreciation as shown in the following table:

Table 31 Approved Depreciation for FY 2012-13 of Unit 2 (Rs Cr)

Particulars	Approved in MYT order	Submitted by TPCL	Approved in True up
Depreciation on Original Cost of Capital	3.59	3.59	3.59
Depreciation on Additional Capitalisation	0.79	0.71	0.72
Total Depreciation	4.38	4.31	4.31

Table 32 Approved Depreciation for FY 2012-13 of Unit 3 (Rs Cr)

Particulars	Approved in MYT order	Submitted by TPCL	Approved in True up
Depreciation on Original Cost of Capital	5.34	5.34	5.34
Depreciation on Additional Capitalisation	0.63	0.53	0.54
Total Depreciation	5.96	5.88	5.88

Normative Operation & Maintenance Expenses

Petitioner's submission

- 6.54 The Petitioner has submitted O&M Expenses for FY 2012-13 at Rs 33.87 Cr for Unit 2 and at Rs 25.27 Cr for Unit 3.
- 6.55 The Petitioner also submitted that the base O&M expenses may be revisited as already noted by the Commission in the MYT order and accordingly has calculated revised O&M expenses as shown in the table below:

Table 33 Revised O&M expenses submitted by the Petitioner

Particulars	Base O&M Expenses		Revised O&M	
	Unit 2	Unit 3	Unit 2	Unit 3
Total O&M expenses	21.67	16.71	23.53	18.11
HO Expenses	5.58	3.95	6.05	4.28
Total O&M	27.25	20.66	29.58	22.39

6.56 The basis of allocation as submitted by the Petitioner is shown below:

- (a) Allocation of Head Office and management expenses=Head office and management expenses allocable to cost of generation*Generation expenses of Unit/Total generation expenses (excluding cost of power purchase, depreciation, borrowing costs, exchange loss/gain, non-recurring onetime expenses, fuel(including related exchange loss/gain),etc).
- (b) Head office and Management expenses allocable to cost of generation = Head office and management expenses* Total generation expenses (excluding cost of power purchase, depreciation, borrowing costs, exchange loss/gain, non recurring onetime expenses, fuel(including related exchange loss/gain),etc)/{Total generation expenses(excluding cost of power purchase, depreciation, borrowing costs, exchange loss/gain, non recurring onetime expenses, fuel(including related exchange loss/gain),etc) + Total distribution, transmission expenses and expenses related to other business (excluding wheeling/transmission charges, depreciation, exchange loss/gain and borrowing costs, components consumed, non recurring one time expenses, etc.)}

6.57 The Petitioner submitted the ash disposal expenses at Rs 4.09 Cr for Unit-2 and Rs 4.44 Cr for Unit-3. Further the Petitioner also submitted the ash disposal expenses certified by the Statutory Auditors.

6.58 The Petitioner submitted the Application fees and publication expenses for Unit-2 and Unit-3 at Rs 0.32 Cr each.

6.59 Using the above methodology the Petitioner has submitted the details as shown on the table below.

Table 34 Summary of O&M Expenses (Rs Cr)

Particulars	Unit 2	Unit 3
<i>O&M Expenses</i>		
Employee Cost	5.50	5.50
Employee Expenses without Terminal Liabilities	4.66	4.66
Terminal Liabilities	0.84	0.84
R&M Expenses	14.24	7.07
A& G Expenses	14.13	12.7
Ash Disposal Expenses	4.09	4.44
Raw Water Expenses	1.59	1.64
Other A&G Expenses (including HO Expenses)	8.13	6.30
Application Fees & Publication Expenses	0.32	0.32
Total O&M Expenses	33.87	25.27

Commission's analysis

- 6.60 Regulation 7.41 of the Generation Tariff Regulation, 2010 lays out the provision for determination of O&M expenses, the same is quoted below

“7.41 Existing Thermal Generating Stations:

(a) The O&M expenses for the Transition Period shall be approved by the Commission as per the JSERC (Terms and condition of Determination of Generation Tariff) Regulations, 2004.

(b) The Applicant shall submit details on O&M expenses as required by the Commission. The O&M expenses excluding terminal liabilities for the Base Year shall be determined based on latest accounting statements, estimates of the Generating Company for relevant years and other factors considered relevant.

(c) The O&M expenses excluding terminal liabilities permissible towards determination of tariff for each year of the Control Period shall be determined after a prudence check by the Commission based on submissions of the Generating Company, previous years' actual expenses and any other factor considered relevant.

(d) Terminal Liabilities will be approved as per actual submitted by the Generating Company or be established through actuarial studies.

(e) Increase in O&M charges on account of war, insurgency or changes in laws, or like eventualities where the Commission is of the opinion that an increase in O&M charges is justified, may be considered by the Commission for a specified period.”

- 6.61 As per Regulation 6.14 of the Generation Tariff Regulation, 2010, for the Existing Thermal Generating Stations, any surplus or deficit on account of O&M expenses shall be to the account of the generating company . The regulations are quoted below:

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

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

- 6.62 However, in MYT order dated May 31, 2012, the Commission took note of the effect of increasing inflation on O&M expenses and has decided that it may revise the base O&M expenses in its next tariff order. The relevant extract from the MYT order is quoted below:

“8.54 Regulation 6.5 of the Generation Tariff Regulations, 2010 further states that “The Commission shall normally not revisit the performance targets even if the targets are fixed on the basis of base values of un-audited accounts”. However, the Commission notes that the O&M expenses for FY 2011-12 have increased significantly during the year due to the high inflation, salary adjustment given to employees and increase in cost of ash disposal and R&M activities. Keeping the interest of consumers in mind the Commission has decided that it may revise the Base Year O&M expenses in its next Tariff Order after taking into account the audited accounts (after due prudence check) for FY 2011-12”.

- 6.63 The Commission notes that in the MYT order dated May 31, 2012, the Commission has escalated the base O&M expenses with an inflation rate of 8.40% (based on CERC methodology of 80% weightage to WPI and 20% weightage to CPI and the prevailing inflation rate comes out to 7.75%. Accordingly, the Commission after due prudence check of the O&M expenses has considered O&M expenses as approved in the MYT order.
- 6.64 The Commission has approved ARR Application Fees and Publication Expenses as per actuals for FY 2012-13.
- 6.65 Hence the O&M expenses approved for True up of FY 2012-13 and that submitted by the Petitioner are shown in the table below:

Table 35 O&M expenses of Unit 2 approved for True Up for FY 2012-13 (Rs Cr)

Particulars	Unit 2		
	As per MYT Order	Submitted by TPCL	Approved by JSERC
Employee Cost	5.5	5.50	5.5
Employee Expenses without Terminal Liabilities	4.66	4.66	4.66
Terminal Liabilities	0.84	0.84	0.84
R&M Expenses	10.3	14.24	10.3
A&G Expenses	9.53	14.13	9.53
Ash Disposal Expenses	2.49	4.09	2.49
Raw Water Expenses	1.6	1.59	1.6
Other A&G Expenses (including HO Expenses)	5.18	8.13	5.18
Application Fees & Publication Expenses	0.26	0.32	0.32
Total O&M Expenses	25.33	33.87	25.39

Table 36 O&M expenses of Unit 3 approved for True Up for FY 2012-13 (Rs Cr)

Particulars	Unit 3		
	As per MYT Order	Submitted by TPCL	Approved by JSERC
Employee Cost	5.50	5.50	5.50
Employee Expenses without Terminal	4.66	4.66	4.66

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Particulars	Unit 3		
	As per MYT Order	Submitted by TPCL	Approved by JSERC
Liabilities			
Terminal Liabilities	0.84	0.84	0.84
R&M Expenses	6.41	7.07	6.41
A& G Expenses	9.05	12.7	9.05
Ash Disposal Expenses	2.58	4.44	2.58
Raw Water Expenses	1.61	1.64	1.61
Other A&G Expenses (including HO Expenses)	4.60	6.30	4.60
Application Fees & Publication Expenses	0.26	0.32	0.32
Total O&M Expenses	20.96	25.27	21.02

Return on Equity (RoE)

Petitioner's submission

6.66 The Petitioner has submitted the RoE at 15.50% which is same as that approved by the Commission in the MYT order dated May 31, 2012 for FY 2012-13. The details are shown in the table below.

