CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION
RAIPUR

Bhilai Steel Plant Town Electrical Engineering Department … … P. No. 09/2017(T)

Present: **Narayan Singh, Chairman**
Arun Kumar Sharma, Member

In the matter of –

1. Truing up of BSP (TEED) for the period from FY 2013-14 to FY 2015-16
2. Determination of Aggregate Revenue Requirement (ARR) for the Control Period from FY 2016-17 to FY 2020-21
3. Determination of Retail Tariff for FY 2017-18

ORDER

(Passed on 27.12.2017)

1. The Commission has notified the Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2015 (hereinafter referred as "CSERC MYT Regulations, 2015") as per the provisions of the Electricity Act, 2003 (hereinafter referred as 'the Act') and the Tariff Policy for determination of tariff for the Generating Company, Licensees, and Chhattisgarh State Load Despatch Centre (CSLDC).

2. This Order is passed in respect of the Petition filed by BSP-TEED for approval of (i) Final True-up for FY 2013-14 to FY 2015-16, (ii) Approval of Aggregate Revenue Requirement (ARR) for the Control Period from FY 2016-17 to FY 2020-21, and (iii) Determination of Retail Tariff for FY 2017-18.

3. This Order is passed under the provisions of Section 32(3), and Sections 45 and 62 read with Section 86(1) of the Act. This Order is passed by the Commission after having considered all the information and documents filed with the said Petition, the information submitted to the Commission after Technical Validation Session, and after having heard the consumers, their representatives and other stakeholders in the hearing held by the Commission.

4. According to the provisions of Regulation 5.2 of the CSERC MYT Regulations, 2015, the Licensee shall file the MYT petition for the Control Period from FY 2016-17 to FY 2020-21 by November 30, 2015. BSP-TEED did not file the MYT Petition on the due date and requested the Commission to extend the date of filing of the said Petition to February 2017.

5. On the request submitted by BSP-TEED, the Commission extended the date of filing of the Petition up to February 17, 2017. Subsequently, BSP-TEED filed the present MYT Petition on February 21, 2017, which was admitted by the Commission on April 24, 2017.

6. The Petition was made available on the website of the Commission as well as the Petitioner and was also made available at the offices of the Petitioner. A Notice along with the gist of the Petition was also published in the newspapers. Suggestions/objections

were invited as per the procedure laid down in the Regulations. Further, the Commission conducted a Hearing at Raipur on the said Petition on October 27, 2017. After taking into account all the suggestions/objections and after performing necessary due diligence on each of the issues, the Commission has finalised its views.

7. In the Multi-Year Tariff (MYT) Order passed on May 7, 2014, the Commission had approved the ARR for the Control Period from FY 2013-14 to FY 2015-16 for BSP-TEED. In this Order, the Commission has undertaken the final true up for FY 2013-14 to FY 2015-16 for BSP-TEED in accordance with the provisions of the Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2012 (hereinafter referred as 'CSERC MYT Regulations, 2012') and segregated audited accounts submitted by BSP-TEED.

8. The provisions of the CSERC MYT Regulations, 2015 have been considered for determination of ARR and Tariff for FY 2016-17 to FY 2020-21 and Retail Supply Tariff for FY 2017-18 for BSP-TEED. These Regulations embody the principles for determination of tariff enunciated in the Act. In passing this Order, the Commission has also been guided by the National Electricity Policy (NEP), 2005 and revised Tariff Policy, as mandated under the provisions of the Act. The Commission has taken care to ensure that the revenue requirement of BSP-TEED is based on reasonable and prudent expenditure required to serve the consumers efficiently and effectively.

9. After carrying out final True-up, the Commission approves the Revenue Gap of Rs. 5,667.88 Lakh for FY 2013-14, Rs. 521.19 Lakh for FY 2014-15, and Rs. 865.10 Lakh for FY 2015-16. The Commission accepts the proposal of BSP-TEED and has not considered the recovery of these Revenue Gaps through retail supply tariff for the subsequent years. The Commission notes that these Revenue Gaps are to be funded by the Bhilai Steel Plant and shall not be claimed by BSP-TEED in future years.

10. The standalone deficit for BSP-TEED for FY 2017-18 has been approved as Rs. 651.81 Lakh. BSP-TEED has proposed partial recovery of ARR for FY 2017-18. This partial recovery of ARR will lead to Revenue Gap, which will need to be considered in subsequent years. Moreover, the approved tariff would be applicable only for three (3) months of FY 2017-18. If the ACoS -ABR gap is considered to be recovered in three (3) months of FY 2017-18, there would be tariff shock to the consumers. Hence, the

Commission is of view that under recovery of ARR for FY 2017-18 shall be considered after final True-up for FY 2017-18.

11. Hence, the Commission has approved the tariff increase of 7.71% towards the recovery of approved ARR for FY 2017-18.

12. The tariff for most of the consumer categories has been marginally increased in order to recover the approved revenue gap. The Commission has computed the cross-subsidy with respect to the ACoS, and attempted to ensure that the cross-subsidies are within the limits of ±20% of the ACoS, as laid down in the Tariff Policy as well as several Judgments of Hon'ble APTEL.

13. The Order will be applicable from January 1, 2018 and will remain in force till March 31, 2018 or till the issue of next Tariff Order, whichever is later. The Commission directs BSP-TEED to take appropriate steps to implement the Tariff Order.

(ARUN KUMAR SHARMA) **MEMBER**	**(NARAYAN SINGH)** **CHAIRMAN**

TABLE OF CONTENTS

1 Introduction.....14

1.1 Background.....14

1.2 The Electricity Act, 2003, Tariff Policy and Regulations.....14

1.3 Procedural History.....15

1.4 Organisation of the Order.....17

2 Objections Received, BSP-TEED's Response and Commission's Ruling.....19

2.1 Unmetered connections to Public Buildings.....19

2.2 Curbing Power theft in unauthorized colonies.....19

2.3 Electricity supply to public markets through generators.....20

2.4 Unmetered connections/overdrawal in National and International Stadiums.....20

2.5 Disconnection of Unauthorized Electricity connections.....21

3 True-up for FY 2013-14 to FY 2015-16.....22

3.1 Segregated Accounts for BSP-TEED.....22

3.2 Energy Sales.....25

3.3 Distribution Loss and Energy Balance.....26

3.4 Power Purchase Cost.....28

3.5 O&M Expenses.....30

3.6 Depreciation.....32

3.7 Interest on Loan Capital.....33

3.8 Interest on Consumer Security Deposit.....34

3.9 Interest on Working Capital.....35

3.10 Provision for Bad and Doubtful Debts 38
3.11 Return on Equity 38
3.12 Non-tariff Income 39
3.13 Revenue from Sale of Electricity 40
3.14 Aggregate Revenue Requirement for FY 2013-14 to FY 2015-16 40
4 Aggregate Revenue Requirement for FY 2016-17 to FY 2020-21 42
4.1 Energy Sales 42
4.2 Distribution Loss and Energy Balance 44
4.3 Power Purchase Cost 46
4.4 O&M Expenses 50
4.5 Capital Expenditure and Capitalisation 55
4.6 Depreciation 57
4.7 Interest on Long-term Loan Capital 59
4.8 Interest on Consumer Security Deposit 61
4.9 Interest on Working Capital 62
4.10 Provisions for Bad and Doubtful Debt 64
4.11 Return on Equity 64
4.12 Non-Tariff Income 66
4.13 Aggregate Revenue Requirement for FY 2016-17 to FY 2020-21 66
5 Determination of Tariff for FY 2017-18 68
5.1 Recovery of past Revenue Gaps 68
5.2 Average Cost of Supply and Proposed Tariff for FY 2017-18 68
5.3 Applicability of Order 73

6 Tariff Schedule for FY 2017-18 74

7 Directives for BSP-TEED 82

8 Annexure 83

List of Tables

Table 1-1 : List of Newspapers where Public Notices were published 17

Table 3-1: Energy Sales submitted by BSP-TEED for FY 2013-14 to FY 2015-16...............25

Table 3-2: Energy Sales for FY 2013-14 to FY 2015-16 as approved by Commission..........26

Table 3-3: Distribution Loss for FY 2013-14 to FY 2015-16 submitted by BSP-TEED........26

Table 3-4: Energy Balance for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED......27

Table 3-5: Energy Balance for FY 2013-14 to FY 2015-16 as approved by the Commission28

Table 3-6: Power Purchase Cost for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED 28

Table 3-7: Power Purchase Cost for FY 2013-14 to FY 2015-16 as approved by Commission 29

Table 3-8: O&M expenses for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)..30

Table 3-9: Net Allowable O&M expenses for FY 2013-14 to FY 2015-16 as approved by Commission (Rs. Lakh) 32

Table 3-10:Depreciation for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)..32

Table 3-11: Depreciation for FY 2013-14 to FY 2015-16 as approved by the Commission (Rs. Lakh)..33

Table 3-12: Interest on Long-term Loan capital for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)..33

Table 3-13: Interest on Long-term Loan capital for FY 2013-14 to FY 2015-16 as approved by the Commission (Rs. Lakh) 34

Table 3-14: Interest on Consumers' Security Deposit FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)..35

Table 3-15: Interest on CSD for FY 2013-14 to FY 2015-16 as approved by Commission (Rs. Lakh)..35

Table 3-16:Interest on Working Capital submitted by BSP-TEED for FY 2013-14 to FY 2015-16 (Rs. Lakh) 37

Table 3-17: Interest on Working Capital for FY 2013-14 to FY 2015-16 as approved by the Commission (Rs. Lakh) 37

Table 3-18: Return on Equity for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)..38

Table 3-19: Return on Equity for FY 2013-14 to FY 2015-16 as approved by Commission (Rs. Lakh)..39

Table 3-20: Non-tariff Income for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)..39

Table 3-21: Revenue from Sale of Electricity for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)..40

Table 3-22: Net ARR and Revenue Gap/(Surplus) for FY 2013-14 to FY 2015-16 as approved by the Commission (Rs. Lakh) 41

Table 4-1: Category-wise Energy Sales for FY 2016-17 to FY 2020-21 as projected by BSP-TEED (MU) 43

Table 4-2: CAGR considered by the Commission for projecting the sales for FY 2017-18 to FY 2020-21 43

Table 4-4-3: Energy Sales for FY 2016-17 to FY 2020-21 as estimated by Commission (MU) 44

Table 4-4: Distribution Loss for the past years as submitted by BSP-TEED..........................44

Table 4-5: Distribution Losses for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED 45

Table 4-6: Energy Balance for the FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (MU) 45

Table 4-7: Distribution losses for FY 2016-17 to FY 2020-21 as estimated by Commission 46

Table 4-8: Energy Balance estimated by the Commission for FY 2016-17 to FY 2020-21 (MU) 46

Table 4-9: RPO Obligation considered by BSP-TEED for Control Period............................47

Table 4-10: Power Purchase Cost for 2016-17 to FY 2020-21 as submitted by BSP-TEED..48

Table 4-11: RPO Targets considered by the Commission..49

Table 4-12: Power Purchase Cost estimated by the Commission for 2016-17 to FY 2020-21 49

Table 4-13: O&M expenses as submitted by BSP-TEED for FY 2016-17 to FY 2020-21 (Rs. Lakh)..50

Table 4-14: Sharing of gains for O&M expenses for FY 2016-17 (Rs. Lakh)........................51

Table 4-15: Computation of Inflation Rate for Projections (%)...52

Table 4-16: O&M expenses for FY 2016-17 to FY 2020-21 estimated by the Commission (Rs. Lakh)..54

Table 4-17: Scheme-wise Capital Expenditure for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)..55

Table 4-18: Capital Expenditure and Capitalisation for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)..55

Table 4-19: Means of Finance for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)..56

Table 4-20: Capitalisation and Means of finance for FY 2016-17 to FY 2020-21 as estimated by the Commission (Rs. Lakh) 57

Table 4-21: Depreciation for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)..57

Table 4-22: Depreciation for FY 2016-17 to FY 2020-21 as estimated by the Commission (Rs. Lakh)..59

Table 4-23: Interest on Long-term loan capital for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)..59

Table 4-24: Interest on Long-term loan capital as estimated by Commission for FY 2016-17 to FY 2020-21 (Rs. Lakh)..61

Table 4-25: Interest on Consumer Security Deposit for FY 2016-17 to FY 2020-21 (Rs. Lakh) as submitted by BSP-TEED..61

Table 4-26: Interest on Consumer Security Deposit for FY 2016-17 to FY 2020-21 as approved by the Commission (Rs. Lakh) 62

Table 4-27: Interest on Working Capital for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh) 63

Table 4-28: Interest on Working Capital for FY 2016-17 to FY 2020-21 as estimated by Commission (Rs. Lakh) 63

Table 4-29: Provision for bad and doubtful debt for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh) 64

Table 4-30: Return on Equity for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh) 64

Table 4-31: Return on Equity for FY 2016-17 to FY 2020-21 as estimated by Commission (Rs. Lakh) 66

Table 4-32: Non-tariff Income for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh) 66

Table 4-33: Non-Tariff Income for FY 2016-17 to FY 2020-21 as estimated by the Commission (Rs. Lakh) 66

Table 4-34: Aggregate Revenue Requirement for Control Period from FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh) 67

Table 4-35: Aggregate Revenue Requirement for Control Period from FY 2016-17 to FY 2020-21 as estimated by the Commission (Rs. Lakh) 67

Table 5-1: Revenue Gap for FY 2013-14 to FY 2016-17 as submitted by BSP-TEED (Rs. Lakh) 68

Table 5-2: Average Cost of Supply as submitted by BSP-TEED (Rs. Lakh) 68

Table 5-3: Average Cost of Supply for FY 2017-18 as submitted by BSP-TEED 69

Table 5-4: Proposed Tariff for FY 2017-18 as submitted by BSP-TEED 69

Table 5-5: ACoS-ABR Gap as computed by the Commission for FY 2017-18 70

Table 5-6: Approved Average Cost of Supply for FY 2017-18 (Rs Lakh) 70

Table 5-7: Approved Tariff for FY 2017-18 72

Table 5-8: Approved Cross-subsidy for FY 2017-18 72

Table 8-1: List of Persons who submitted written submission/comments on Petition No.9/2017(T) 83

LIST OF ABBREVIATIONS

Abbreviation	Description
A&G	Administrative & General
ABR	Average Billing Rate
ACoS	Average Cost of Supply
ARR	Aggregate Revenue Requirement
CPP	Captive Power Plant
CSD	Consumers' Security Deposit
CSS	Cross Subsidy Surcharge
CSEB	Chhattisgarh State Electricity Board
CSERC	Chhattisgarh State Electricity Regulatory Commission
CSPDCL	Chhattisgarh
EA, 2003	Electricity Act, 2003
FY	Financial Year
GFA	Gross Fixed Asset
HT	High Tension
HVDS	High Voltage Distribution System
kWh	Kilo-watt Hour
LT	Low Tension
MAT	Minimum Alternate Tax
MoU	Memorandum of Understanding
MU	Million Units
MW	Mega-Watt
MYT	Multi Year Tariff
O&M	Operation & Maintenance
PPA	Power Purchase Agreement
R&M	Repair & Maintenance
RoE	Return on Equity
RPO	Renewable Purchase Obligation
SAIL	Steel Authority of India Limited
SBI	State Bank of India
SCADA	Supervisory Control and Data Acquisition
TVS	Technical validation Session
Y-o-Y	Year on Year

1 INTRODUCTION

1.1 Background

Bhilai Steel Plant (BSP), a Unit of the Steel Authority of India (SAIL) is a Government of India Enterprise under Section 617 of the Companies Act, 1956. The Town Electrical Engineering Department of BSP (herein after referred as "BSP-TEED" or "the Petitioner") is a division of BSP, responsible for electricity distribution and related services in the township area.