Table 37 Return on Equity submitted by the Petitioner (Rs Cr)

Particulars	Unit 2	Unit 3
Computation of Regulatory Equity		
Opening GFA (Original Project Cost)	439.56	425.54
Opening Equity	131.87	127.66
Additional Capitalization during FY13	10.39	5.32
Additions (Additional Equity of FY13)	3.12	1.60
Closing Equity	134.98	129.26
Computation of Return on Equity		
Rate of Return on Equity Component of Original Capital Cost (%)	15.50%	15.50%
Rate of Return on Equity Component of Additional Capitalization (%) after 1st April 2012	15.50%	15.50%
Return on Equity Component of Original Capital Cost (Post-Tax)	20.44	19.79
Return on Equity Component of Additional Capitalization (Post-Tax)	0.24	0.12
Total Return on Equity (Post-Tax)	20.68	19.91
Applicable Tax MAT	MAT	MAT
Applicable Tax Rate	20.01%	20.01%
Total Return on Equity (Pre-Tax) for FY 2012-13	25.85	24.89

Commission's analysis

- 6.67 The Commission has worked out the gross normative equity for FY 2012-13 as per Regulation 7.13 and 7.14 of the Generation Tariff Regulation, 2010. The Commission has considered the return on equity at 15.50% which after grossing up with the MAT rate applicable for the year comes out to 20.01% for FY 2012-13.
- 6.68 Accordingly the Commission approves the return of equity for FY 2012-13 and the calculation of the same is shown in the table below.

Table 38 Return on Equity approved for Unit 2 (Rs Cr)

Particulars	Approved in MYT order	Submitted by TPCL	Approved by JSERC
Opening Equity for the year	131.87	131.87	131.87
Additions during FY 2012-13	3.82	3.12	3.12
Closing Equity	135.69	134.99	134.99
Rate of Return on Equity Component on Opening GFA	15.50%	15.50%	15.50%
Rate of Return on Equity Component of Additional Capitalization	15.50%	15.50%	15.50%
Tax Rate	20.01%	20.01%	20.01%
Rate of Return on Equity Component of Original Cost	20.44	20.68	20.44
Rate of Return on Equity Component of Additional Capitalization	0.30	0.00	0.24
Return on Equity (Post Tax)	20.74	20.68	20.68
MAT Rate	20.01%	20.01%	20.01%
Return on Equity (Pre Tax)	25.93	25.86	25.85

Table 39 Approved Return on Equity for Unit 3 (Rs Cr)

Particulars	Approved in MYT order	Submitted by TPCL	Approved by JSERC
Opening Equity for the year	127.66	127.66	127.63
Additions during FY 2012-13	2.65	1.6	1.60
Closing Equity	130.31	129.26	129.23
Rate of Return on Equity Component on Opening GFA	15.50%	15.50%	15.50%
Rate of Return on Equity Component of Additional Capitalization	15.50%	15.50%	15.50%
Tax Rate	20.01%	20.01%	20.01%
Rate of Return on Equity Component of Original Cost	19.79	19.79	19.78
Rate of Return on Equity Component of Additional Capitalization	0.21	0.12	0.12
Return on Equity (Post Tax)	20.00	19.91	19.91
MAT Rate	20.01%	20.01%	20.01%
Return on Equity (Pre Tax)	24.99	24.89	24.89

Interest on Loan

Petitioner's submission

- 6.69 The Petitioner has considered rate of interest of loan at 13.02% for Unit 2 and 12.33% for Unit 3 which is equal to the rate of interest approved by the Commission in the order dated May 31, 2012 for FY 2012-13 as shown in the table below

Table 40 Interest on Loan of Unit 2 and Unit 3 submitted by the Petitioner for FY 2012-13 (Rs Cr)

Particulars	Unit 2	Unit 3
Loan Balance Movement		
Opening GFA (Original Project Cost)	439.56	425.54
Opening Loan Balance on above (=70% of GFA)	5.54	4.99
Additional Capitalization during FY13	10.39	5.32
Loan Balance (on Additional Capitalization for FY13)	7.27	3.72
Deemed Repayment (=Depreciation)	0.72	0.54
Closing Loan Balance	12.09	8.18
Average Loan Balance during the year	8.82	6.59
Computation of Interest on Loan		
Rate Of Interest (%)	13.02%	12.33%
Interest on Loan for FY 2012-13	1.15	0.81

Commission's analysis

- 6.70 The Commission has worked out gross normative loan for FY 2012-13 as per Regulation 7.13 and 7.14 of the Generation Tariff Regulation, 2010 as quoted below

“7.13 In case of the generating station declared under commercial operation prior to 1.4.2011, debt-equity ratio allowed by the Commission for determination of Tariff for the period ending 31.3.2011 shall be considered for determination of tariff for the Transition period.

7.14 For the project declared under commercial operation on or after 1.04.2011, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Explanation:- Any expenditure incurred or projected to be incurred on or after 1.04.2011 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause 7.14 of this Regulation.”

6.71 The rate of interest on the approved normative debt has been worked out for Unit 2 and Unit 3 as 13.02% and 12.33% respectively and accordingly the Commission approves the the interest on loan amount at Rs 1.15 Cr for Unit 2 and Rs 0.81 Cr for Unit 3 respectively.

Interest on Working Capital

Petitioner's submission

6.72 The Petitioner for 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 two months for generation corresponding to the Normative Annual Plant Availability Factor;
- (b) Cost of secondary fuel oil for two months for generation corresponding to the Normative Annual Plant Availability Factor;
- (c) Maintenance spares @ 20% of operation and maintenance expenses;
- (d) Operation and Maintenance expenses for 1 month; and
- (e) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor.

6.73 The rate of interest for calculating the interest on working capital is taken at the prevalent SBI PLR rate of 2012 i.e. @ 14.75% The details are shown in the table below:

Table 41 Interest on Working Capital for FY 2012-13 of Unit 2 and Unit 3 submitted by the Petitioner (Rs Cr)

Particulars	Unit 2		Unit 3	
	Submitted by the Petitioner in the petition dated August 28, 2014	Submitted by the Petitioner in the I.A dated March 12, 2015	Submitted by the Petitioner in the petition dated August 28, 2014	Submitted by the Petitioner in the I.A dated March 12, 2015
Computation of Cost Elements at Normative Availability				
Ex-Bus Generation at Normative Availability & Aux Power (i) (MUs)	804.17	10.99	804.17	10.41
Approved Rate of Energy Charges for FY 2012-13 (ii) (Rs/Kwh)	1.881		1.879	
Coal Cost at Normative Availability [= (i)x(ii)]	151.29		151.10	
LDO Cost at Normative Availability	5.33		5.66	
Annual Fixed Charges (excluding	86.85		73.94	

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Particulars	Unit 2		Unit 3	
	Submitted by the Petitioner in the petition dated August 28, 2014	Submitted by the Petitioner in the I.A dated March 12, 2015	Submitted by the Petitioner in the petition dated August 28, 2014	Submitted by the Petitioner in the I.A dated March 12, 2015
Incentive) at Normative Availability				
O&M Expenses	33.87		25.27	
Maintenance Spares	6.77		5.05	
Elements of Working Capital				
Working Capital as Coal Cost for 2 months	25.22		25.18	
Working Capital as LDO Cost for 2 months	0.89		0.94	
Working Capital as Receivables for 2 months	39.69		37.51	
Working Capital as O&M Expenses for 1 month	2.82		2.11	
Working Capital as Maintenance Spares (at 20% of O&M Expenses)	6.77		5.05	
Total Working Capital	75.39		70.79	
Computation of Interest on Working Capital				
SBI PLR as on 1st April 2012 (%)	14.75%		14.75%	
Interest on working Capital	11.12		10.44	

Commission's analysis

6.74 The Commission has computed the interest on working capital for FY 2012-13 for both Units 2 and 3 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 Regulation, 2010:

- (a) Cost of Coal for two months for generation corresponding to the Normative Annual Plant Availability Factor;
- (b) Cost of secondary fuel oil for two months for generation corresponding to the Normative Annual Plant Availability Factor;
- (c) Maintenance spares @ 20% of operation and maintenance expenses;
- (d) Operation and Maintenance expenses for 1 month; and
- (e) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the Normative Annual Plant Availability Factor.

6.75 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.”

6.76 The rate of interest on working capital has been taken as 14.75% i.e. the short-term Prime Lending Rate of State Bank of India as on April 1, 2012.

6.77 Accordingly, the Commission has trued up the interest on working capital for Unit 2 and Unit 3 for FY 2012-13 as shown in the tables below.

Table 42 Interest on Working Capital approved by the Commission for FY 2012-13 (Rs Cr)

Particulars	Approved in MYT order		Submitted by TPCL		Approved in True up	
	Unit 2	Unit 3	Unit 2	Unit 3	Unit 2	Unit 3
Coal Cost for 2 months	25.22	25.30	25.22	25.18	28.35	29.43
LDO Cost for 2 months	0.89	0.94	0.89	0.94	0.87	0.88
Receivables for 2 months	37.33	36.76	39.69	37.51	40.76	41.21
O&M Expenses for 1 month	2.11	1.75	2.82	2.11	2.12	1.75
Maintenance Spares (@ 20% of O&M Expenses)	5.07	4.19	6.77	5.05	5.08	4.20
Total Working Capital	70.62	68.94	75.39	70.79	77.17	77.47
Rate of Interest	14.75%	14.75%	14.75%	14.75%	14.75%	14.75%
Interest on Working Capital	10.42	10.17	11.12	10.44	11.38	11.43

Cost of Secondary Fuel

Petitioner's submission

6.78 The Petitioner submitted that cost of secondary fuel at Rs 5.22 Cr and Rs 5.26 Cr for Unit 2 and Unit 3 respectively.

Commission's analysis

- 6.79 The Commission has approved the cost of secondary fuel oil (LDO in case of the Petitioner) 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.”

- 6.80 As per the Generation Tariff Regulations 2010, the consumption of LDO has been calculated considering the gross generation corresponding to the NAPAF (i.e. 85%) and Specific Normative Fuel Oil Consumption (i.e. 1ml/kWh) and the landed price of LDO has been computed considering the weighted average cost of LDO from April 2012 to March 2013. Accordingly the Commission approves the LDO cost at Rs 5.22 Cr and Rs 5.26 Cr for Unit 2 and Unit 3 respectively.

Summary of Fixed Cost Determinants and Generation Tariff

- 6.81 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;

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- (e) Interest Charges on Working Capital; and
(f) Cost of Secondary Fuel Oil.

6.82 The following tables show the fixed cost components and energy cost for FY 2012-13, in terms of the Petitioner's submission and the Commission's trued up costs for Unit 2 and Unit 3.

Table 43 Summary of Annual Fixed Cost and Generation Tariff for Unit 2 for FY 2012-13

Parameters	Units	Unit 2		
		Approved in MYT order	Revised Submitted by TPCL in IA	Approved in True up
O&M charges	Rs Cr	25.33	33.87	25.39
Depreciation	Rs Cr	4.38	4.30	4.31
Interest on Loan	Rs Cr	1.25	1.15	1.15
Return on Equity	Rs Cr	25.93	25.85	25.85
Cost of Secondary Fuel	Rs Cr	5.33	5.22	5.22
Interest on Working Capital	Rs Cr	10.42	11.12	11.38
Revenue Gap for FY 2010-11	Rs Cr	-	-	-
Annual Fixed Charges	Rs Cr	72.64	81.39	73.31
Energy Charge Rate (ECR)	Rs/kWh	1.882	2.210	2.180
Fuel Cost	Rs Cr	151.35	173.55	171.22
Total Cost	Rs Cr	223.98	254.95	244.53

Table 44 Summary of Annual Fixed Cost and Generation Tariff for Unit 3 for FY 2012-13

Parameters	Units	Unit 3		
		Approved in MYT order	Revised Submitted by TPCL in IA	Approved in True up
O&M charges	Rs Cr	20.96	25.27	21.02
Depreciation	Rs Cr	5.96	5.88	5.88
Interest on Loan	Rs Cr	0.96	0.81	0.81
Return on Equity	Rs Cr	24.99	24.89	24.89
Cost of Secondary Fuel	Rs Cr	5.66	5.26	5.26
Interest on Working Capital	Rs Cr	10.16	10.41	11.43
Revenue Gap for FY 2010-11	Rs Cr	-	-	-
Annual Fixed Charges	Rs Cr	68.69	72.53	69.29
Energy Charge Rate (ECR)	Rs/kWh	1.889	2.243	2.213
Fuel Cost	Rs Cr	153.1	180.4	177.9
Total Cost	Rs Cr	221.8	252.9	247.2

Incentive

Petitioner's submission

6.83 The Petitioner based on the provisions of Generation Tariff Regulations, 2010 computed Incentive for Truing-up of FY 2012-13 which works out to Rs 11.62 Cr for Unit 2 and Rs 15.02 Cr for Unit 3. However vide the Interlocutory Application dated March 12, 2015 has revised the submissions to Rs 10.89 Cr for Unit 2 and 14.73 Cr for Unit 3. The detailed computation of pre-tax Incentive is shown in the following Tables:

Table 45 Incentive submitted by the Petitioner for FY 2012-13 for Unit 2 and Unit 3

Particulars	UoM	FY 2012-13	
		Unit 2	Unit 3
Actual Plant Availability	%	94.10%	98.81%
Normative Plant Availability	%	85.00%	85.00%
Annual Fixed Charges without Incentive	Rs Cr	81.39	72.52
Annual Fixed Charges with Incentive	Rs Cr	92.28	87.26
Computation of Incentive			
Incentive(Post-Tax)	Rs Cr	9.30	12.01
MAT Rate	%	20.01%	20.01%
Incentive(Pre-Tax) for FY 2012-13	Rs Cr	11.62	15.02
Revised Incentive computed vide the Interlocutory Application dated March 12, 2015	Rs Cr	10.89	14.73

Commission's analysis

6.84 As per regulation 8.12 of Generation Tariff Regulations, 2010,

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

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

$$= (AFC \times (NDM / NDY)) \times (0.5 + 0.5 \times PAFM / NAPAF) \text{ (in Rupees);}$$

Provided that in case the plant availability factor achieved during a financial year (PAFY) is less than 70%, the total capacity charge for the year shall be restricted to: =AFC x (0.5 + 35 / NAPAF) x (PAFY / 70) (in Rupees)

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

$$= (AFC \times NDM / NDY) \times (PAFM / NAPAF) \text{ (in Rupees)}$$

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

NAPAF - Normative annual plant availability factor in percentage;

NDM - Number of days in the month;

NDY - Number of days in the year;

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

PAFY - Plant availability factor achieved during the year, in percent”

- 6.85 Accordingly the Commission has calculated the incentives after due verification of SLDC certified availability. The Commission hereby approves the incentives at Rs 7.8 Cr for Unit 2 and 11.2 Cr for Unit 3.