Prior to the formation of the State of Chhattisgarh, the Government of Madhya Pradesh had issued permission to Bhilai Steel Plant for distribution of electricity in its township under the provision of Section 28(1) of the erstwhile Indian Electricity Act, 1910, vide letter No. 3116/F-16/3/13/92 dated June 27, 1992**.**

In February 2005, SAIL-BSP submitted an Application before the Chhattisgarh State Electricity Regulatory Commission (CSERC or Commission) under Section 14 of the Electricity Act, 2003 (herein after referred as "the EA, 2003" or "the Act") for the grant of a new Distribution Licence. The application was considered by the Commission, and a Distribution Licence was granted to SAIL-BSP vide No. 02/Licence/01/022005/1395, dated December 20, 2005, to distribute electricity in the designated area of township of BSP, except for HUDCO area.

BSP-TEED submitted the present Petition for Truing up for FY 2013-14, FY 2014-15 and FY 2015-16 in accordance with the relevant provisions of the CSERC (Terms and Conditions for determination of Tariff according to Multi-Year Tariff principles and methodology and procedure for determination of expected revenue from Tariff and Charges) Regulations, 2012 (herein after referred as " CSERC MYT Regulations, 2012") and Approval of Aggregate Revenue Requirement (ARR) for the Multi-Year Tariff (MYT) Control Period from FY 2016-17 to FY 2020-21 and determination of tariff for FY 2017-18 in accordance with the relevant provisions of the CSERC (Terms and conditions for determination of tariff according to Multi Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2015 (herein after referred as "CSERC MYT Regulations, 2015") and CSERC (Conduct of Business) Regulations 2009.

1.2 The Electricity Act, 2003, Tariff Policy and Regulations

Section 61 of the Electricity Act, 2003 (herein after referred as "the EA, 2003" or "the Act") stipulates the guiding principles for determination of tariff by the Commission and mandates that the tariff should progressively reflect the cost of supply of electricity, reduce cross subsidy, safeguard consumers' interest and recover the cost of electricity in a reasonable manner. This

Section also stipulates that the Commission while framing the Tariff Regulations shall be guided by the principles and methodologies specified by the Central Electricity Regulatory Commission for determination of the tariff applicable to Generating Companies and Transmission Licensees.

Section 62 of the EA, 2003 stipulates that the Commission shall determine the tariff for:

- Supply of electricity by a Generating Company to a Distribution Licensee;
- Transmission of electricity;
- Wheeling of electricity; and
- Retail sale of electricity.

The Tariff Policy notified by the Government of India in January 2006, as well as the amended Tariff Policy notified in January 2016, provides the framework to balance the conflicting objectives of attracting investments to ensure availability of quality power and protecting the interest of consumers by ensuring that the electricity tariffs are affordable.

In exercise of powers conferred under Section 61 of the Act and all other powers enabling it on this behalf, the Commission notified the CSERC MYT Regulations, 2015 applicable for the Control Period from FY 2016-17 to FY 2020-21. Subsequently, the Commission notified the first amendment to the CSERC MYT Regulations in 2017.

1.3 Procedural History

The Commission notified the CSERC MYT Regulations, 2012 for the Control Period from FY 2013-14 to FY 2015-16. Based on the above Regulations, the Commission issued the MYT Order dated May 7, 2014 for BSP-TEED for the Control Period from FY 2013-14 to FY 2015-16.

According to Regulation 10.2 of CSERC MYT Regulations, 2012, BSP-TEED had to file an Application each year during the Control Period for Truing up of the previous year(s) and determination of Tariff for the ensuing year. As per these Regulations, the Distribution Licensee shall submit the information in such form as may be prescribed by the Commission, together with the Audited Accounts, extracts of books of the accounts and any such other details as the Commission may require to assess the reasons for and extent of any variations in financial performance from the approved forecast of Aggregate Revenue Requirement and expected revenue from Tariff and charges.

BSP-TEED did not submit the segregated audited accounts for the distribution business while filing the Truing up for FY 2009-10 to FY 2012-13 and Tariff Proposal for FY 2015-16. Under the provisions of the CSERC (License) Regulations, 2004, the Licensee is required to keep the accounting records in respect of each such business, as if it were carried on by separate Companies so that the revenues, costs, assets, liabilities, reserves, and provisions of, or reasonably attributable to are separately identifiable in the books of the Licensee, from those of other business in which the Licensee may be engaged.

The Commission vide Order dated February 24, 2016, disposed of the Petition and decided not to increase the tariff for BSP-TEED, in the absence of segregated accounts.

Similarly, as per Regulation 5.2 of the CSERC MYT Regulations, 2015, the Licensee shall file the MYT Petition for the Control Period from FY 2016-17 to FY 2020-21 by November 30, 2015. BSP-TEED did not file the MYT Petition on the due date and requested the Commission to extend the date of filing of the said Petition to February 2017. The Commission vide its letter no. 46 extended the date of filing to February 17, 2017.

BSP-TEED submitted the present MYT Petition on February 21, 2017, which was admitted by the Commission on April 24, 2017. In the present Petition, the Petitioner has prayed as under:

> *"a) To invoke the power conferred on it under Section 62 of EA 2003, and to admit the Petition seeking approval of BSP-TEED's:*
>
> > *1) True-up for the period from FY 2013-14 to FY 2015-16*
> >
> > *2) ARR for the MYT Control period from FY 2016-17 to FY 2020-21*
> >
> > *3) True-up for FY 2016-17*
> >
> > *4) Tariff Proposal for FY 2017-18*
>
> *b) To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.*
>
> *c) To condone any error/omission and to give opportunity to rectify the same.*
>
> *d) The filing is being done based on the best available information. The Hon'ble Commission may permit the Petitioner to make further submissions, addition and alteration to the Petition as may be necessary."*

In order to have better clarity on the data submitted by the Petitioners and to remove inconsistency in the data, Technical Validation Sessions (TVS) were held on June 20, 2017. During the TVS, additional information required for processing of the Petition was sought from the Petitioner. The Petitioner submitted the additional information sought in the TVS and filed the revised Petition on July 24, 2017.

BSP-TEED published the Notice in newspapers detailed as under, inviting suggestions and objections from the stakeholders on its MYT Petition within 21 days from the date of issuance of such notice.

Table 1-1 : List of Newspapers where Public Notices were published

Sr. No.	Name of the Newspaper	Language	Publication Date
1	Hitavada	English	30.08.2017
2	Dainik Bhaskar	Hindi	30.08.2017
3.	Nai Duniya	Hindi	30.08.2017

The copies of BSP-TEED's MYT Petition and its summary were made available, for inspection/purchase, to the public at the office of the Commission and BSP-TEED. The copy of Public Notice and Executive Summary of the MYT Petition were also uploaded on the website of the Commission (www.cserc.gov.in) in downloadable format. The Public Notice specified that the suggestions and objections can be submitted either in Hindi or English.

In order to ensure the transparency and public participation during the regulatory proceedings as envisaged under the law, the Commission sought to provide adequate opportunity to all the concerned stakeholders. Hearing was organised in the Commission's Office at Raipur on October 27, 2017 for providing adequate opportunity to all the stakeholders to express their opinion in the matter. Various suggestions and objections raised on the Petition, oral as well written, during the Hearing along with the Petitioner's responses and the Commission's Rulings have been summarised in Section 2 of this Order. The Objections and suggestions from stakeholders were received on the petition filed by BSP-TEED. The list of persons who filed the written/oral submission is annexed as **Annexure.**

The Commission found several discrepancies and shortcomings in the information submitted by BSP-TEED and directed to furnish the additional information vide its letter dated October 31, 2017. BSP-TEED submitted point-wise reply to the data gaps identified by the Commission on November 10, 2017.

1.4 Organisation of the Order

This Order includes the following Chapters:

Chapter 1: Introduction (present Chapter) - provides a brief background of the regulatory process undertaken by the Commission.

Chapter 2: Objections Received, BSP-TEED's Response and Commission's Ruling - summarises the written and oral suggestions and objections raised. These are followed by the responses of the Petitioner and the Rulings of the Commission.

Chapter 3: True-up for FY 2013-14 to FY 2015-16 -deals with Final True-up for FY 2013-14 to FY 2015-16 as per MYT Regulations, 2012.

Chapter 4: Aggregate Revenue Requirement (ARR) for FY 2016-17 to FY 2020-21-deals with approval of Aggregate Revenue Requirement for MYT Control Period from FY 2016-17 to FY 2020-21 in accordance with MYT Regulations, 2015.

Chapter 5: Determination of Tariff for FY 2017-18 – sets out the Commission's Tariff Philosophy and the category-wise tariffs applicable for FY 2017-18.

Chapter 6: Tariff Schedule for FY 2017-18 – sets out the category-wise tariff and its applicability for FY 2017-18.

Chapter 7: Directives - discusses the directives issued to the Petitioner.

2 OBJECTIONS RECEIVED, BSP-TEED'S RESPONSE AND COMMISSION'S RULING

BSP-TEED has filed its MYT Petition for True-up for FY 2013-14 to FY 2015-16, determination of ARR for the Control Period from FY 2016-17 to FY 2020-21 and the retail supply tariff for FY 2017-18. This section gives the issue-wise summary of the suggestions and/or objections of the different stakeholders, replies given by BSP-TEED, and Commission's views on the same.

2.1 Unmetered connections to Public Buildings

The objector submitted that it is consistently objecting to the unmetered electricity supply to the Public Buildings in the Petitioner's licence area for the last 7 years. In the absence of electric meters in Public Buildings such as City Service Centre, Ispat Bhavan, BSP-Hostel, BSP-Hospital and similar other buildings, the power theft has become a common phenomenon. The burden of this power theft is levied on common consumers. The objector therefore, objected to any tariff increase as proposed by the Petitioner.

Petitioner's Reply

BSP-TEED submitted that it has already installed electricity meters for all the Public Buildings and the bills are collected from these institutions as per the meter reading.

Commission's View

BSP-TEED has confirmed that it has installed meters for all the Public Buildings and that the electricity bills are prepared asper the meter reading. Further, the actual Distribution Loss achieved by BSP-TEED over the period from FY 2013-14 to FY 2015-16, is lower than the target Distribution Loss approved by the Commission in the MYT Order. For the MYT Control Period, the Commission has approved the trajectory for reduction of Distribution Losses. As the consumers' tariffs are based on the ARR approved, which is dependent on the approved Distribution Loss levels, the burden on the common consumers is minimised to the extent possible.

2.2 Curbing Power theft in unauthorized colonies

The objector submitted that only miniscule efforts are being made by the BSP-TEED management to curb the power theft in the Camp Area, Khursipaar, and Labour colonies. The objector therefore, objected to any increase in tariff as proposed by the Petitioner.

Petitioner's Reply

BSP-TEED clarified that in places such as Camp area and Khursipaar, it is trying to curb power theft by using Aerial Bunched Cables (ABC). BSP-TEED further explained that these unauthorized colonies are developed on the vacant land of the Bhilai Steel Plant and since the development of such colonies are politically influenced, it is trying to curb power theft in these areas in co-operation with the administration.

Commission's View

The actual Distribution Loss achieved by BSP-TEED over the period from FY 2013-14 to FY 2015-16, is lower than the target Distribution Loss approved by the Commission in the MYT Order. For the MYT Control Period, the Commission has approved the trajectory for reduction of Distribution Losses. As the consumers' tariffs are based on the ARR approved, which is dependent on the approved Distribution Loss levels, the burden on the common consumers is minimised to the extent possible.

2.3 Electricity supply to public markets through generators

The objector submitted that electricity is supplied through generators in the market area without the permission of the concerned department, which is illegal and hence, needs to be stopped.

Petitioner's Reply

BSP-TEED clarified that the weekly markets are temporary in nature and hence, ownership to the vending areas is not clear and not provided to the department. Therefore, the regular metered electricity supply to such market place is not possible. In order to meet this temporary electricity demand, generators are used to sell the electricity after the concerned person receives prior approval from the Electrical Inspector.

Commission's View

The Commission is of the view that this issue is not within the scope of the present ARR and Tariff Petition filed by BSP-TEED.

2.4 Unmetered connections/overdrawal in National and International Stadiums

The objector submitted that the electricity is either supplied without any metered connection or is drawn more than what is scheduled for National and International sports organised during the night.

Petitioner's Reply

BSP-TEED clarified that the electricity supply to National and International sports is as per the demand.

Commission's View

The Commission directs BSP-TEED to ensure that supply to stadiums where National and International sports are played is metered and drawn within limits.

2.5 Disconnection of Unauthorized Electricity connections

The objector suggested that BSP-TEED should disconnect electricity supply to households /institutions in the township area against whom complaints of unauthorized connections have been registered. BSP-TEED should disconnect such supply and collect the electricity bills with penalty, to bridge the losses and increase the revenue collection. Hence, there would not be any need to increase the electricity Tariff.

Petitioner's Reply

BSP-TEED explained that unauthorized connections are disconnected from time to time with the help of different departments. However, unauthorized connections are defined differently as per the situation, e.g. retention tenure is over, allotment period ends, etc. In such situations, the concerned department collects other applicable charges from these connections. However, in case of lack of information regarding the unauthorized connections, the collection gets difficult due to different reasons. Therefore, with the help of concerned department, the process to ostracise such connections is initiated.