Sharing of Gains on Secondary Fuel Oil Consumption

Petitioner’s submission

- 6.86 Whereas the Petitioner has claimed tax liability on sharing of gains from secondary fuel oil consumption, the Petitioner has failed to account for the sharing of gains from secondary fuel oil consumption.

Commission’s View

- 6.87 The Commission computed the gains on account of secondary fuel consumption by comparing the cost of secondary fuel consumption on normative and actual basis in accordance with Regulation 7.52 of the Generation Tariff Regulations, 2010. The said regulation is quoted below:

“7.52 The savings on account of secondary fuel oil consumption in relation to norms specified in clause 8.4, 8.6 of these Regulations, shall be shared with Beneficiaries in the ratio of 50:50, in accordance with the following formula at the end of the year:

$$= (SFC \times NAPAF \times 24 \times NDY \times IC \times 10 - ACsfoy) \times LPSFy \times 0.5$$

Where,

ACsfoy = Actual consumption of secondary fuel oil during the year in ml.”

- 6.88 The Commission approves the gains on secondary fuel consumption and computation of the same is summarized in the following table.

Table 46: Computation of Sharing of gains on LDO consumption for FY 2012-13 (Rs Cr)

Particulars	UoM	Unit 2		Unit 3	
		Submitted by TPCL	Approved by JSERC in this TO	Submitted by TPCL	Approved by JSERC in this TO
Normative Gross Generation	MU	895.97	895.97	895.97	895.97
Normative Specific LDO Consumption	ml/kWh	1.00	1.00	1.00	1.00
LDO Consumption at NAPAF	kL	895.97	895.97	895.97	895.97
Projected LDO Consumption	kL		-		-
Actual LDO Consumption	kL	262.3	262.3	304.50	304.50
Difference in LDO Consumption (Consumption at NAPAF - Projected/Actual Consumption)	kL	624.86	624.88	588.21	588.21
LDO Landed price	Rs/kL	58434	58434	58879	58879
Gain/(Loss) on LDO Consumption	Rs Cr	3.65	3.65	3.46	3.46
Sharing of Gain/(Loss) with Beneficiary (TSL)	Rs Cr		1.83		0.34
Gain/(Loss) to be retained by TPCL	Rs Cr	-	1.83	-	1.73

Tax Liability on gain on secondary fuel oil consumption

Petitioner's submission

6.89 The Petitioner submitted that the tax liability to be borne by the Petitioner on such gains on account of lower LDO Consumption is recoverable from the beneficiaries at Rs 0.91 Cr for Unit 2 and 0.87 Cr for Unit3 respectively.

Commission's View

6.90 The Commission computed the gains on account of secondary fuel consumption by comparing the cost of secondary fuel consumption on normative and actual basis in accordance with Regulation 7.52 of the Generation Tariff Regulations, 2010. The said regulation is quoted below:

“7.52 The savings on account of secondary fuel oil consumption in relation to norms specified in clause 8.4, 8.6 of these Regulations, shall be shared with Beneficiaries in the ratio of 50:50, in accordance with the following formula at the end of the year:

$$= (SFC \times NAPAF \times 24 \times NDY \times IC \times 10 - ACsfoy) \times LPSFy \times 0.5$$

Where,

ACsfoy = Actual consumption of secondary fuel oil during the year in ml.”

6.91 As per Regulation 7.48 of the Generation Tariff Regulations, 2010:

“7.48 Tax on the income streams of the Generating Company shall not be recovered from the Beneficiaries.

Provided that the deferred tax liability, excluding Fringe Benefit Tax, for the period up to 31st March, 2011 whenever it materializes, shall be recoverable directly from the beneficiaries and the long-term customers;

Provided further that any tax liability on incentives and savings due to improved performance on any parameter, if any, shall be considered for passing onto the Beneficiaries in the ratio of the sharing of the gains as prescribed under these Regulations.”

6.92 The following table shows the tax liability submitted by the Petitioner and approved by the Commission.

Table 47: Computation of Tax liability on gains on LDO consumption of Unit 2 for FY 2012-13 (Rs Cr)

Particulars	Unit 2	
	Submitted by the Petitioner	Approved by the Commission
Normative Gross generation	895.97	895.97
Actual gross generation	866.87	866.92
Normative sp. LDO Consumption	1	1
LDO Consumption at Normative Plant Availability	895.97	895.97
Actual LDO Consumption for the year	262.3	262.3
Equivalent actual LDO Consumption at normative generation	271.11	271.09
Difference in LDO Consumption	624.86	624.88
LDO Landed Price	58434	58434
Gain/Loss on LDO Consumption(post Tax)	3.65	3.65
MAT rate	20.01%	20.01%
Retained by TPCL	4.56	4.56
Passed on to Consumers	-	2.28
Tax liability to be recovered from Consumers	0.91	0.46

Table 48 Computation of Sharing of gains on LDO consumption of Unit 3 for FY 2012-13 (Rs Cr)

Particulars	Unit 3	
	Submitted by the Petitioner	Approved by the Commission
Normative Gross generation	895.97	895.97
Actual gross generation	886.5	886.48
Normative sp. LDO Consumption	1	1
LDO Consumption at Normative Plant Availability	895.97	895.97

Particulars	Unit 3	
	Submitted by the Petitioner	Approved by the Commission
Actual LDO Consumption for the year	304.50	304.50
Equivalent actual LDO Consumption at normative generation	307.75	307.76
Difference in LDO Consumption	588.22	588.21
LDO Landed Price	58879	58879
Gain/Loss on LDO Consumption(post Tax)	3.46	3.46
MAT rate	20.01%	20.01%
Retained by TPCL	4.33	4.33
Passed on to Consumers		2.16
Tax liability to be recovered from Consumers	0.87	0.43

Tax Liability on gain in Auxiliary Consumption

Petitioner's submission

6.93 The Petitioner submitted that the tax liability to be borne on the gain on account of lower auxiliary power consumption is recoverable from the beneficiaries as per Regulation 7.48 of the Generation Tariff Regulations, 2010 as stated in para 6.91 above. The Petitioner calculated the tax liability on gain on auxiliary consumption at Rs 0.29 Cr for Unit 2 and Rs 0.36 Cr for Unit 3 for FY 2012-13.

6.94 The detailed computation on Tax liability on Gain on Auxiliary Power Consumption as submitted by the Petitioner is shown in the following Table:

Table 49 Tax Liability on Gain in Auxiliary Power Consumption submitted by the Petitioner for FY 2012-13

Particulars	UoM	Unit 2	Unit 3
Energy Charges	Rs Cr	173.55	180.41
Net Gain due to lower Auxiliary Power Consumption	Rs Cr	1.14	1.42
MAT Rate	%	20.01%	20.01%
Tax Liability due to Gain in Auxiliary Consumption	Rs Cr	0.29	0.36

Commission's analysis

6.95 As per Regulation 7.48 of the Generation Tariff Regulations, 2010:

“7.48 Tax on the income streams of the Generating Company shall not be recovered from the Beneficiaries.

Provided that the deferred tax liability, excluding Fringe Benefit Tax, for the period up to 31st March, 2011 whenever it materializes, shall be recoverable directly from the beneficiaries and the long-term customers;

Provided further that any tax liability on incentives and savings due to improved performance on any parameter, if any, shall be considered for passing onto the Beneficiaries in the ratio of the sharing of the gains as prescribed under these Regulations.”

- 6.96 The Commission calculated the tax on the gain in auxiliary consumption of the Petitioner and accordingly approves the tax on auxiliary consumption for Unit-2 at Rs 0.26 Cr and Unit-3 at Rs 0.32 Cr.

Total cost

- 6.97 The tables below show the total cost recoverable by the Petitioner for Unit 2 and Unit 3 inclusive of incentive and sharing of gains on operational parameters.

Table 50 Cost recoverable by Petitioner for Unit 2 for FY 2012-13

Parameters	Units	Unit 2		
		Approved in MYT order	Revised Submitted by TPCL in IA	Approved in True up
Annual Fixed Charges	Rs Cr	72.64	81.39	73.31
Fuel Cost	Rs Cr	151.35	173.55	171.22
Total Cost	Rs Cr	223.98	254.95	244.53
Revenue Gap for FY 2010-11	Rs Cr	-	-	-
Incentive	Rs Cr	-	10.89	7.85
Less: Sharing of Gains on LDO		-	-	1.83
Add: Tax on the Gain on LDO Consumption retained by Tata Power	Rs Cr	-	0.91	0.46
Add: tax on Gain on aux. power consumption	Rs Cr	-	0.29	0.26
Total Cost including incentive & sharing of gains on LDO consumption	Rs Cr	229.31	267.04	251.27

Table 51 Cost recoverable by Petitioner for Unit 3 for FY 2012-13

Parameters	Units	Unit 3		
		Approved in MYT order	Revised Submitted by TPCL in IA	Approved in True up
Annual Fixed Charges	Rs Cr	68.70	72.54	69.29
Fuel Cost	Rs Cr	153.11	180.41	177.95
Total Cost	Rs Cr	221.80	252.93	247.25
Revenue Gap for FY 2010-11	Rs Cr	1.38	-	-

Parameters	Units	Unit 3		
		Approved in MYT order	Revised Submitted by TPCL in IA	Approved in True up
Incentive	Rs Cr	-	14.73	11.26
Less: Sharing of Gains on LDO		=	-	1.73
Add: Tax on the Gain on LDO Consumption retained by Tata Power	Rs Cr	-	0.87	0.43
Add: Tax on Gain on aux. power consumption	Rs Cr	-	0.36	0.32
Total Cost including incentive & sharing of gains on LDO consumption	Rs Cr	223.18	268.89	257.52

Gap/Surplus for FY 2012-13

- 6.98 The Commission has calculated the gap taking into account the carrying cost for the period April 1, 2012 to April 1, 2015 and accordingly approved revenue gap/surplus for FY 2012-13 in table below. **In accordance with Clause 6.18 of 'Generation Tariff Regulations, 2010' the Petitioner may recover the gap in 6 equal monthly instalments from the beneficiary starting within three months from the date of this tariff order issued by the Commission.**

Table 52 Gap/Surplus for FY 2012-13 of Unit-2

Particulars	Approved in MYT order	Revised Submitted by TPCL in IA	Approved in True up
Total Cost including incentive & sharing of gains on LDO consumption for FY 2012-13	229.30	267.03	251.27
Revenue Recovered during the year FY 2012-13	-	259.29	259.29
Gap/(Surplus) for the year FY 2012-13	229.30	7.74	(8.02)
Carrying Cost on current year gap/(Surplus)	-	2.28	(3.72)
Total gap for FY 2011-12 C/f			3.07
Net Gap to be recovered/adjusted	229.30	10.03	(8.67)

Table 53 Gap/Surplus for FY 2012-13 of Unit-3

Particulars	Approved in MYT order	Revised Submitted by TPCL in IA	Approved in True up
Total Cost including incentive & sharing of gains on LDO consumption for FY 2012-13	223.18	268.89	257.52

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Particulars	Approved in MYT order	Revised Submitted by TPCL in IA	Approved in True up
Revenue Recovered during the year FY 2012-13		261.63	261.63
Gap/(Surplus) for the year FY 2012-13	223.18	7.26	(4.11)
Carrying Cost on current year gap/(Surplus)		2.14	(1.91)
Total gap for FY 2011-12 C/f			0.99
Net Gap to be recovered/adjusted	223.18	9.40	(5.03)

A7: ADDITIONAL CAPITALIZATION FOR FY 2014-15 TO FY 2015-16

Petitioner's Submission

- 7.1 Under the Additional Capitalization Plan, the Petitioner submitted changes in certain schemes of approved Capital Investment Plan and revised the capitalisation value of these schemes from Rs. 24 Cr. to Rs. 53.36 Cr. The Petitioner also submitted additional schemes of Rs. 149.1 Cr. over and above the original plan, part of which is for Unit 2 and Unit 3 for the period FY 2014-16.
- 7.2 The capitalization plan has been divided into two major heads:
- Standalone - Capitalization: This category includes the Capitalized Costs incurred for Assets/Schemes exclusively for Unit 2 & 3.
 - Common Facilities: This category includes capitalised costs which have been incurred or proposed to be incurred for the whole station and their costs have been apportioned to the GFA of Unit 2 and Unit 3.
- 7.3 The Petitioner has worked out the Apportionment Ratio individually as well as the combined ratio for Unit 2 and Unit 3 based on the Installed Capacity of these Units with respect to the Installed Capacity of the Jojobera Power Plant as laid out in the following table:

Table 54: Apportionment ratio for capitalised cost of common facilities

Facilities to Unit 2 & 3		
Installed Capacity of Unit1	MW	67.50
Installed Capacity of Unit2	MW	120
Installed Capacity of Unit3	MW	120
Installed Capacity of Unit4	MW	120
Installed Capacity of Jojobera Power Plant	MW	427.5
Contribution of Unit2 in Total Installed Capacity	%	28.07%
Contribution of Unit3 in Total Installed Capacity	%	28.07%
Combined Contribution of Unit 2 & 3 in Total Installed Capacity	%	56.14%

- 7.4 The Petitioner has submitted that Capital Investment Plan for a period of 4 years is bound to undergo certain revisions mainly on account of deviations in Cost & Budgeting, Inflation, changes in necessity/usefulness of Scheme as found necessary due to technical reasons, changes in Annual Shutdown Plan & duration and in case of any emergency.
- 7.5 The Petitioner has submitted that some of the Capex Schemes have been carried forward to FY 2014-15 and FY 2015-16 with a revised Capitalisation phasing.