Commission's View

The Commission is of the view that this issue is not within the scope of the present ARR and Tariff Petition filed by BSP-TEED. It is also clarified that the Tariffs are determined on the basis of expenses and revenue considered on accrual basis rather than cash collection, and hence, even if the actual revenue collection is lower than the revenue billed, the Tariff is not adversely affected.

3 TRUE-UP FOR FY 2013-14 TO FY 2015-16

The Commission vide Order dated May 7, 2014 approved the ARR for the Control Period from FY 2013-14 to FY 2015-16. BSP-TEED has submitted the Petition for approval of True-up for the Control Period from FY 2013-14 to FY 2015-16 in accordance with the provisions of the CSERC MYT Regulations, 2012 and based on the segregated audited accounts for BSP-TEED.

Accordingly, in this Section, the Commission has analysed all the elements of actual expenditure and revenue for BSP-TEED for the Control Period from FY 2013-14 to FY 2015-16 and scrutinized the deviations from MYT Order. It has accordingly undertaken the final true-up of expenses and revenue after prudence check under CSERC MYT Regulations, 2012.

3.1 Segregated Accounts for BSP-TEED

BSP-TEED submitted the segregated Annual accounts for FY 2013-14 to FY 2015-16 duly certified by the Auditor.

The Petitioner submitted that the Commission in Order dated 24 February, 2016 on Tariff Petition for FY 2015-16 did not increase the Tariff since BSP-TEED could not submit the segregated audited accounts. The Petitioner further submitted that the above decision of the Commission was based on the Hon'ble APTEL Judgment in Appeal No. 89 of 2012. BSP-TEED submitted the legal opinion on this issue on 22 June, 2017 to the Commission.

Commission's View

The Hon'ble APTEL in its Judgment dated March 7, 2014 in Appeal No. 89 of 2012 has held as under:

> *"58. In the absence of the segregated accounts of the Distribution Licensee,* ***the State Commission could not undertake prudence check in determining the ARR and retail tariff of the Jindal Steel.*** *The prudence check is an essential part of the process of tariff determination.*
>
> *59. It is settled position of law that* ***any expenditure incurred by the Utility cannot be accepted by a Regulator on the face of and passed on to the consumers.*** *The State Commission is required to assess the claims made by the Jindal Steel only after satisfying itself by the prudence check claims should have been allowed.*
>
> *60. It is settled law as laid down by this Tribunal as well as by the Hon'ble Supreme Court that* ***the Regulatory Commission is required to take into consideration the efficient working of a utility as also the interest of the consumers while determining the tariff. While complying with the same, the State Commission being a Regulator plays a role of internal auditor and it is***

not bound by the expenditure reflected in the accounts of the said Distribution Company.

… … …

62. In view of the above settled position, the State Commission ought not to have entertained the claims of the Jindal Steel in the absence of segregated accounts maintained for its distribution license exclusively since in those cases, ***the State Commission could not have carried out prudence check on the expenses claimed by it thereby causing prejudice to the consumers such as the Appellant. The State Commission is directed not to entertain the Petition of Jindal Steel for enhancement of tariff in the event of failure to submit the segregated accounts as per the directions of the State Commission in future****." (****emphasis added)***

Further, the Hon'ble APTEL in the Judgment dated July 1, 2014 in Appeal No. 213 and 214 of 2013 in the matter of Jindal Steel & Power Ltd. vs CSERC held as under:

"10.3 … … … the State Commission, on examination of the accounts submitted by the Appellant-JSPL during processing of the FY 2012-13 Tariff Petition, again noted that accounts prepared for the distribution business on behalf of the Appellant were barely extractions from the audited accounts of the parent company namely, JSPL. Not only these so-called audited accounts submitted by the Appellant-JSPL did not comply with the CSERC (License) Regulations, 2004 and ***there was no opinion from the Auditor with respect to whether the accounts prepared give true and fair view of the JSPL - licensed distribution business****, then we are left with no alternative but to accept the reasonings or findings recorded by the State Commission in the impugned order.*

10.4 We, further observe that the State Commission while passing the impugned order, dated 12.7.2013 in Petition No. 55/2013, recorded sufficient reasons for rejecting the segregated accounts. Those accounts were merely extraction of the audited accounts of parent company, JSPL and accounts were based on assumptions. Book keeping was not done separately for the regulated business. ***Further, the accounts did not reflect the actual expenditure with respect to JSPL's distribution business and the Appellant-JSPL submitted the accounts without fulfilling the requirement as prescribed in the CSERC (License) Regulations, 2004, and there was no auditor's opinion as to whether the accounts prepared gives a true and fair view of JSPL – licensed distribution business.***

… … …

10.6 … … … Even though, some of the expenses of the various business of the Appellant's company may be common and have to be apportioned to distribution business, ***it should be possible for the Auditors to draw up separate accounts certifying the expenses apportioned to electricity business as true and fair view of the JSPL's distribution business****. We, therefore, give liberty to the Appellant to prepare separate accounts for their distribution business as sought by the State*

Commission duly certified by the statutory auditors and the State Commission shall consider the same in the final true-up of the accounts. ***The auditors will also certify the common expenses apportioned to the distribution business as true and fair view of the JSPL's distribution business****." **(emphasis added)***

After analysing the Judgments of the Hon'ble APTEL dated March 7, 2014 in Appeal No. 89 of 2012, APTEL Judgment dated July 1, 2014 in Appeal No. 213 and 214 of 2013, legal opinion submitted by BSP-TEED, and audited segregated annual accounts submitted by the Petitioner for FY 2013-14 to FY 2015-16, the Commission observes as under:

(a) The Hon'ble APTEL Judgment stipulated that the Commission would require to take into consideration the efficiency of the Utility and has to undertake the prudence check on expenses claimed at time of allowing expenses and determination of tariff.

(b) In case of Distribution Licensee engaged in Licensed Business and other Businesses, the Commission could not have arrived out prudence check of the expenses claimed by the licensee in absence of segregated accounts. The books of the accounts for Distribution Business and other Business are to be maintained separately or in the alternative, the same has to be identified and audited separately.

(c) The basic premise of the Hon'ble APTEL in its Judgment dated July 1, 2014 is that the accounts did not reflect the actual expenditure with respect to distribution business and there was no auditor's opinion as to whether the accounts prepared gives a true and fair view of the licensed Distribution Business.

(d) In the Auditor's Report of audited accounts submitted by BSP-TEED, the Auditor has opined that:

> *"… … ..*
>
> *3. Annual accounts pertaining to electricity distribution business have been extracted from the main audited books of SAIL BHILAI STEEL PLANT for financial year…. No separate books of accounts are being maintained for its electricity distribution business by Bhilai Steel Plant.* ***We certify that statement has been derived from SAP code linked to BSP-TEED department in SAP of BSP and this accounting statement gives true and fair view of licensed electricity distribution business. The financial statement i.e., Balance Sheet and Profit and Loss account of electricity distribution business has been prepared on the basis of such accounting policies and assumptions as annexed to those financial statements.***
>
> *4. Since no separate company has been formed for electricity distribution business and the entire operation of electricity distribution business is being taken care by SAIL BHILAI STEEL PLANT observations on Companies audit report order 2003 has not been commented upon and we have limited our observation to the extent of*

true & fair view of Balance Sheet and Profit & loss Accounts prepared on the basis as mentioned above.

5. The directives given by the Chhattisgarh state electricity regulatory commission has not been complied in totality. However, in our opinion and to the best of our information and according to the explanations given to us, ***the said accounts give a true and fair view in conformity with the according principles generally accepted in India****." (****emphasis added****)*

From the above, it is observed that the Auditor has given an opinion in the Audited Accounts that the said accounts reflects the true and fair view of licensed electricity Distribution Business. This meets the requirement laid down under the Hon'ble APTEL's Judgment.

In view of the above, the Commission is of the view that the segregated Audited Accounts provide by BSP-TEED reflects the true and fair view of its electricity Distribution Business and the Commission has accepted the said Accounts for the purpose of undertaking the true-up for the respective years.

3.2 Energy Sales

The Petitioner submitted the actual energy sales for FY 2013-14 to FY 2015-16 as shown in the following Table:

Table 3-1: Energy Sales submitted by BSP-TEED for FY 2013-14 to FY 2015-16

Category	FY 2013-14		FY 2014-15		FY 2015-16	
	MYT Order	Actuals	MYT Order	Actuals	MYT Order	Actuals
LT-1: Domestic	85.57	107.46	87.54	118.50	89.55	112.37
LT-2: Non-Domestic	18.89	24.15	20.18	24.11	21.56	25.84
LT-3: Industry	0.71	0.50	0.83	0.54	0.96	0.52
LT-4: Public Utilities	16.77	8.11	17.71	8.12	18.70	8.14
LT-5: Temporary Supply	-	-	-	0.02	-	0.04
Total LT	**121.94**	**140.23**	**126.26**	**151.29**	**130.77**	**146.91**
HT-1: Residential	2.94	0.40	3.41	0.49	3.96	0.29
HT-2: Non-Residential and General Purpose	5.08	7.35	5.38	9.27	5.70	8.82
HT-3: Public Utilities	25.86	16.37	25.97	15.44	26.08	14.71
Total HT	**33.89**	**24.13**	**34.77**	**25.21**	**35.74**	**23.82**
Total Sales	**155.83**	**164.36**	**161.03**	**176.51**	**166.51**	**170.72**

Commission's View

As regards the actual sales submitted by the Petitioner, the Commission sought the details of actual number of consumers, total number of electronic and electro-mechanical meters, number of defective meters, etc., for the period from FY 2013-14 to FY 2015-16. It is observed that out of total meters, around 8-9% meters are still electro-mechanical meters. The rest of the operational meters are electronic meters.

For the purpose of the True-up, the Commission approves the actual energy sales for FY 2013-14 to FY 2015-16 as submitted by the Petitioner, as shown in the following Table:

Table 3-2: Energy Sales for FY 2013-14 to FY 2015-16 as approved by Commission

Category	FY 2013-14		FY 2014-15		FY 2015-16	
	True-up Petition	Approved after True-up	True-up Petition	Approved after True-up	True-up Petition	Approved after True-up
LT-Sales	140.23	140.23	151.29	151.30	146.91	146.91
HT-Sales	24.13	24.13	25.21	25.21	23.82	23.82
Total	**164.36**	**164.36**	**176.51**	**176.51**	**170.72**	**170.72**

3.3 Distribution Loss and Energy Balance

The Petitioner submitted the actual Distribution Loss for FY 2013-14 to FY 2015-16, as shown in the following Table:

Table 3-3: Distribution Loss for FY 2013-14 to FY 2015-16 submitted by BSP-TEED

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Approved Distribution Loss (%)	18.00%	17.00%	16.00%
Actual Distribution Loss (%)	17.68%	11.63%	15.54%

The Petitioner submitted that it has brought down distribution losses from 33.07% in FY 2009-10 to 15.54% in FY 2015-16, which was possible due to the following initiatives undertaken:

(a) Gradual replacement of overhead open wires with AB Cables (ABC) in strategically identified areas having high Distribution Losses.

(b) Implementation of High Voltage Distribution System (HVDS) in identified theft prone areas.

(c) A special drive for metering and replacement of defective meters on a large scale was undertaken and installation of 10,000 single-phase electronic energy meters was accomplished in order to have mechanism for appropriate billing in place.

The Petitioner further added that approx. 8000 meters were replaced with electronic energy meters during FY 2014-15 and few colonies were brought into the ambit of single point metering. This led to lowering the distribution loss. Subsequently, due to public submission, the same has been reverted back.

The Petitioner submitted the Energy Balance for FY 2013-14 to FY 2015-16 based on the actual sales and actual Distribution Loss as shown in the following Table:

Table 3-4: Energy Balance for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MYT Order	True-up Claim	MYT Order	True-up Claim	MYT Order	True-up Claim
Energy Sales (MU)	155.83	164.36	161.03	176.51	166.52	170.72
Distribution Losses (%)	18.00%	17.68%	17.00%	11.63%	16.00%	15.54%
Distribution Losses (MU)	34.21	35.29	32.98	23.23	31.72	31.40
Energy Requirement (MU)	190.04	199.64	194.01	199.73	198.24	202.13

Commission's View

The Commission notes that the actual Distribution Losses submitted by the Petitioner for FY 2013-14 to FY 2015-16 are lower than the target Distribution Losses approved by the Commission in the MYT Order.

Further, it is observed that Distribution Losses in FY 2014-15 reduced steeply to 11.63% from 17.68% in FY 2013-14, and increased to 15.54% in FY 2015-16. The Commission sought clarification from the Petitioner regarding this oscillation of actual Distribution Losses. In this regard, the Petitioner submitted that the Distribution Losses came down because of single point metering of major consumer colonies like HSCL, BSNL, SBI, etc., and installation of ABC in some of the theft prone areas. This was taken up because the majority of meters were not working in HSCL colony. Subsequently, the management of HSCL passed the average bill amount to all their employees/houses. However, later, it was decided that HSCL will install meters in their colony for individual metered billing and the management of HSCL will be liable for payment of bill (Gross energy of the area – sum of energy billed of total houses as per meter). This led to increase in Distribution Losses in FY 2015-16.

The Commission is of the view that the increase in overall distribution losses from FY 2014-15 to FY 2015-16 cannot be attributed only to the change from single-point metering arrangement to individual metering in HSCL colony. There might be other reasons for the increase in the Distribution Losses in the area. However, the Petitioner has not submitted any break up of increase in losses in HSCL colony and other areas. Hence, the reasons for increase in Distribution Losses cannot be ascertained at this stage.

The Petitioner is directed to analyse the reasons for increase in Distribution Losses from the level of 11.63% in FY 2014-15 to 15.54% in FY 2015-16 and submit the same to the Commission in the next Tariff Petition.

Since, the actual Distribution Losses achieved during FY 2013-14 to FY 2015-16 are lower than the Distribution Losses approved in the MYT Order, the Commission has accepted the actual Distribution Losses for the purpose of true-up for respective years.