- 7.6 Petitioner has submitted the consolidated details/justifications of the significant changes in the original capitalization plan as annexures along with the petition. The proposed values of the revised schemes are as shown below:

Table 55: Proposed revision of existing capital investment schemes

Name of Scheme	Revised Scheme Value (Rs. Cr.)
Coal Shed	11.66
High Concentration Slurry Discharge	30.00
APH Tubes	9.40
Insurance Spares for LPBP	0.40
Upgradation of RH SH Spray Control Valve	0.50
Trim Part Upgradation of RH, SH-1, SH-2 Spray Block Valves	0.20
Retrofitting of ESP Controllers of Unit 2	0.60
Retrofitting of ESP Controllers of Unit 3	0.60
Total	53.36

- 7.7 Petitioner has also furnished the proposed values of additional Capex Schemes along with DPR of some of the schemes. The proposed values of additional Capex schemes are shown in the table below:

Table 56: Proposed additional capitalisation schemes

Name of Scheme	Total Scheme Value (Rs. Cr.)
Extension of existing Loco Shed for DE Locomotive maintenance	2.37
ABT metering system	0.76
Flow meters for CW System	0.42
PNLD for Air receiver Tanks	0.20
Procurement of industrial grade PC/Printers DCS/Offsite system	0.08
Installation of Side Stream Filtration System for Unit 2	1.09
Installation of Side Stream Filtration System for Unit 3	1.08
Self-propelled Aerial Work Platform	0.31
LCV Tata 207 DI for CHP	0.12
Indigo Car for Administration	0.09
Purchase of Skid Steer Loader/Excavator	0.39
Tata Sumo/207 DI Crew Cab for trolley mounted fire pump	0.12
Furnishing of Trainee Hostel	0.40
Refurbishment of Existing ESP	40.00
Housing Colony at Jojobera	70.12
Replacement of Battery Chargers for Unit 2	0.20
Replacement of Battery Chargers for Unit 3	0.20

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Name of Scheme	Total Scheme Value (Rs. Cr.)
Renovation of Main Store	1.01
Kardex Shuttle storage system	0.60
Mobile Shelving system for Jojobera main stores	0.40
ISAS System Up gradation	0.09
Procurement of Economizer Coils for Unit-2	0.94
Procurement of LTSH Coils for Unit-2	0.98
Fire Tender	1.24
Fire Hydrant Line for CHP	0.72
Fire Detection and Protection System for LDO storage tank area	0.78
Upgradation of Air Drier Unit-2	1.20
LPBP Stop and Control Valve Actuator set for Unit 2	1.20
Upgradation of Compressed Air Network of 2 & 3	4.00
CHP Control Room Modification	1.83
Installation of Fire Detection and Monitoring System	12.91
Coal Bucket for CAT Bulldozer	0.60
Upgradation of Honeywell HMI Unit 2	1.71
Upgradation of ISAS System Unit 2	0.47
Upgradation of ISAS System Unit 3	0.47
Total	149.10

7.8 Based on the above mentioned apportionment methodology and scheme-wise details, the summary of Asset-wise revised Capitalisation Plan is as shown in the following Tables:

Table 57: Asset-wise capitalisation details for Unit-2 (Rs lakhs)

Asset Class	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	Total
Building and civil engineering works of a permanent character not mentioned above	70.78	472.92	185.09	439.98	1168.77
Transformers, kiosk sub-station equipment and other fixed apparatus	5.5	0	16.95	10	32.45
Batteries	19.2	0	20.38	30	69.58
Plant & Machinery in generating stations	639	265.81	1413.8	2622.74	4941.35
Switch gear including cable connections	0	0	0	0	0.00
Air conditioning plants Static	0.76	0	0	0	0.76
Other assets – unclassified	182.73	313.23	389.53	170.85	1056.34

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Asset Class	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	Total
Office furniture, furnishings and office	3.84	1.09	3.19	0	8.12
Communication equipment Telephone	0	0	0	0	0.00
Self -Propelled vehicles	115.64	0	79.3	0	194.94
IT Equipment	1.06	5.22	9.15	5.61	21.04
Total (in Rs Lakhs)	1038.51	1058.27	2117.39	3279.18	7493.35
TOTAL in RS Cr	10.39	10.58	21.17	32.79	74.93

Table 58: Asset-wise capitalisation details for Unit-3 (Rs Lakhs)

Asset Class	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	Total
Building and civil engineering works of a permanent character not mentioned above	70.78	472.92	185.09	439.98	1168.77
Transformers, kiosk sub-station equipment and other fixed apparatus	5.5	0	16.95	0	22.45
Batteries	9.93	0	0	79.14	89.07
Plant & Machinery in generating stations	230.02	1120.36	1013.01	2449.22	4812.61
Switch gear including cable connections	0	0	0	0	0.00
Air conditioning plants Static	0.76	0	0	0	0.76
Other assets – unclassified	94.24	188.16	205.64	140.85	628.89
Office furniture, furnishings and office	3.84	1.09	3.19	0	8.12
Communication equipment Telephone	0	0	0	0	0.00
Self-Propelled vehicles	115.64	0	79.3	0	194.94
IT Equipment	1.06	5.22	9.15	5.61	21.04
Total (in Rs Lakhs)	531.77	1787.75	1512.33	3114.8	6946.65
TOTAL in RS Cr	5.32	17.88	15.12	31.15	69.47

Commission's Analysis

- 7.9 The Commission is of the view that undue deviation from the approved MYT Business Plan is not in the spirit of the Multi Year Tariff Regulations and should be avoided. Additional works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost can be considered by the Commission in line with the provisions of the JSERC (Generation Tariff) Regulations, 2010.

7.10 In view of above, the Commission undertook a detailed review of the additional capitalization proposed by the Petitioner in line with the provisions of the JSERC (Generation Tariff) Regulations, 2010, and same has been summarised below.

7.11 Regulation 6.10 of the above mentioned regulations provide for mid-term review of the Capital investment plan as reiterated below:

“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;”

7.12 In view of above, the Commission reviewed the variation in the actual capital expenditure/capitalization incurred during FY 2012-13 and FY 2013-14 vis-à-vis targets as summarized in following table:

Table 59: Variation in actual capital expenditure/capitalisation vis-à-vis approved (Rs Cr)

Year	Approved by Commission in MYT Order	Actual incurred by Petitioner	Variation (%)
FY 2012-13	21.58	15.70	27.24
FY 2013-14	43.07	28.46	33.92
Total	64.65	44.16	31.69

7.13 As can be seen, there is variation of more than 20% (cumulative) in actual capital investment/ capitalization incurred. Thus, the Commission shall undertake a review of additional capitalization in view of following regulations.

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

- (i) *Undischarged liabilities;*
- (ii) *Works deferred for execution;*
- (iii) *Procurement of initial capital spares within the original scope of work, subject to the provisions under clause 7.3,7.4 of these Regulations;*
- (iv) *Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) *Change in law.*

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

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

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*
- (ii) Change in law;*
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (iv) Any additional works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost;”*

7.14 In the light of the above, the Commission considered the proposed capitalisation. For approving the additional capitalisation, the Commission has also taken into consideration the past trend in capitalisation of the Petitioner, which as noted by the Commission is substantially lower than that approved. Further the Generation Tariff Regulations 2010 under Regulation 6.11 specify that:

“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.”

7.15 The Commission has examined the additional capital works proposal, duly considering the fact that the trend of actual capitalization is lower than the approval granted by the Commission in its previous Tariff Orders and the fact that the Petitioner has not justified the nature of all the additional works proposed as emergency in nature. Hence the Commission has applied prudence and has identified those schemes which are of emergency in nature and are essential for safe, efficient and successful functioning of the units, which have been summarised in following tables.