The Commission has computed the actual Distribution Losses based on the actual energy sales and actual quantum of power purchased for FY 2013-14 to FY 2015-16, as shown in the following Table:

Table 3-5: Energy Balance for FY 2013-14 to FY 2015-16 as approved by the Commission

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	True-up Petition	Approved after True-up	True-up Petition	Approved after True-up	True-up Petition	Approved after True-up
Energy Sales (MU)	164.36	164.36	176.51	176.51	170.72	170.72
Distribution Losses (%)	17.68%	17.70%	11.63%	11.63%	15.54%	15.54%
Distribution Losses (MU)	35.29	35.29	23.23	23.23	31.40	31.40
Energy Requirement (MU)	199.64	199.72	199.73	199.73	202.13	202.13

3.4 Power Purchase Cost

The Petitioner submitted that the power was purchased from NSPCL PP-3, PP-2 and PP-1 for the period from FY 2013-14 to FY 2015-16. The actual power purchase quantum and cost is shown in the following Table:

Table 3-6: Power Purchase Cost for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MYT Order	True-up Claim	MYT Order	True-up Claim	MYT Order	True-up Claim
Power purchase cost (Rs. Lakh)	7232.58	9163.22	7349.06	7203.45	7474.29	7624.97
Power Purchase Quantum (MU)	190.04	199.72	191.70	199.73	193.60	202.13
Avg. Power Purchase Cost (Rs. /kWh)	3.81	4.59	3.83	3.61	3.86	3.77

Commission's View

The Petitioner has submitted the source-wise break up of power purchase quantum from NSPCL PP1, PP2 and PP3 and Solar in the Formats.

In the MYT Order, the Commission had directed the Petitioner to purchase at least 25% of quantum from open market in order to reduce the power purchase cost for the consumers. In this regard, the Petitioner submitted that there is no dedicated corridor with adequate metering arrangement for purchase of power from outside source other than NSPCL. Since, the project requires huge investment, it could not be undertaken in past years. Hence, no power was purchased from open market in past years.

The average power purchase cost was much higher in FY 2013-14 compared to average power purchase cost in FY 2014-15 and FY 2015-16. The average power purchase cost in FY 2013-14 was Rs. 4.59 per unit, which has reduced to Rs. 3.61 per unit in FY 2014-15 and again increased slightly to Rs. 3.77 per unit in FY 2015-16. In this regard, the Petitioner submitted that the power to the extent of Renewable Purchase Obligation (RPO) received from NSPCL PP1 (co-generation) is transferred to BSP-TEED at zero cost in view of the Commission's Order dated May 13, 2016 in Petition No. 7 of 2013. Hence, the actual average power purchase cost has been reduced in FY 2014-15 and FY 2015-16 compared to the actual cost in FY 2013-14.

The Commission has verified the actual power purchase quantum and cost from the audited annual accounts. After scrutiny of the material placed on record including the audited annual accounts and the actual source-wise power purchase cost, the approved power purchase cost for FY 2013-14 to FY 2015-16 after true-up is shown in the following Table:

Table 3-7: Power Purchase Cost for FY 2013-14 to FY 2015-16 as approved by Commission

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	True-up Claim	Approved after True-up	True-up Claim	Approved after True-up	True-up Claim	Approved after True-up
Power purchase cost (Rs. Lakh)	9163.22	9163.22	7203.05	7203.49	7624.97	7623.53
Power Purchase Quantum (MU)	199.72	199.72	199.73	199.73	202.13	202.13
Avg. Power Purchase Cost (Rs. /kWh)	4.59	4.59	3.61	3.61	3.77	3.77

3.5 O&M Expenses

The Petitioner submitted that it has considered the actual O&M expenses based on audited accounts. The actual O&M expenses for FY 2013-14 to FY 2015-16 as submitted by the Petitioner is shown in the following Table:

Table 3-8: O&M expenses for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MYT Order	True-up Claim	MYT Order	True-up Claim	MYT Order	True-up Claim
Employee Expenses		1,493.66		1,365.33		1,366.23
A&G Expenses		119.93		106.86		75.43
R&M Expenses		134.86		217.58		240.48
Total O&M Expenses	**637.06**	**1,748.44**	**695.74**	**1,689.77**	**759.83**	**1,682.14**

The Petitioner submitted that the actual O&M expenses are significantly higher than the O&M Expenses approved in the MYT Order on account of the following reasons:

(a) Increase in welfare expenses
(b) Payment of Rs. 1.25 Crore made to CSPDCL in FY 2015-16 regarding RPO for FY 2011-12
(c) Increase in security charges

Commission's View

Regulation 57.4 of the CSERC MYT Regulations, 2012 specifies as under:

"57.4 Operation and maintenance expenses
57.4.1 Operation and Maintenance (O&M) expenses for shall include:
I. Employee costs;
II. Administrative and General expenses
III. Repairs and Maintenance
… … …
(c)At the time of true up, the O&M cost shall be considered after taking into account the actual inflation instead of projected inflation for that period.
Provided further that impact of pay revision (including arrears), if any, shall be allowed on actual during the true-up as per audited /unaudited accounts, subject to prudence check and any other factor considered appropriate by the Commission."

The Commission notes that actual O&M expenses for FY 2013-14 to FY 2015-16 are significantly higher than the approved O&M expenses in MYT Order. The Commission in

MYT Order has computed the O&M expenses for FY 2013-14 to FY 2015-16 after escalating the base year O&M expenses (i.e., of FY 2012-13) after considering the average inflation rate for three years preceding the base year.

Since, the actual inflation rate is available now, the normative O&M expenses approved in MYT Order has been revised considering the inflation factor of 8.25% for FY 2013-14, 4.57% for FY 2014-15 and 2.39% for FY 2015-16 in accordance with CSERC MYT Regulations, 2012. Further, the escalation factor has to be applied on the O&M expenses for FY 2012-13 approved after true-up. In absence of approved trued up value for FY 2012-13, the normative O&M Expenses for FY 2012-13 as approved in MYT Order have been considered.

Accordingly, the revised normative O&M Expenses for FY 2013-14 to FY 2015-16 have been computed as Rs. 631.46 Lakh for FY 2013-14, Rs. 660.32 Lakh for FY 2014-15 and Rs. 676.10 Lakh for FY 2015-16.

The O&M Expenses are a controllable factor as per CSERC MYT Regulations, 2012. Regulation 13 of CSERC MYT Regulations, 2012 specifies as under:

> *"**13. MECHANISM FOR SHARING OF GAINS OR LOSSES ON ACCOUNT OF CONTROLLABLE FACTORS***
>
> *The mechanism for sharing of aggregate net gain / loss on account of better/ under achievement in reference to the target set in tariff order for efficiency linked controllable items shall be passed on to the beneficiary / consumer(s) and the other one-half (or 50%) amount of gain/ loss shall be retained by the generating company or the licensee, as the case may be, over such period as may be stipulated in the Order of the Commission"*

In view of the above, the sharing of gains or losses has been considered for allowing the O&M Expenses after true-up.

Further, the actual O&M expenses has been scrutinised with the audited accounts. The O&M expenses as per audited accounts has been considered for sharing of gains and losses. As the O&M expenses are a controllable factor, the sharing of loss in O&M expenses has been carried out in accordance with CSERC MYT Regulations, 2012, as shown in the Table below:

Table 3-9: Net Allowable O&M expenses for FY 2013-14 to FY 2015-16 as approved by Commission (Rs. Lakh)

Years	Normative O&M	Actual O&M	Efficiency Gain/(Loss)	Entitlement of Gain/(Loss)		Net Allowable O&M expense
				BSP-TEED	Consumers	
FY 2013-14	631.46	1,748.44	(1,116.98)	(558.49)	(558.49)	**1,189.95**
FY 2014-15	660.32	1,690.66	(1,030.34)	(515.17)	(515.17)	**1,175.49**
FY 2015-16	676.10	1,682.14	(1,006.04)	(503.02)	(503.02)	**1,179.12**

The Commission approves the O&M expenses for FY 2013-14 to FY 2015-16 as shown in the above Table after True-up.

3.6 Depreciation

The Petitioner has considered the closing GFA for FY 2012-13 as submitted in the Petition for truing up for FY 2012-13, as the opening GFA for FY 2013-14. The addition of GFA from FY 2013-14 to FY 2015-16 has been considered based on actual values. The Petitioner has calculated depreciation for FY 2013-14 to FY 2015-16 as per the scheduled depreciation rates specified in the CSERC MYT Regulations 2012. The depreciation for FY 2013-14 to FY 2015-16 as claimed by the Petitioner is shown in the following Table:

Table 3-10:Depreciation for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MYT Order	True-up Claim	MYT Order	True-up Claim	MYT Order	True-up Claim
Opening GFA	1,370.00	1,370.98	1400.00	1,402.37	1695.00	1,404.70
Addition of GFA during the year	30.00	31.39	77.30	2.33	111.57	32.70
Closing GFA	1400.00	1,402.37	1477.30	1,404.70	1588.87	1,437.40
Depreciation	**51.18**	**63.34**	**53.22**	**64.12**	**56.81**	**64.94**

Commission's View

For computation of depreciation, the Commission has considered the Opening GFA for FY 2013-14 as per audited accounts. Further, the addition of GFA, i.e., capitalisation during the year, has been considered as per the audited accounts for the respective years. The scheduled rate of depreciation has been considered in accordance with CSERC MYT Regulations, 2012.

The depreciation has been computed after excluding depreciation on assets funded through consumer contribution, which was not considered by the Petitioner.

The depreciation approved by the Commission for FY 2013-14 to FY 2015-16 after true-up is shown in the following Table:

Table 3-11: Depreciation for FY 2013-14 to FY 2015-16 as approved by the Commission (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	True-up Claim	Approved after True-up	True-up Claim	Approved after True-up	True-up Claim	Approved after True-up
Opening GFA	1,370.98	1,370.98	1,402.37	1,402.33	1,404.70	1,404.70
Addition of GFA during the Year	31.39	31.39	2.33	2.33	32.70	32.70
Closing GFA	1,402.37	1,402.37	1,404.70	1,404.66	1,437.40	1,437.40
Depreciation	**63.34**	**61.52**	**64.12**	**62.30**	**64.94**	**63.11**

3.7 Interest on Loan Capital

The Petitioner submitted that the Opening normative loan balance for FY 2012-13 has been considered equivalent to closing normative loan balance for FY 2012-13 as submitted in the Petition for True-up for FY 2012-13. The normative addition to loan during the year has been considered as 70% of the amount of capitalisation during the year, considering the fact that funding of the assets capitalised has been made from internal accruals.

Further, the Petitioner submitted that since there is no actual loan, interest on normative debt has been calculated at 11% for FY 2013-14 to FY 2015-16 in accordance with the Commission's MYT Order dated May 7, 2014. The interest on loan capital for FY 2013-14 to FY 2015-16 is shown in the following Table:

Table 3-12: Interest on Long-term Loan capital for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
		MYT Order	True-up Claim	MYT Order	True-up Claim	MYT Order	True-up Claim
1	Opening Balance of normative loan	219.67	294.80	189.50	253.43	190.39	190.94
2	Addition of loan during the year	21.00	21.97	54.11	1.63	78.10	22.89
3	Repayment of loan during the year	51.18	63.34	53.22	64.12	56.81	64.94
4	Closing Balance of normative loan	189.50	253.43	190.39	190.94	211.67	148.89
5	Average balance of normative loan	204.59	274.12	189.94	222.19	201.03	169.92
6	Rate of Interest (%)	11%	11%	11%	11%	11%	11%
7	**Interest on Loan Capital**	**22.50**	**30.15**	**20.89**	**24.44**	**22.11**	**18.69**

Commission's View

The Petitioner has considered the opening normative loan for FY 2012-13 as submitted in the true-up Petition for FY 2012-13. The Commission has not undertaken the True-up for FY 2012-13 in absence of submission of segregated accounts by the Petitioner. Hence, no closing normative loan value was approved by the Commission for FY 2012-13 after true-up. In view of the above, it would be appropriate to consider normative loan as approved by the Commission in MYT Order. Accordingly, the Commission has considered the opening loan balance for FY 2013-14 as approved in the MYT Order. The addition of normative loan has been considered at 70% of actual capitalisation during the year. The allowable depreciation for the year has been considered as the normative repayment for the year. Interest on the loan capital considered by the Commission after True-up for FY 2013-14 to FY 2015-16 is shown in the following Table:

Table 3-13: Interest on Long-term Loan capital for FY 2013-14 to FY 2015-16 as approved by the Commission (Rs. Lakh)

Sr. No.	Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
		True-up Claim	Approved after True-up	True-up Claim	Approved after True-up	True-up Claim	Approved after True-up
1	Opening Balance of normative loan	294.80	219.67	253.43	180.13	190.94	119.46
2	Addition of loan during the year	21.97	21.97	1.63	1.63	22.89	22.89
3	Repayment of loan during the year	63.34	61.52	64.12	62.30	64.94	63.11
4	Closing Balance of normative loan	253.43	180.13	190.94	119.46	148.89	79.24
5	Average balance of normative loan	274.12	199.90	222.19	149.79	169.92	99.35
6	Rate of Interest (%)	11%	11%	11%	11%	11%	11%
7	**Interest on Loan Capital**	**30.15**	**21.99**	**24.44**	**16.48**	**18.69**	**10.93**

3.8 Interest on Consumer Security Deposit

Petitioner has considered actual consumer security deposits (CSD). Rate of interest on CSD has been considered at 8% as approved by the Commission in the MYT Order. Interest on CSD has been computed on average balance during the year. Interest on CSD for FY 2013-14 to FY 2015-16 is shown in the following Table:

Table 3-14: Interest on Consumers' Security Deposit FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	MYT Order	True-up Claim	MYT Order	True-up Claim	MYT Order	True-up Claim
Security Deposit	288.81	257.00	303.25	345.02	318.41	363.30
Rate of Interest	8%	8%	8%	8%	8%	8%
Interest on Consumer Security Deposit	**22.55**	**20.56**	**23.68**	**24.08**	**24.87**	**28.33**

Commission's View

The Commission sought the details of actual interest on CSD paid by the Petitioner vis-à-vis interest on CSD reported in the Audited Accounts. The only difference is found for the interest on CSD for FY 2015-16, wherein the Petitioner submitted the actual amount paid as Rs. 28.49 lakh, however, audited accounts reported the amount as Rs. 28.33 lakh.

For the purpose of True-up for FY 2013-14 to FY 2015-16, the Commission has considered the actual interest on CSD as per audited annual accounts for FY 2013-14 to FY 2015-16. Accordingly, the interest on CSD approved by the Commission after true-up for FY 2013-14 to FY 2015-16 is shown in the following Table:

Table 3-15: Interest on CSD for FY 2013-14 to FY 2015-16 as approved by Commission (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	True-up Claim	Approved after True-up	True-up Claim	Approved after True-up	True-up Claim	Approved after True-up
Interest on Consumer Security Deposit	20.56	20.56	24.08	24.08	28.33	28.33

3.9 Interest on Working Capital

Regulation 25.1 of the CSERC MYT Regulations, 2012 specifies as under:

> *"25.1 … … …*
>
> *(d) In case of Distribution Wheeling Business:*
>
> *i. One-twelfth (1/12) of the amount of Operation and Maintenance expenses for such financial year; plus*
>
> *ii. Maintenance spares @ 15% of operation and maintenance expenses specified*

in Regulation 57.4; plus

iii. One (1) months equivalent of the expected revenue from charges for use of Distribution Wires at the prevailing tariff;

(e) In case of Retail Supply of Electricity

i. Operation and maintenance expenses for one month; plus

ii. Maintenance spares @ 15% of operation and maintenance expenses specified in Regulation 66.6; plus

iii. Receivables equivalent to one months of the expected revenue from sale of electricity at the prevailing tariffs;

iv. Less: Amount held as security deposits (cash) from consumers."

Further, Regulations 25.3 and 25.4 of CSERC MYT Regulations, 2012 specifies as under:

> *"25.3 Interest on working capital shall be allowed at a rate equal to the Base rate of State Bank of India as on 30th September of the financial year in which the Petition is filed plus 350 basis points. At the time of true up, the interest rate shall be adjusted as per the actual rate prevailing on 1st April of the financial year for which truing up exercise has been undertaken.*
>
> *25.4 Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee or the distribution licensee has not taken loan for working capital from any outside agency."*

Accordingly, the rate of interest of 13.20%, 13.50% and 13.50% has been considered by the Petitioner for FY 2013-14, FY 2014-15 and FY 2015-16, respectively. The normative Interest on Working Capital for true-up for the period from FY 2013-14 to FY 2015-16 is given in the Tables below:

Table 3-16:Interest on Working Capital submitted by BSP-TEED for FY 2013-14 to FY 2015-16 (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Approved in the MYT Order	True-up claim	Approved in the MYT Order	True-up claim	Approved in the MYT Order	True-up claim
1/12th of total O&M expenses	53.09	145.70	57.98	140.81	63.32	140.18
Maintenance spares	95.56	262.27	104.36	253.47	113.97	252.32
Receivables for one month	574.54	400.39	748.73	661.13	774.43	668.12
Less: Amount held as CSD	288.81	257.00	303.25	345.02	318.41	363.30
Total Working Capital	434.38	551.36	609.35	710.39	634.95	697.32
Rate of Interest	13.20%	13.20%	13.20%	13.50%	13.20%	13.50%
Normative Interest on Working Capital	**57.34**	**72.78**	**80.43**	**95.90**	**83.81**	**94.14**

Commission's View

The Commission has computed the Interest on Working Capital (IoWC) on normative basis in accordance with the CSERC MYT Regulations, 2012. The rate of interest has been considered as 13.20% for FY 2013-14 and 13.50% for FY 2014-15 and FY 2015-16 in accordance with CSERC MYT Regulations, 2012. The normative IoWC approved by the Commission after true-up for FY 2013-14 to FY 2015-16 is shown in the following Table:

Table 3-17: Interest on Working Capital for FY 2013-14 to FY 2015-16 as approved by the Commission (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	True-up claim	Approved in this order	True-up claim	Approved in this order	True-up claim	Approved in this order
1/12th of total O&M expenses	145.70	99.16	140.81	97.96	140.18	98.26
Maintenance spares	262.27	94.72	253.47	99.05	252.32	101.41
Receivables for one month	400.39	400.39	661.13	661.13	668.12	668.12
Less: Amount held as CSD	257.00	257.00	345.02	345.02	363.30	363.30
Total Working Capital	551.36	337.27	710.39	513.11	697.32	504.50
Rate of Interest	13.20%	13.20%	13.50%	13.50%	13.50%	13.50%
Normative Interest on Working Capital	**72.78**	**44.52**	**95.90**	**69.27**	**94.14**	**68.11**

3.10 Provision for Bad and Doubtful Debts

Petitioner submitted that no bad debts have been written off for FY 2013-14 to FY 2015-16. Therefore, it had not considered the same for true-up for FY 2013-14 and FY 2015-16.

Commission's View

As submitted by BSP-TEED, the Commission has not considered any provision for bad and doubtful debts for the purpose of true-up for FY 2013-14 to FY 2015-16.

3.11 Return on Equity

Petitioner submitted that the opening balance of equity for FY 2013-14 has been considered equivalent to closing balance of equity for FY 2012-13 as submitted in True-up Petition for FY 2012-13. The addition to equity during the year has been considered as 30% of the amount of capitalisation during the year considering the fact that funding of capitalised assets has been made in debt: equity ratio of 70:30. The Return on Equity (RoE) submitted by the Petitioner for FY 2013-14 to FY 2015-16 is shown in the following Table:

Table 3-18: Return on Equity for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Approved in MYT Order	True-Up Claim	Approved in MYT Order	True-Up Claim	Approved in MYT Order	True-Up Claim
Opening Balance	114.06	126.34	123.06	135.76	146.25	136.46
Normative Addition	9.00	9.42	23.19	0.7	33.47	9.81
Closing Balance	123.06	135.76	146.25	136.46	179.72	146.27
Average Balance	118.56	131.05	134.66	136.11	162.99	141.37
Pre-Tax Rate of Return	16%	16%	16%	16%	16%	16%
Normative RoE	**18.97**	**20.97**	**21.54**	**21.78**	**26.08**	**22.62**

Commission's View

Petitioner has proposed the opening regulatory equity for FY 2012-13 as submitted in true-up Petition for FY 2012-13. The Commission has not undertaken the True-up for FY 2012-13 in the absence of submission of segregated accounts by Petitioner. Hence, no closing regulatory equity was approved by the Commission for FY 2012-13 after true-up. In view of the above, it would be appropriate to consider regulatory equity as approved by the Commission in MYT Order. Accordingly, the Commission has considered the opening regulatory equity for FY 2013-14 as approved in the MYT Order. The addition of equity has been considered at 30% of actual capitalisation during the year. RoE has been computed at the base rate of maximum 16% as per Regulation 22.2 of CSERC MYT Regulations, 2012. RoE approved by the Commission for FY 2013-14 to FY 2015-16 after True-up is shown in the following Table:

Table 3-19: Return on Equity for FY 2013-14 to FY 2015-16 as approved by Commission (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	True-Up Claim	Approved in this order	True-Up Claim	Approved in this order	True-Up Claim	Approved in this order
Opening Balance of Normative Equity	126.34	114.06	135.76	123.48	136.46	124.18
Normative Addition	9.42	9.42	0.70	0.70	9.81	9.81
Closing Balance of normative equity	135.76	123.48	136.46	124.18	146.27	133.99
Average Balance of Normative Equity	131.05	118.77	136.11	123.83	141.37	129.08
Base rate of Return on Equity	16%	16%	16%	16%	16%	16%
Return on Equity	**20.97**	**19.00**	**21.78**	**19.81**	**22.62**	**20.65**

3.12 Non-tariff Income

Petitioner submitted that it has considered Non-tariff income towards social amenities recoveries on the basis of actual values for true-up for FY 2013-14 to FY 2015-16, as shown in the Table below:

Table 3-20: Non-tariff Income for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Approved in MYT Order	True-Up Claim	Approved in MYT Order	True-Up Claim	Approved in MYT Order	True-Up Claim
Non-tariff Income	35.70	48.21	37.49	116.18	39.36	111.25

Commission's View

The actual Non-Tariff Income received for FY 2013-14 to FY 2015-16 has been approved by the Commission based on the audited accounts.

3.13 Revenue from Sale of Electricity

Petitioner submitted the revenue from sale of electricity as the income from distribution business as per the Audited Accounts for FY 2013-14 to FY 2015-16, as shown in the following Table:

Table 3-21: Revenue from Sale of Electricity for FY 2013-14 to FY 2015-16 as submitted by BSP-TEED (Rs. Lakh)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Income from Distribution	4804.66	7933.55	8017.43

Commission's View

The actual revenue from sale of electricity received for FY 2013-14 to FY 2015-16 has been approved by the Commission based on the audited accounts, same as submitted by the Petitioner.

3.14 Aggregate Revenue Requirement for FY 2013-14 to FY 2015-16

Based on the above, Net ARR and revenue gap/(surplus) for FY 2013-14 to FY 2015-16 after true-up has been approved by the Commission as shown in the following Table:

Table 3-22: Net ARR and Revenue Gap/(Surplus) for FY 2013-14 to FY 2015-16 as approved by the Commission (Rs. Lakh)

Sr. No.	Particulars	FY 2013-14			FY 2014-15			FY 2015-16		
		Approved in MYT Tariff Order	True-Up Claim	Approved in this order	Approved in MYT Tariff Order	True-Up Claim	Approved in this order	Approved in MYT Tariff Order	True-Up Claim	Approved in this order
1	Power Purchase Cost	7232.58	9163.22	9163.22	7349.06	7203.05	7203.49	7474.29	7624.97	7623.53
2	Operation & Maintenance Expenses	637.06	1748.44	1189.95	695.74	1689.77	1175.49	759.83	1682.14	1179.12
3	Depreciation	51.18	63.34	61.52	53.22	64.12	62.30	56.81	64.94	63.11
4	Interest on Loan Capital	22.5	30.15	21.99	20.89	24.44	16.48	22.11	18.69	10.93
5	Interest on Working Capital	57.34	72.78	44.52	80.43	95.90	69.27	83.81	94.14	68.11
6	Interest on Consumer Security Deposit	22.55	20.56	20.56	23.68	24.08	24.08	24.87	28.33	28.33
7	Provision for Bad & Doubtful Debt	68.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Return on Equity	18.97	20.97	19.00	21.54	21.78	19.81	26.08	22.62	20.65
9	Less: Non-Tariff Income	35.70	48.21	48.21	37.49	116.18	116.18	39.36	111.25	111.25
10	**Net ARR**	**8075.42**	**11071.25**	**10472.54**	**8297.12**	**9006.97**	**8454.74**	**8501.57**	**9424.58**	**8882.53**
11	Less: Revenue from Sale of Electricity		4804.66	4804.66		7933.55	7933.55		8017.43	8017.43
12	**Revenue Gap/(Surplus)**		**6266.59**	**5667.88**		**1073.42**	**521.19**		**1407.15**	**865.10**

4 AGGREGATE REVENUE REQUIREMENT FOR FY 2016-17 TO FY 2020-21

BSP-TEED submitted the projection of various components of ARR for the Control Period from FY 2016-17 to FY 2020-21 in accordance with the provisions of the CSERC MYT Regulations, 2015.

As regards FY 2016-17, BSP-TEED has sought the final True-up for FY 2016-17 and submitted the audited accounts for the same. However, since, the present Order is the MYT Order for FY 2016-17 to FY 2020-21 and tariff determination for FY 2017-18, the final True-up for FY 2016-17 has not been undertaken in the present Order. The final True-up for FY 2016-17 shall be undertaken along with the next Tariff Petition for FY 2018-19.

The Commission's analysis and approval of various components of ARR for the Control Period from FY 2016-17 to FY 2020-21 is set out in the following Sections:

4.1 Energy Sales

BSP-TEED has considered the actual sales for FY 2011-12 to FY 2016-17 for sales projections. For projecting the category-wise energy sales for the Control Period, BSP-TEED has considered the past growth trends for each consumer category as explained below:

(a) BSP-TEED has adopted the trend analysis method for projecting the sales of Domestic, Non-Domestic, Industrial and other categories. This method assumes that the underlying factors, which drive the demand for electricity are expected to follow the same trend as in the past.

(b) As per this method, Compounded Annual Growth Rates (CAGRs) were calculated by BSP-TEED from the past actual sales for each category, corresponding to different periods of time in the past years for LT and HT, respectively, along with the year on year (YoY) growth.

(c) CAGR has been computed for each consumer category for the past 5-year period from FY 2010-11 to FY 2015-16, the 3-year period FY 2012-13 to FY 2015-16 along with the YoY growth rate.

(d) Subject to the specific characteristics of each consumer category, either a particular CAGR or the YoY growth rates or an appropriate growth rate has been considered as the basis of sales projection for that category.

(e) For sales projections for FY 2016-17, the actual sales for FY 2015-16 for each consumer category, has been considered as the base, i.e., the selected growth rate has been applied over the actual sales for FY 2015-16 for each category; and for projections for future years, the growth rate is applied on the projected sales of previous year;

The energy sales projected by BSP-TEED for FY 2016-17 to FY 2020-21 is shown in the following Table:

Table 4-1: Category-wise Energy Sales for FY 2016-17 to FY 2020-21 as projected by BSP-TEED (MU)

Consumer Categories	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
LT-1: Domestic	113.55	116.96	120.48	124.10	127.83
LT-2: Non-Domestic	25.86	27.67	29.61	31.69	33.91
LT-3: Industry	0.52	0.53	0.54	0.54	0.55
LT-4: Public Utilities	8.14	8.15	8.16	8.17	8.18
LT-5: Temporary Supply	0.04	0.05	0.05	0.05	0.05
Total LT	**148.11**	**153.36**	**158.83**	**164.55**	**170.53**
HT-1: Residential	0.29	0.29	0.29	0.29	0.29
HT-2: Non-Residential and General Purpose	8.82	9.45	10.13	10.85	11.63
HT-3: Public Utilities	14.71	16.01	17.42	18.95	20.62
Total HT	**23.82**	**25.74**	**27.83**	**30.09**	**32.54**
Total Sales	**171.93**	**179.10**	**186.67**	**194.64**	**203.06**

Commission's View

For the projection of the energy sales, the Commission has adopted the trend analysis method, wherein the energy sales are projected based on CAGR of past periods.

Since, the actual energy sales for FY 2016-17 are available, the same has been considered as base energy sales for the projection of energy sales for the remaining years of the Control Period.