Table 60: Identified existing schemes for consideration of additional capitalisation in accordance with Regulation 6.11

Name of Scheme	Value (Rs. Cr.)
High Concentration Slurry Discharge System	30.00
APH Tubes	9.40
Insurance Spares for LPBP	0.40
Upgradation of RH/SH Spray Control Valve	0.50
Trim Part Upgradation of RH, SH-1, SH-2 Spray Block Valves	0.20
Retrofitting of ESP Controllers of Unit 2	0.60
Retrofitting of ESP Controllers of Unit 3	0.60
Total	41.70

Table 61: Identified new schemes for consideration of additional capitalisation in accordance with Regulation 6.11

Name of Scheme	Value (Rs. Cr.)
Replacement of Battery Chargers for Unit 2	0.20
Replacement of Battery Chargers for Unit 3	0.20
Renovation of Main Store	1.01
Fire Tender	1.24
Fire Hydrant Line for CHP	0.72
Fire Detection and Protection System for LDO Storage Tank Area	0.78
Installation of Fire Detection and Monitoring System	12.91
Total	17.06

- 7.16 In order to grant approval for above identified schemes, the Petitioner was directed to submit DPRs, reasons justifying emergency of works, certification from Board of directors for emergency of work and other relevant details. While, the Petitioner submitted DPRs for schemes with value above Rs 1 Crore, the Commission on scrutiny of the DPRs observed that the details related to the savings in the operating norms due to improvement in availability, auxiliary consumption, heat rates, secondary fuel consumption, etc. which shall benefit the consumers have not been provided. Moreover, other details related to justifications for emergency works, certification from Board of directors, etc. have not been furnished by the Petitioner.
- 7.17 In view of above, the Commission holds that passing on the cost of additional capitalisation without undertaking entire cost benefit analysis in terms of savings to be passed on to the consumers is not justified.
- 7.18 Thus, the Commission provisionally approves the additional capitalisation for schemes identified in Table 60 and Table 61, while the impact on fixed cost shall be passed on after detailed scrutiny at the time of true up considering the descriptions submitted by the Petitioner related to cost benefit analysis, savings in operating norms, certification from Board of directors, etc. and subject to prudence check by the Commission.

A8: STATUS OF EARLIER DIRECTIVES

Directives as per MYT Order dated April 28, 2014	Status	Views of the Commission
<p>Auditor's certificate for additional capitalization</p> <p>With regards to the Additional Capitalization from FY 2012-13 and FY 2013-14, the Petitioner is directed to get the Certificate of Completion and the listing of the Fixed Assets Register, as submitted by it, certified by the Statutory Auditors of the Company and submit the same to the Commission with the next tariff petition</p>	<p>As directed by the Hon'ble Commission, the Certificates of Completion of the assets pertaining to Additional Capitalization and the listing of the Fixed Asset Register for FY 2012-13 certified by the Statutory Auditors of the Company have been provided as Annexure 5 through the instant petition. However, the Certificates of Completion of the assets pertaining to Additional Capitalization and the listing of the Fixed Asset Register for FY 2013-14 shall be submitted once the audited financial for FY 2013-14 is available with us.</p>	<p>The directive has been complied for FY 2012-13. Further, with regards to the Additional Capitalization for FY 2013-14 and FY 2014-15 onwards, the Petitioner is directed to 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 petition.</p>
<p>Competitive Procurement</p> <p>The Commission has approved capital expenditure for various schemes to be taken up during the Control Period. The projected cost of the schemes has also been approved in line with the cost of each scheme estimated by the Petitioner. The Commission however directs the Petitioner to procure equipment and services through competitive bidding process and minimize the cost of each scheme. 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>As per the directive of the Hon'ble Commission, the detail of the competitive bidding of the approved schemes in the MYT order, for which the competitive bidding have been completed, have been provided as Annexure 31 of the instant petition.</p>	<p>The directive has been complied. Further the Commission directs the Petitioner to submit the details of procurement process followed for each year of the Control Period.</p>

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Directives as per MYT Order dated April 28, 2014	Status	Views of the Commission
<p>Off take of Power from Unit 2 and Unit 3</p> <p>The Petitioner has explained that the PLF of Unit 2 and Unit 3 has been low in the past on account of lower than expected load growth in Tata Steel Distribution area but is expected to increase in future years. However, the Petitioner expects that the PLF of Unit 2 and Unit 3 would remain around 85% only. The Commission is of the view that Unit-2 and Unit-3 at Jojobera should be used to meet the base load demand of Tata Steel Distribution and Tata Steel Distribution should only draw the expensive power from DVC to meet the peak demand which is not met by supply from Unit-2 and Unit-3. The Commission therefore directs the Petitioner to take up the matter with Tata Steel Limited and make all attempts to achieve a PLF of at least 90%.</p>	<p>It is humbly submitted that PLF of Jojobera Unit 2 and Unit 3 is solely dependent on the load demand of the distribution licensee. In FY 2013-14 the PLF has been registered at 78.31% for Unit 2 and 70.60% for Unit 3. Tata Power humbly submits that the matter pertaining to low PLF of Unit 2 and Unit 3 has been taken up with Tata Steel. The load pattern of Industrial consumers has varied significantly during FY 2013-14 and the major industries have intermittently reduced the production volume due to economic slowdown. However from the 1st quarter of FY 2014-15, the load demand has increased considerably and the PLF of Unit 2 and Unit 3 has significantly increased to about 92% and 84% respectively (YTD July 2014). Hence, it is expected to achieve a higher PLF in Unit 2 and Unit 3 in FY 2014-15.</p>	<p>Commission observes that the Unit 2 and Unit 3 has achieved PLF of 92% and 84% respectively in July 2014 and expects that base load requirement of the Petitioner will be always met from Unit 2 and Unit 3 of Jojobera station. Commission, therefore directs the Petitioner to maintain the PLF around 90%.</p>
<p>Landed Cost of Coal</p> <p>The Commission directs the Petitioner to get the month-wise landed cost of coal separately showing Base cost of coal; Royalty; Taxes and duties; Transport cost by rail / ocean / road / pipeline or any other means; and Clean energy cess as per Ministry of Coal, Govt. of India Notification with respect to Unit 2 and Unit 3 certified by the Statutory Auditor of the Company and submit the same along with the petition for truing up of ARR for FY 2012-13.</p>	<p>Tata power has provided the Landed Price of Coal for FY 2012-13 and FY 2013-14 duly certified by the Statutory Auditors of the Company as Annexure 32 and Annexure 33 respectively of the instant petition. Notification with respect to Unit 2 and Unit 3 certified by the Statutory Auditor of the Company and submit the same along with the petition for truing up of ARR for FY 2012-13.</p>	<p>The directive has been complied. Further, the Commission directs the Petitioner to get the month-wise landed cost of coal separately showing Base cost of coal; Royalty; Taxes and duties; Transport cost by rail / ocean / road / pipeline or any other means; and Clean energy cess as per Ministry of Coal, Govt. of India Notification with respect to Unit 2 and Unit 3 certified by the Statutory Auditor of the Company and submit the same along with the petition for truing up for FY 2013-14 and subsequent years as well.</p>