The Commission has computed the CAGR for different periods for each consumer category based on the actual sales for the period from FY 2011-12 to FY 2016-17. The Commission, after analysing the historic growth trends in each consumer category, considered the basis for forecasting the sales for that category. The category-wise CAGR considered by the Commission is shown in the Table below:

Table 4-2: CAGR considered by the Commission for projecting the sales for FY 2017-18 to FY 2020-21

Consumer Category	CAGR	Basis of Growth Rates
LT-1: Domestic	2.62%	5-Year CAGR
LT-2: Non-Domestic	4.85%	3-Year CAGR
LT-3: Industry	0.71%	5-Year CAGR
LT-4: Public Utilities	0.33%	3-Year CAGR
LT-5: Temporary Supply	Nil	No growth in sales
HT-1: Residential	Nil	No growth in sales
HT-2: Non-Residential and General Purpose	5.63%	3-Year CAGR
HT-3: Public Utilities	Nil	No growth in sales

On the basis of the above computed CAGRs, the Commission has computed the energy sales for the Control Period after taking into account the actual sales for FY 2016-17 as base year sales. The energy sales estimated by the Commission for the Control Period is shown in the following Table:

Table 4-4-3: Energy Sales for FY 2016-17 to FY 2020-21 as estimated by Commission (MU)

Consumer Categories	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
LT-1: Domestic	111.43	114.34	117.34	120.41	123.56
LT-2: Non-Domestic	27.83	29.18	30.60	32.08	33.63
LT-3: Industry	0.51	0.51	0.51	0.52	0.52
LT-4: Public Utilities	8.19	8.22	8.24	8.27	8.30
LT-5: Temporary Supply	0.04	0.04	0.04	0.04	0.04
Total LT categories	**147.99**	**152.29**	**156.73**	**161.31**	**166.05**
HT-1: Residential	0.20	0.20	0.20	0.20	0.20
HT-2: Non-Residential and General Purpose	8.67	9.15	9.67	10.21	10.79
HT-3: Public Utilities	12.62	12.62	12.62	12.62	12.62
Total HT categories	**21.49**	**21.98**	**22.49**	**23.04**	**23.61**
Grand total	**169.48**	**174.27**	**179.22**	**184.35**	**189.66**

4.2 Distribution Loss and Energy Balance

BSP-TEED submitted the actual Distribution Loss for the past years as shown in the Table below:

Table 4-4: Distribution Loss for the past years as submitted by BSP-TEED

Financial Year	Approved by the Commission	Actual achieved by BSP-TEED
FY 2012-13	20.36%	26.52%
FY 2013-14	18.00%	17.68%
FY 2014-15	17.00%	11.63%
FY 2015-16	16.00%	15.54%

BSP-TEED further submitted that the achievement of Distribution Loss is indicative of its efficient performance. It is making concerted efforts to reduce and control the Distribution Losses. Considering the state of the distribution network, further reduction of Distribution Losses would require significant efforts. The efforts to reduce Losses below these levels would require huge investments and appropriate cost benefit analysis is essential as return in the form of loss reduction. Hence, for the Control Period, BSP-TEED has proposed the Distribution Loss trajectory by reducing 0.50% Distribution Loss every year from the target of 16% approved by the Commission for FY 2015-16. The Distribution Loss projected by BSP-TEED for the Control Period is shown in the following Table:

Table 4-5: Distribution Losses for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Distribution Loss	15.50%	15.00%	14.50%	14.00%	13.50%

BSP-TEED has computed the actual Distribution Loss for FY 2016-17 by considering the actual energy sales and actual power purchase quantum. With the projected sales and projected Distribution Loss, BSP-TEED has projected the Energy Balance for the Control Period as shown in the following Table:

Table 4-6: Energy Balance for the FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (MU)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	LT Sales	148.11	153.36	158.83	164.55	170.53
2	HT Sales	23.82	25.74	27.83	30.09	32.54
3	**Total Energy Sales**	**171.93**	**179.10**	**186.67**	**194.64**	**203.06**
4	Losses for the network 11/33 kV and below	13.64%	15.00%	14.50%	14.00%	13.50%
5	Losses for the network 11/33 kV and below	27.15	31.61	31.66	31.69	31.69
6	**Total Energy Requirement**	**199.08**	**210.71**	**218.32**	**226.33**	**234.76**

Commission's View

Since, the actual energy sales and power purchase quantum for FY 2016-17 are available, the Commission has computed the actual Distribution Loss for FY 2016-17, which works out to 14.82%. In the past period, there is upward and downward movement of actual Distribution Losses. After taking into account the rationale submitted by BSP-TEED regarding lowering of Distribution Loss to the level of 11.63% in FY 2014-15 and again increase in losses in FY 2015-16 to the level of 15.54%, the actual Distribution Losses for FY 2014-15 is considered as an outlier and has been ignored while formulating the trajectory for the Control Period.

Further, as regards the ensuring 100%-meter installation, BSP-TEED stated that it has initiated the procurement of 8000 Nos. of energy meters, and the proposal is presented for Management approval. It is anticipated that the installation of these meters would be done in the Control Period. Hence, there would be ample scope for further reduction of Distribution Losses for BSP-TEED. At the same time, at the lower levels of Distribution Loss, the annual reduction in Distribution Losses would be lower. Hence, the Commission has considered annual Loss reduction trajectory of 0.5%.

After taking into account the actual Distribution Losses of 14.82% for FY 2016-17, the Commission has approved the distribution loss target of 14.50% for FY 2017-18 and 0.50%

reduction in each subsequent year. Accordingly, the Distribution Losses estimated by the Commission for the Control Period from FY 2016-17 to FY 2020-21 is shown in the following Table:

Table 4-7: Distribution losses for FY 2016-17 to FY 2020-21 as estimated by Commission

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Distribution Loss	14.82%	14.50%	14.00%	13.50%	13.00%

The actual Energy Balance for FY 2016-17 has been considered by the Commission. After taking into account the projected Energy Sales and approved Distribution Losses, the Energy Balance estimated by the Commission for FY 2016-17 to FY 2020-21 is given in the Table below:

Table 4-8: Energy Balance estimated by the Commission for FY 2016-17 to FY 2020-21 (MU)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	LT Sales	147.99	152.29	156.73	161.31	166.05
2	HT Sales	21.49	21.98	22.49	23.04	23.61
3	**Total Energy Sales**	**169.48**	**174.27**	**179.22**	**184.35**	**189.66**
4	Overall Distribution Losses (%)	14.82%	14.50%	14.00%	13.50%	13.00%
5	Overall Distribution Losses	29.50	29.55	29.18	28.77	28.34
6	**Total Energy Requirement**	**198.98**	**203.82**	**208.40**	**213.12**	**218.00**

4.3 Power Purchase Cost

BSP-TEED submitted that in order to meet the power requirement for supply to its consumers in the Bhilai Township, it has entered into a long-term Power Supply Arrangement (PSA) between BSP-TEED and BSP-PSD (BSP, Power Supply Department), Amendment No.1, for supplying power from NSPCL PP 3, PP2 and BSP-PP1. Further, based on the existing PSA, in case of total outage of NSPCL PP 3, BSP-TEED shall get power from NSPCL PP 2. However, going forward, the BSP-TEED has estimated that in case of total outage of NSPCL PP 3, BSP-TEED will also procure power from PP 1 and has estimated purchase from the same during the Control Period based on the existing terms and conditions. Accordingly, BSP-TEED has planned its Power Purchase procurement for the Control Period from NSPCL PP-3, NSPCL PP-2 and PP-1.

Further, paragraph 3.30 of the Commission's MYT Order dated May 7, 2014 stipulates as under:

"3.30 The Commission directs the Petitioner to buy at least 25% of power from

open market. The Commission also directs the Petitioner to increase this quantum gradually. The Commission provisionally approved the average power purchase cost of Rs 4.325 per unit for 75% of power purchase in second Control Period and 25% of power purchase is approved at the rate of Rs 3.2 per unit. Hence, the Commission approves average power purchase cost of Rs 4.04 per unit provisionally for the power purchase through conventional sources. The Commission would review the approved quantum of 25% power at open market prices at the time true up and next tariff proceeding."

In view of the above, BSP-TEED has proposed to procure at least 25% of quantum from the open market. For this purpose, BSP-TEED has considered the rate of purchase of Rs. 3.00/kWh as approved by the Commission for CSPDCL for the MYT Control Period. BSP-TEED has considered the actual power purchase expenses for FY 2016-17 based on audited accounts.

Further, BSP-TEED submitted that it is obligated to meet the Solar Renewable Purchase Obligation (RPO) and Non-Solar Renewable Purchase Obligation as per the approved percentages of total consumption. For the purpose of estimating the Solar and non-Solar RPO, BSP-TEED has considered the percentages of RPO as approved by the Commission for CSPDCL in its MYT Order dated April 30, 2016, as shown in the following Table:

Table 4-9: RPO Obligation considered by BSP-TEED for Control Period

Category	FY 2017-18 to FY 2020-21
Solar RPO	1.00%
Non-Solar RPO	6.25%
Total	7.25%

Accordingly, for the purpose of meeting the Non-Solar and Solar RPO, the Petitioner has considered consumption from PP-1 and PP-2 without any financial implications. The Petitioner has estimated the quantum of Solar generation from its own plant in the township at the same level as realised in FY 2015-16 without any financial implications.

For projecting the power purchase cost from NSPCL-PP3, BSP-TEED has considered the actual average power purchase rate for FY 2016-17, i.e., Rs. 3.82/kWh. Considering the consumption plan to meet RPO from the co-generation power plant, i.e., PP2 and PP1, BSP-TEED has not considered any additional cost to meet RPO.

The summary of Power Purchase quantum and cost projected by BSP-TEED for FY 2016-17 to FY 2020-21 is shown in the following Table:

Table 4-10: Power Purchase Cost for 2016-17 to FY 2020-21 as submitted by BSP-TEED

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
	Power Purchase Quantum (MU)					
1	NSPCL - PP3	181.46	148.08	153.44	159.07	164.99
2	Short Term source	-	49.36	51.15	53.02	55.00
3	Solar RPO	0.10	0.10	0.10	0.10	0.10
4	Non-Solar RPO (PP1 & PP2)	17.52	13.17	13.65	14.15	14.67
5	**Total**	**199.08**	**210.71**	**218.32**	**226.33**	**234.76**
	Power Purchase Cost (Rs. Lakh)					
6	NSPCL-PP3	6,937.52	5,661.41	5,866.08	6,081.34	6,307.83
7	Short Term source	-	1,480.82	1,534.35	1,590.66	1,649.90
8	Solar RPO	-	-	-	-	-
9	Non-Solar RPO (PP1 & PP2)	-	-	-	-	-
10	**Total**	**6,937.52**	**7,142.23**	**7,400.43**	**7,671.99**	**7,957.73**

Commission's View

For FY 2016-17, the Commission has taken into account the actual power purchase quantum and cost as per the audited accounts.

The Commission has considered the power purchase from NSPCL PP1, PP2 and PP3 as per the existing PSA for meeting the projected energy requirement. For projecting the cost of power purchase, the Commission has considered the actual power purchase rate in FY 2016-17. No escalation in power purchase rate has been considered for FY 2017-18 to FY 2020-21.

Further, BSP-TEED has proposed to buy at least 25% of power from the open market in order to reduce its power purchase cost and burden on consumers. In view of the proposal of BSP-TEED, the Commission has also considered 25% of power from short-term purchase at the power purchase rate of Rs. 3.09/kWh for the period from FY 2017-18 to FY 2020-21.

In this regard, the Commission directs BSP-TEED to explore all other alternatives to reduce its power purchase cost; including the purchase from open market at rate not exceeding the applicable rate of NSPCL for that respective period.

As regards the RPO, the Commission has considered the RPO Targets specified in the CSERC (Renewable Purchase Obligation and REC framework Implementation) Regulations, 2016 as shown in the following Table:

Table 4-11: RPO Targets considered by the Commission

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Solar (%)	1.50%	2.00%	3.50%	5.00%	6.50%
Non-Solar (%)	6.50%	7.00%	7.50%	8.00%	8.50%
Total RPO (%)	8.00%	9.00%	11.00%	13.00%	15.00%

As regards the Non-Solar RPO, the power produced from the co-generation units of NSPCL is used for internal purposes and this system is in existence for a long-time. The fuel used in the generation is a by-product, i.e., waste heat recovery and currently no cost is being determined for the same. The benefits of the zero-cost power produced from this source is passed on the consumers and hence, the Commission has not considered any cost implication for the quantum of power produced from NSPCL PP1 and NSPCL PP2, as submitted by BSP-TEED. The Commission has projected the power from these sources for meeting the Non-Solar RPO.

As regards the Solar RPO, the Commission has considered the Solar generation of 0.10 MU from its own plant in township as submitted by BSP-TEED. Further, it is observed that the present tied up Solar generation capacity would not meet the RPO targets specified by the Commission for the Control Period. Hence, in the present Order, the Commission has considered the Solar Renewable Energy Certificates (RECs) at the floor price of Re. 1.00/kWh for the balance quantum required to meet the Solar RPO.

The Commission directs BSP-TEED to fulfil the Solar RPO requirement either by actual purchase of Solar power or purchase of equivalent RECs.

In view of the above, the power purchase quantum and cost estimated by the Commission for FY 2016-17 to FY 2020-21 is shown in the following Table:

Table 4-12: Power Purchase Cost estimated by the Commission for 2016-17 to FY 2020-21

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
A	**Quantum of Power Purchase (MU)**					
1	NSPCL -PP3	181.46	142.09	144.50	146.98	149.53
2	Short Term Power	-	47.36	48.17	48.99	49.84
3	NSPCL PP1 & PP2	17.52	14.27	15.63	17.05	18.53
4	Solar	-	0.10	0.10	0.10	0.10
5	Total	198.98	203.82	208.40	213.12	218.00
B	**Power Purchase Cost (Rs. Lakh)**					
1	NSPCL -PP3	6,758.75	5,292.47	5,382.23	5,474.57	5,569.58
2	Short Term Power	-	1,463.56	1,488.38	1,513.92	1,540.19
3	NSPCL -PP1 & PP2	-	-	-	-	-
4	Solar Purchase	-	-	-	-	-

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
5	Solar REC Purchase	-	39.80	71.98	105.60	140.74
6	Total	6,758.75	6,795.84	6,942.58	7,094.09	7,250.52
C	**Avg. Power Purchase Rate (Rs. /kWh)**					
1	NSPCL -PP3	3.72	3.72	3.72	3.72	3.72
2	Short Term Power	-	3.09	3.09	3.09	3.09
3	NSPCL -PP1 & PP2	-	-	-	-	-
4	Total	3.40	3.33	3.33	3.33	3.33

4.4 O&M Expenses

BSP-TEED has projected the O&M Expenses for the Control Period in accordance with the provisions of CSERC MYT Regulations, 2015. For projection purposes, the inflation index has been considered as 9.05% for Employee Expenses and 6.77% for A&G Expenses and R&M Expenses, as approved by the Commission in the Tariff Order dated April 30, 2016 for CSPDCL. The O&M expenses for the Control Period have been projected as shown in the following Table:

Table 4-13: O&M expenses as submitted by BSP-TEED for FY 2016-17 to FY 2020-21 (Rs. Lakh)

Particulars	Base Years	Base Value	Escalated value for FY 15	Normalised value for FY 16 (Avg. of FY 11 to FY 15)	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Employee Expenses	FY 2010-11	1,022.23	1,445.51	1,610.42	1,756.13	1,915.03	2,088.30	2,277.26	2,483.31
	FY 2011-12	1,446.00	1,875.09						
	FY 2012-13	1,461.00	1,737.35						
	FY 2013-14	1,493.66	1,628.80						
	FY 2014-15	1,365.33	1,365.33						
A&G Expenses	FY 2010-11	115.00	149.43	142.86	152.52	162.84	173.86	185.62	198.18
	FY 2011-12	119.00	144.83						
	FY 2012-13	162.40	185.12						
	FY 2013-14	119.93	128.04						
	FY 2014-15	106.86	106.86						
R&M Expenses	FY 2010-11	14.00	18.19	160.24	171.08	182.66	195.01	208.21	222.30
	FY 2011-12	135.00	164.30						
	FY 2012-13	128.00	145.91						
	FY 2013-14	217.58	232.30						
	FY 2014-15	240.48	240.48						
Total O&M Expenses					**2,079.73**	**2,260.53**	**2,457.18**	**2,671.09**	**2,903.79**

Since, BSP-TEED has sought the true-up for FY 2016-17, it has proposed the sharing of gains/losses on account of O&M expenses for FY 2016-17. The actual O&M expenses have been considered as per the audited accounts, which are lower than the normative O&M expenses for FY 2016-17 as computed in the above Table. The Sharing of gains for FY 2016-17 has been computed as shown in the following Table:

Table 4-14: Sharing of gains for O&M expenses for FY 2016-17 (Rs. Lakh)

Particulars	Normative O&M	Actual O&M	Efficiency Gain/(Loss)	Entitlement of Gain/(Loss)	
				BSP-TEED	Consumers
O&M expenses	2,079.73	1,480.57	599.16	299.58	299.58

BSP-TEED further submitted that wage revision for its employees is due. Accordingly, in accordance with provisions of CSERC MYT Regulations, 2015, BSP-TEED requested the Commission to allow the impact of pay revision (including arrears), on actual during the true-up based on the audited accounts.

Commission's View

Regulation 47.5 of the CSERC MYT Regulations, 2015 specifies as under:

*"**Employee Cost***

… …

(c) The employee cost, excluding pension fund contribution and impact of pay revision arrears for the base year i.e. FY 16, shall be derived on the basis of the normalized average of the actual employee expenses excluding pension fund contribution and impact of pay revision arrears available in the accounts for the previous five (5) years immediately preceding the base year FY 16, subject to prudence check by the Commission. Any other expense of nonrecurring nature shall also be excluded while determining normalized average for the previous five (5) years.

(d) The normalization shall be done by applying last five-year average increase in Consumer Price Index (CPI) on year to year basis. The average of normalized net present value for FY 2010-11 to FY 15, shall then be used to project base year value for FY 16. The base year value so arrived, shall be escalated by the above inflation rate to estimate the employee expense (excluding impact of pension fund contribution and pay revision, if any) for each year of the Control Period.

At the time of true up, the employee costs shall be considered after taking into account the actual increase in CPI during the year instead of projected inflation for that period.

Provided further that impact of pay revision (including arrears) and pension fund

contribution shall be allowed on actual during the true-up as per accounts, *subject to prudence check and any other factor considered appropriate by the Commission.*

A&G Expenses and R&M Expenses

(e) The administrative and general expenses and repair and maintenance expenses, for the base year i.e. FY 16, shall be derived on the basis of the normalized average of the actual administrative and general expenses and repair and maintenance expenses, respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 16, subject to prudence check by the Commission. Any expense of non-recurring nature shall be excluded while determining normalized average for the previous five (5) years.

(f) The normalization shall be done by applying last five-year average increase in Wholesale Price Index (WPI) on year to year basis. The average of normalized net present value for FY 2010-11 to FY 15, shall then be used to project base year value for FY 16. The base year value so arrived, shall be escalated by the above inflation rate to estimate the administrative and general expense and repair and maintenance expenses for each year of the Control Period.

At the time of true up, the administrative and general expenses and repair and maintenance expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.

(g) The additional O&M Expenses on account of new lines/ substations commissioned after March 31, 2016 shall be allowed by the Commission subject to prudence check at the time of truing up exercise."

The O&M expenses for the Control Period from FY 2016-17 to FY 2020-21 have been estimated on the basis of methodology specified in the CSERC MYT Regulations, 2015.

The data published by the Reserve Bank of India (RBI) has been relied upon to compute average increase in CPI and WPI over five years from FY 2010-11 to FY 2014-15. The summary of the yearly inflation and the average inflation considered for projecting the O&M expenses is shown in the following Table:

Table 4-15: Computation of Inflation Rate for Projections (%)

Particulars	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	Average of 5 years increase
CPI-IW (%)	10.45%	8.39%	10.44%	9.68%	6.29%	9.05%
WPI-AC (%)	9.56%	8.94%	7.35%	5.98%	2%	6.77%

***Note**: CPI-IW: Consumer Price Index - Industrial Workers*
WPI-AC: Wholesale Price Index - All Commodities

The CSERC MYT Regulations, 2015 requires that the actual expenses incurred and admitted in the True-up Orders for the past five years, i.e., from FY 2010-11 to FY 2014-15 have to be considered. For FY 2010-11 to FY 2012-13, the actual expenses as submitted by BSP-TEED have been considered. The O&M expenses for FY 2013-14 and FY 2014-15 as trued up in this Order have been considered. The net employee expenses have been normalised up to FY 2014-15 by escalating net expenses of each year by average increase in CPI for past five years, i.e., 9.05%. The net A&G and R&M expenses have been normalised up to FY 2014-15 by escalating net expenses of each year by average increase in WPI for past five years, i.e., 6.77%.

Further, since no Final true-up for FY 2016-17 has been undertaken in the present Order, the sharing of gains or losses for FY 2016-17 has not been considered.

Accordingly, the O&M expenses considered by the Commission for each year of the Control Period is shown in the Table below:

Table 4-16: O&M expenses for FY 2016-17 to FY 2020-21 estimated by the Commission (Rs. Lakh)

Particulars	Base Years	Base Value	Escalated value for FY 2014-15	Normalised value for FY 2014-15 (Avg. of FY 11 to FY 15)	Normalised value for FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Employee Expenses	FY 2010-11	1,022.23	1,445.51	1,423.28	1,552.06	1,692.49	1,845.63	2,012.63	2,194.73	2,393.32
	FY 2011-12	1,446.00	1,875.09							
	FY 2012-13	1,461.00	1,737.35							
	FY 2013-14	1,016.55	1,108.53							
	FY 2014-15	949.92	949.92							
A&G Expenses	FY 2010-11	115.00	162.62	134.67	143.78	153.51	163.90	174.99	186.83	199.47
	FY 2011-12	119.00	154.31							
	FY 2012-13	162.40	193.12							
	FY 2013-14	81.62	89.00							
	FY 2014-15	74.29	74.29							
R&M Expenses	FY 2010-11	14.00	19.80	119.69	127.79	136.43	145.66	155.52	166.04	177.28
	FY 2011-12	135.00	175.06							
	FY 2012-13	128.00	152.21							
	FY 2013-14	91.78	100.09							
	FY 2014-15	151.28	151.28							
	Total O&M Expenses					**1,982.44**	**2,155.19**	**2,343.14**	**2,547.61**	**2,770.07**

4.5 Capital Expenditure and Capitalisation

BSP-TEED submitted that the capital expenditure plan for the Control Period from FY 2016-17 to FY 2020-21 is primarily focussed on projects related to energy accounting and reduction in the Distribution Losses. The scheme-wise details of capital expenditure submitted by BSP-TEED are shown in the following Table:

Table 4-17: Scheme-wise Capital Expenditure for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Capital Expenditure Scheme	Tentative completion date	Estimated Cost (Rs. Lakh)
1	Replacement procurement of 600 Nos. LED	31/12/17	48.00
2	Replacement modification of Conductor with Aerial bunch cable	31/03/18	70.00
3	Conversion of 1-Phase distribution lines to 3-phase distribution	31/03/18	80.00
4	Procurement of one no. Hydraulic Platform 9 Metre	31/07/18	25.00
5	Procurement of 8000 Nos single phase energy meters	31/03/18	92.00
6	Replacement procurement of PDBs	31/03/19	82.00
7	Illumination of Road#3 with energy efficient LED lights	31/03/18	66.00
8	Illumination of forest Avenue Road with energy efficient LED lights	31/03/18	85.00
9	Replacement procurement of existing lighting system with energy efficient lights (phased manner)	31/03/19	550.00
10	**Total**		**1098.00**

The capitalisation for FY 2016-17 to FY 2018-19 has been considered based on estimated completion of identified schemes and for future years, capitalisation has been proposed based on average estimated capitalisation for FY 2016-17 to FY 2018-19. The capital expenditure and capitalization projected by BSP-TEED for the Control Period is shown in the following Table:

Table 4-18: Capital Expenditure and Capitalisation for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening CWIP	1,700.58	1,786.28	1,699.95	1,397.61	1,368.75
2	Capital Expenditure	354.67	354.67	354.67	354.67	354.67
3	Capitalisation	268.97	441.00	657.00	326.92	331.51
4	Closing CWIP	1,786.28	1,699.95	1,397.61	1,368.75	1,346.21

As regards the funding of capitalisation, BSP-TEED submitted that the capital expenditure of the licenced operations of the Township has traditionally been funded from internal accruals. Regulation 17 of the CSERC MYT Regulations, 2015 specifies that for the purpose of determination of tariff, the Debt: Equity Ratio of the capital cost of a project shall be considered as 70:30. In case the equity employed is more than 30%, it shall be restricted to 30% for the purpose of tariff determination and the balance amount shall be considered as normative debt.

Accordingly, the funding of the capitalised expenditure projected by BSP-TEED for FY 2016-17 to FY 2020-21 is shown in the following Table:

Table 4-19: Means of Finance for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Normative Equity	80.69	132.30	197.10	98.08	99.45
2	Normative Debt	188.28	308.70	459.90	228.85	232.06
3	Capitalisation	268.97	441.00	657.00	326.92	331.51

Commission's View

The actual capitalisation for FY 2016-17 have been considered based on the audited accounts.

The Commission has analysed the scheme-wise details submitted by BSP-TEED and considered the capitalisation in view of the anticipated date of completion submitted by BSP-TEED. Further, it is noted that BSP-TEED has not proposed any scheme from FY 2019-20 onwards. BSP-TEED submitted that it is in the process of identifying the capital schemes for improvement of distribution network in its area of supply. The schemes submitted are the works identified till date.

BSP-TEED is required to submit the Capital Investment Plan in accordance with CSERC MYT Regulations, 2015. However, BSP-TEED has submitted only limited details towards the schemes planned till FY 2018-19. Hence, at this stage, for the purpose of present MYT Order, the Commission provisionally accepts the submission of BSP-TEED and has considered the capitalisation in accordance with the scheme details submitted by BSP-TEED. **Further, the Commission directs BSP-TEED to submit the revised details of schemes planned during Control Period including physical status of implementation, scope of work, cost benefit analysis, funding arrangement, etc., in the next Tariff Petition.**

In the present Order, the Commission has considered the capitalisation for FY 2019-20 and FY 2020-21 as the average capitalisation achieved in the past five years from FY 2012-13 to FY 2016-17. The funding of capitalisation has been considered normatively based on the debt: equity ratio of 70:30 in accordance with CSERC MYT Regulations, 2015.

The capitalisation and means of finance approved by the Commission for the Control Period from FY 2016-17 to FY 2020-21 is shown in the following Table:

Table 4-20: Capitalisation and Means of finance for FY 2016-17 to FY 2020-21 as estimated by the Commission (Rs. Lakh)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Capitalisation	268.97	441.00	657.00	78.34	78.34
Funding arrangement					
Equity	80.69	132.30	197.10	23.50	23.50
Debt	188.28	308.70	459.90	54.84	54.84
Total Capitalisation	268.97	441.00	657.00	78.34	78.34

4.6 Depreciation

BSP-TEED has computed the depreciation in accordance with Regulation 24 of the CSERC MYT Regulations, 2015. The opening GFA for FY 2016-17 has been considered equal to closing GFA for FY 2015-16, as submitted in the present Petition. The addition of GFA has been considered equivalent to capitalisation proposed during the year. The depreciation projected by BSP-TEED for the Control Period is as shown in the following Table:

Table 4-21: Depreciation for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening GFA	1,437.40	1,706.37	2,147.37	2,804.37	3,187.89
2	Addition of GFA	268.97	441.00	657.00	383.53	377.21
3	Closing GFA	1,706.37	2,147.37	2,804.37	3,187.89	3,565.11
4	**Depreciation**	**72.10**	**88.97**	**115.06**	**139.78**	**157.86**

Commission's View

Regulation 24 of CSERC MYT Regulations, 2015 specifies as under:

"24.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the capital cost shall not include funds from grant or consumer contribution or deposit works received for funding of fixed asset as specified in Regulation 21.

24.2 The salvage value of the asset except for IT equipment's and software used for SLDC business shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that, the salvage value for IT equipment's and Software shall be *considered as NIL and 100% value of the assets shall be considered depreciable.*

24.3 Land other than the land held under lease and the land for reservoir in case of hydro generating station and the land for ash-bund for thermal power stations shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

24.4 Depreciation shall be calculated annually based on Straight Line Method and at rates as specified in Appendix-I to these regulations for the assets of the generating station, transmission system, distribution system and SLDC:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 15 years from date of commercial operation shall be spread over the balance useful life of the assets;

In case of the existing projects, the balance depreciable value as on 01.04.2016 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.03.2016 from the gross depreciable value of the assets.

Provided that in those cases where the capital investment plan has been approved by the Commission and the depreciation rates as provided in these Regulations are insufficient for the repayment of loan, the rate of depreciation shall be decided by the Commission at the time of issuance of tariff order, subject to prudence check.

24.6 Depreciation shall be chargeable from the first year of commercial operation. The depreciation shall be computed on the average asset base during the year:

Provided for the new generating station or unit, the depreciation shall be charged on prorate basis during the year the asset has been declared under commercial operation.