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Directives as per MYT Order dated April 28, 2014	Status	Views of the Commission
<p>Concerns regarding environmental degradation around the plant</p> <p>During the public hearing conducted by the Commission on March 14, 2014, the public raised various issues relating to health hazards caused by the Jojobera Power Plant of the Petitioner in previous years. The Commission directs the Petitioner should take the required measures to ensure that the immediate environment is kept free from contamination and report compliance.</p>	<p>It is humbly submitted that Tata Power endeavors to reduce the pollution from the Jojobera Power Plant and comply with all the statutory norms set out by the Jharkhand State Pollution Control Board. Tata Power has taken many initiatives under its Corporate Social Responsibility to protect the environment and provide opportunity to its immediate community to maintain clean surroundings and good health. The detailed list of activities conducted under Corporate Social Responsibility has been attached as Annexure 34 with the instant petition.</p>	<p>The Commission is of the view that the environment and social concerns should be a matter of priority and continuous efforts should be made to keep the health hazards to public at minimum acceptable norms. As submitted by the Petitioner it is undertaking measures to keep environment checks and health safety, the Commission accepts the submissions made by Petitioner and directs the Petitioner to continue efforts in this area and to submit report on checks put for ensuring above along with APR petitions in subsequent years.</p>
<p>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</p> <p>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.</p>	<p>In Compliance with the directive of the Hon'ble Commission, Tata Power submits the instant petition for truing up of energy charges for FY 2011-12, Truing up of FY 2012-13, Annual Performance Review for FY 2013-14 and the revised estimates for FY 2014-15 to FY 2015-16 for the kind perusal of the Hon'ble Commission. Tata Power humbly submits that the extension for submission of the instant petition has been kindly granted by the Hon'ble Commission upon the request of Tata Power through the Orders dated 3rd July 2014 and 1st August 2014.</p>	<p>Commission condones the delay in filing of the petition in this regard and expects the Petitioner to file the petitions in future within the time limits specified by the appropriate regulations.</p>
<p>Data adequacy in next Tariff petition and timelines</p> <p>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-</p>	<p>Tata Power humbly submits that the detailed computation of all operational, fuel and financial parameters along with adequate justification through the instant APR petition FY 2013-14. The Hon'ble Commission may appreciate that it is practically impossible to interpret and foresee</p>	<p>The Commission notes with concern that even after repeated directives the information related to segregated accounts for Unit 2 and Unit 3 are not submitted and same is essential part of conducting a tariff review exercise. Thus, the Commission again directs to provide unit-wise audited</p>

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Directives as per MYT Order dated April 28, 2014	Status	Views of the Commission
wise audited accounts for FY 2012-13 and latest actual figures of FY 2013-14.	all data requirements at the time of filing the APR petition. The unit-wise audited accounts of FY 2012-13 and the latest actual figures of FY 2013-14 are being submitted in Annexure 6 and Annexure 16 of the instant petition.	accounts along with proper schedules with next tariff petition for consideration of true up of costs.

A9: DIRECTIVES

Auditor's certificate for additional capitalization

- 9.1 With regards to the Additional Capitalization for FY 2013-14 the Petitioner is directed to **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 petition.

Competitive Procurement

- 9.2 The Commission directs **the Petitioner to submit the details of procurement process followed for each year of the Control Period.**

Landed Cost of Coal

- 9.3 The Commission directs **the Petitioner to get the month-wise landed cost of coal separately showing Base cost of coal; Royalty; Taxes and duties; Transport cost by rail / ocean / road / pipeline or any other means; and Clean energy cess as per Ministry of Coal, Govt. of India Notification with respect to Unit 2 and Unit 3 certified by the Statutory Auditor of the Company and submit the same along with the petition for truing up of ARR for FY 2013-14.**

Data adequacy in next Tariff petition and Audited Accounts

- 9.4 The Commission directs **the Petitioner to remove data deficiencies highlighted throughout the tariff order and submit the same at the time of next petition along with the unit-wise audited accounts for FY 2013-14 and latest actual figures of FY 2014-15.** True up Petition should be accompanied by unit wise audited accounts along with all schedules and allocation statements.

Additional details for additional capitalisation plans

- 9.5 The Commission directs **the Petitioner to furnish details related to cost benefit analysis, the details related to the savings in the operating norms due to improvement in availability, auxiliary consumption, heat rates, secondary fuel consumption, etc. which shall benefit the consumers, certificates from Board of directors, justification for emergency works, for provisionally approved schemes in this order and also while submitting revised or new additional capitalisation plans.**

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this the 31st of May, 2015.

Date: 31st of May, 2015

Place: Ranchi

Sd/-
(SUNIL VERMA)
MEMBER (F)

Sd/-
(N.N Tiwari, J)
CHAIRPERSON

A10: ANNEXURES

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

Sl. No.	Name	Address / Organization if any
1	A. K. Lodh	Tata Power, Jojobera
2	S. Baijal	Tata Power, Jojobera
3	Sunil Kumar	Tata Power, Jojobera
4	Sunil Kunwar	Tata Power, Jojobera
5	Chandan Kumar	Tata Power, Jojobera
6	Jagdish Ladiwalla	Tata Power, Jojobera
7	Shubhayu Sanyal	Tata Power, Jojobera
8	Raja Biswas	Tata Power, Jojobera
9	Arvind Kumar Singh	Tata Power, Jojobera
10	Aveek Chatterjee	Tata Power, Jojobera
11	V.V. Namjeshi	Tata Power, Jojobera
12	Ankeeta	Tata Power, Jojobera
13	Vishnu Vishal	Tata Power, Jojobera
14	Rajesh Sinha	Tata Power, Jojobera
15	Ajay Kumar	Rahargora
16	Rampravesh	Budabagan
17	S. Kumar	Sopodera
18	Nayan Molak	Tata Power, Jojobera
19	Sujit Sengupta	Tata Power, Jojobera
20	B. Kumar	Danik Jagran
21	Anum Mishra	Tata Power, Jojobera
22	C.S. Singh	Tata Power, Jojobera
23	S. Dey	Tata Power, Jojobera
24	S.S. Chatterjee]	Tata Power, Jojobera
25	Supratik Mukherji	Tata Power, Jojobera
26	Rajesh Kumar	Sonari
27	R.M. Machie	Jemco
28	S. Kukharjee	Tata Power, Jojobera
29	Arun Prakash	Tata Power, Jojobera
30	Binay	Tata Power, Jojobera
31	P. Kumar	Tata Power, Jojobera
32	S. Kumar	Tata Power, Jojobera
33	Debajit	Tata Power, Jojobera
34	Asbhay Kumar	East Plant Bustte
35	K.K. Rai	E.P. Bagf
36	Senjay Singh	E.P. Bagf
37	D.M. Choudhary	TSL
38	K.C. Jha	JUSCO
39	Sharad Kumar	JUSCO
40	V.P. Singh	JUSCO
41	A.N. Choudhary	JUSCO

Annual Performance Review Petition for FY 2013-14 (including truing-up for FY 12 and FY13)

Sl. No.	Name	Address / Organization if any
42	V.N. Singh	Baridih
43	Sandeep Singh	JUSCO
44	S. D. Banerjee	Tata Power, Jojobera
45	Durgesh Sharma	Tata Power, Jojobera
46	R.N. Mohli	Danik Jagran
47	Arvind	Tata Power, Jojobera
48	Binod Kumar	Tata Power, Jojobera
49	Rajesh Dayal	Ramdev Bagan
50	Ranjit Kumar Singh	Tata Power, Jojobera
51	U.N. Jha	Tata Power, Jojobera
52	Rajesh	Hindustan Paper
53	Ashok Kumar Bihany	SCCI, JSR
54	Piyush Goyal	Bistupur
55	Brajesh Singh	Prabhat Khabar
56	Vidya Sagar Singh	Hindustan Paper