For subsequent years, the depreciation shall be computed on the average asset base during the year"

The Commission has computed the Depreciation for the Control Period in accordance with above said Regulation. The Commission has taken the estimated capitalisation from FY 2016-17 to FY 2020-21 for addition of the assets during the year. The Commission has calculated the depreciation by applying the asset class-wise depreciation rate as specified in the CSERC MYT Regulations, 2015, on the average asset class-wise Gross fixed assets during the year. Further, the Commission has not considered any addition in assets funded by Consumer Contribution. The depreciation on the existing assets funded by Consumer Contribution has also not been considered. The depreciation estimated by the Commission for FY 2016-17 to FY 2020-21 is as shown in the Table below:

Table 4-22: Depreciation for FY 2016-17 to FY 2020-21 as estimated by the Commission (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening GFA	1,437.40	1,706.37	2,147.37	2,804.37	2,882.71
2	Addition of GFA	268.97	441.00	657.00	78.34	78.34
3	Closing GFA	1,706.37	2,147.37	2,804.37	2,882.71	2,961.04
4	**Depreciation**	**70.27**	**87.13**	**113.20**	**130.67**	**134.39**

4.7 Interest on Long-term Loan Capital

BSP-TEED has computed the Interest on loan capital in accordance with the CSERC MYT Regulations, 2015. The normative addition to loan during the year has been considered as 70% of the amount of capitalisation during the year considering that funding of the assets capitalised has been estimated from internal accruals. Since, there is no actual loan, the rate of interest has been considered as 11% in accordance with MYT Order dated May 7, 2014. The Interest on loan capital projected by BSP-TEED for the Control Period is shown in the following Table:

Table 4-23: Interest on Long-term loan capital for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening Net Normative loan for the year	148.89	265.07	484.79	829.63	958.32
2	Addition of normative loan during the year	188.28	308.70	459.90	268.47	264.05
3	Repayment of normative loan during the year	72.10	88.97	115.06	139.78	157.86
4	Closing Net Normative loan	265.07	484.79	829.63	958.32	1,064.51
5	Rate of Interest (%)	11.00%	11.00%	11.00%	11.00%	11.00%
6	**Interest on loan capital**	**22.77**	**41.24**	**72.29**	**98.34**	**111.26**

Commission's View

Regulation 23 of CSERC MYT Regulations, 2015 specifies as under:

> *"23.1. The loans arrived at in the manner indicated in Regulation 17 shall be considered as gross normative loan for calculation of interest on loan.*
>
> *23.2. The normative loan outstanding as on 01.04.2016 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.03.2016 from the gross normative loan.*

23.3. The repayment for the year of the tariff period shall be deemed to be equal to the depreciation allowed for that year.

… …

23.5. The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project;

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

Provided further that if the generating station or the licensee, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the licensee as a whole shall be considered:

Provided further, in case of new generating station or the licensee commencing its operation after the date of effectiveness of these Regulations, and which don't have actual loan portfolio, the rate of interest shall be considered on normative basis and shall be equal to the Base rate of State Bank of India plus 200 basis points as on the date on which the generating station or a unit thereof or the transmission system or the distribution licensee, as the case may be, is declared under commercial operation.

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

23.7. The above interest computation shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, grants or deposit works carried out by transmission licensee or distribution licensee or generating company, as the case may be.

… …

23.11. In case of distribution licensee, the interest paid on security deposit (cash) to the consumers shall be allowed as a part of the Interest and Finance charges under these regulations."

The Commission has computed the Interest on loan capital in accordance with the above said Regulation. The closing balance of net normative loan approved for FY 2015-16 in the present Order has been considered as opening net normative loan for FY 2016-17. The addition of loan has been considered equivalent to debt amount pertaining to estimated capitalisation, as determined earlier in this Section. The normative repayment has been considered equivalent to depreciation approved for respective year. The Commission has considered interest rate of 11% for computation of the interest on loan.

The interest on loan capital as estimated by the Commission for the Control Period is shown in the following Table:

Table 4-24: Interest on Long-term loan capital as estimated by Commission for FY 2016-17 to FY 2020-21 (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening Net Normative loan for the year	79.24	197.25	418.82	765.51	689.68
2	Addition of normative loan during the year	188.28	308.70	459.90	54.84	54.84
3	Repayment of normative loan during the year	70.27	87.13	113.20	130.67	134.39
4	Closing Net Normative loan	197.25	418.82	765.51	689.68	610.13
5	Rate of Interest (%)	11.00%	11.00%	11.00%	11.00%	11.00%
6	**Interest on loan capital**	**15.21**	**33.88**	**65.14**	**80.04**	**71.49**

4.8 Interest on Consumer Security Deposit

BSP-TEED has estimated the increase of 5% in Consumer Security Deposit (CSD) for FY 2015-16. BSP-TEED has projected the interest on CSD by applying the Bank Rate of 7% in accordance with the MYT Order dated April 30, 2016 for CSPDCL, as shown in the following Table:

Table 4-25: Interest on Consumer Security Deposit for FY 2016-17 to FY 2020-21 (Rs. Lakh) as submitted by BSP-TEED

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Consumer Security Deposit	381.46	400.53	420.56	441.59	463.67
2	Rate of Interest (%)	7%	7%	7%	7%	7%
3	**Interest on CSD**	**26.07**	**27.37**	**28.74**	**30.18**	**31.68**

Commission's View

The Commission has considered the actual balance of CSD and actual interest paid on CSD for FY 2016-17. The increase in CSD amount has been considered equal to average increase in actual CSD for past four years, upto FY 2016-17. The Commission has considered the Bank Rate of 7% as applicable for the FY 2016-17 for computation of Interest on CSD from FY 2017-18 onwards. The Interest on CSD estimated by the Commission for the Control Period is shown in the Table below:

Table 4-26: Interest on Consumer Security Deposit for FY 2016-17 to FY 2020-21 as approved by the Commission (Rs. Lakh)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening Balance of CSD	363.30	366.00	388.74	411.47	434.21
Addition of CSD	2.70	22.74	22.74	22.74	22.74
Closing Balance of CSD	366.00	388.74	411.47	434.21	456.95
Interest Rate (%)	7%	7%	7%	7%	7%
Interest on CSD	**25.11**	**26.42**	**28.01**	**29.60**	**31.19**

4.9 Interest on Working Capital

BSP-TEED has computed the Interest on Working Capital (IoWC) in accordance with Regulation 25 of CSERC MYT Regulations 2015, which specifies as under:

> *"(c) In case of Distribution business:*
>
> *i. Operation and maintenance expenses for one (1) month; plus*
> *ii. Maintenance spares @ 40% of repair and maintenance expenses specified in Regulation 66.6; plus*
> *iii. Receivables equivalent to one (1) month of the revenue from sale of electricity at the prevailing tariffs.*
> *iv. Less: Amount, if any, held as security deposits (Cash) from Consumers.*
> *… … …*
>
> *25.4. Interest on working capital shall be allowed at a rate equal to the Base rate of*
>
> *State Bank of India as on 30th September of the financial year in which the Petition is filed plus 350 basis points. At the time of true up, the interest rate shall be adjusted as per the actual rate prevailing on 1st April of the financial year for which truing up exercise has been undertaken.*
>
> *25.5. Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee or the distribution licensee or SLDC has not taken loan for working capital from any outside agency."*

BSP-TEED has considered the rate of interest of 12.80%, equal to SBI Base Rate as on 30 September, 2016 plus 350 basis points. The Interest on Working Capital (IoWC) projected by BSP-TEED for the Control Period is shown in the following Table:

Table 4-27: Interest on Working Capital for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	O&M Expenses for one month	173.31	188.38	204.76	222.59	241.98
2	Maintenance Spares @ 40% of R&M Expenses	68.43	73.06	78.01	83.28	88.92
3	Receivables for one month	699.85	733.98	770.30	808.95	850.12
4	Less: Consumer security deposit	381.46	400.53	420.56	441.59	463.67
5	Working Capital Requirement	560.13	594.89	632.51	673.24	717.35
6	Rate of Interest (%)	12.80%	12.80%	12.80%	12.80%	12.80%
7	**Interest on Working Capital**	**71.70**	**76.15**	**80.96**	**86.17**	**91.82**

Commission's View

The Commission has computed IoWC as per Regulation 25 of CSERC MYT Regulations, 2015. The receivables have been considered equivalent to one month's actual revenue for FY 2016-17 and projected revenue at existing tariff for FY 2017-18 to FY 2020-21. The rate of interest has been considered as 12.80%, as a rate equal to SBI Base Rate as on 30 September, 2016 plus 350 basis points.

IoWC approved by the Commission for the Control Period is shown in the following Table:

Table 4-28: Interest on Working Capital for FY 2016-17 to FY 2020-21 as estimated by Commission (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	O&M Expenses for one month	165.20	179.60	195.26	212.30	230.84
2	Maintenance Spares @ 40% of R&M Expenses	54.57	58.27	62.21	66.42	70.91
3	Receivables for one month	648.40	704.26	723.86	744.23	765.40
4	Less: Consumer security deposit	366.00	388.74	411.47	434.21	456.95
5	Working Capital Requirement	502.18	553.39	569.86	588.73	610.20
6	Rate of Interest (%)	12.80%	12.80%	12.80%	12.80%	12.80%
7	**Interest on Working Capital**	**64.28**	**70.83**	**72.94**	**75.36**	**78.11**

4.10 Provisions for Bad and Doubtful Debt

BSP-TEED has considered the provision for bad and doubtful debt at 1% of revenue of retail supply at prevailing tariff in accordance with Regulation 66.8 of CSERC MYT Regulations, 2015, as shown in the following Table:

Table 4-29: Provision for bad and doubtful debt for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Provision for bad and doubtful debt	83.98	88.08	92.44	97.07	102.01

Commission's View

It is observed that no bad debts have been written off for FY 2013-14 to FY 2016-17. Hence, the Commission does not find any rationale for allowing Provision for bad and doubtful debt for FY 2016-17 to FY 2020-21. The Regulations provides for the limits of allowable Bad debts in a financial year. If there would be any actual bad debts written off for FY 2016-17 to FY 2020-21, the same shall be considered at time of true-up for respective year, subject to prudence check.

4.11 Return on Equity

BSP-TEED submitted that it has computed Return on Equity (RoE) as per Regulation 22 of the CSERC MYT Regulations, 2015.

The opening equity for FY 2016-17 has been considered equivalent to closing equity for FY 2015-16 submitted in the present Petition. The addition of equity has been considered equivalent to equity amount pertaining to capitalisation during the year. The RoE projected by BSP-TEED for the Control Period is shown in the following Table:

Table 4-30: Return on Equity for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening Equity	146.27	226.96	359.26	556.36	671.42
2	Addition during the year	80.69	132.30	197.10	115.06	113.16
3	Closing Equity	226.96	359.26	556.36	671.42	784.58
4	**Return on Equity @ 16%**	**29.86**	**46.90**	**73.25**	**98.22**	**116.48**

Commission's View

Regulation 22 of the CSERC MYT Regulations, 2015 specifies as under:

"22.1. Distribution: Return on Equity shall be computed in rupee terms on the equity base determined in accordance with Regulations 17. Return on equity shall be computed on pre-tax basis at the base rate of maximum 16% to be grossed up as per Regulation 22.3 of these Regulations.

22.3. The rate of return on equity for each year of the Control Period shall be computed by grossing up the base rate with the prevailing MAT rate of the base year:

Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee or distribution licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the Control Period shall be trued up separately for each year of the Control Period.

In case, no tax is payable during the financial year, the tax rate for the purpose of truing up shall be taken as nil.

Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:
Rate of pre-tax return on equity = Base rate / (1-t)
Where, 't' is the applicable tax rate in accordance with regulation 22.3 of these regulations.

Provided that if there is a loss incurred by the generating company or the transmission licensee or distribution licensee or SLDC, as the case may be, in the previous year and based on the prudence check made by the Commission, the Minimum Alternate Tax may not be considered in such a case while determining the return on equity."

The Commission has computed RoE in accordance with the CSERC MYT Regulations, 2015. The closing balance of equity approved for FY 2015-16 in the present Order has been considered as opening equity for FY 2016-17. The addition of equity has been considered equivalent to equity amount pertaining to approved capitalisation, as determined earlier in this Section.

BSP-TEED is a Division of SAIL-BSP and has not paid any Income Tax in past years. Hence, the rate of RoE has not been grossed up with the MAT rate, and the RoE rate of 16% has been considered for the purpose of approving RoE for the Control Period. The RoE estimated by the Commission for the Control Period is shown in the Table below:

Table 4-31: Return on Equity for FY 2016-17 to FY 2020-21 as estimated by Commission (Rs. Lakh)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening Equity	133.99	214.68	346.98	544.08	567.58
Addition during the year	80.69	132.30	197.10	23.50	23.50
Closing Equity	214.68	346.98	544.08	567.58	591.08
Return on Equity @ 16%	**27.89**	**44.93**	**71.28**	**88.93**	**92.69**

4.12 Non-Tariff Income

BSP-TEED has considered the Non-Tariff Income on the basis of average of actual income received in FY 2013-14 to FY 2015-16. Accordingly, Non-Tariff Income projected by BSP-TEED for the Control Period is shown in the following Table:

Table 4-32: Non-tariff Income for FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	**Non-tariff Income**	**91.88**	**91.88**	**91.88**	**91.88**	**91.88**

Commission's View

The Commission has considered the actual Non-Tariff Income for FY 2015-16 for the Control Period except for FY 2016-17. Since, the actual Non-Tariff Income received during FY 2016-17 is available, the same has been considered. Non-Tariff Income estimated by the Commission for the Control Period is shown in the following Table:

Table 4-33: Non-Tariff Income for FY 2016-17 to FY 2020-21 as estimated by the Commission (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	**Non-tariff Income**	**136.72**	**111.25**	**111.25**	**111.25**	**111.25**

4.13 Aggregate Revenue Requirement for FY 2016-17 to FY 2020-21

Based on the discussions in the above paragraphs, BSP-TEED has projected the Aggregate Revenue Requirement for the Control Period as given in the Table below:

Table 4-34: Aggregate Revenue Requirement for Control Period from FY 2016-17 to FY 2020-21 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Power Purchase Cost	6,937.52	7,142.23	7,400.43	7,671.99	7,957.73
2	O&M Expenses	2,079.73	2,260.53	2,457.18	2,671.09	2,903.79
3	Sharing of (gains)/Losses	(299.58)	-	-	-	-
4	Depreciation	72.10	88.97	115.06	139.78	157.86
5	Interest & Finance Charges	22.77	41.24	72.29	98.34	111.26
6	Normative Interest on Working Capital	71.70	76.15	80.96	86.17	91.82
7	Interest on Consumer Security Deposit	26.07	27.37	28.74	30.18	31.68
8	Provision for Bad & Doubtful Debts	83.98	88.08	92.44	97.07	102.01
9	Return on Equity	29.86	46.90	73.25	98.22	116.48
10	Less: Non - Tariff Income	91.88	91.88	91.88	91.88	91.88
11	**Net Aggregate Revenue Requirement**	**8,932.27**	**9,679.58**	**10,228.47**	**10,800.97**	**11,380.76**

Commission's View

Based on the analysis in the previous paragraphs, the Commission has estimated the ARR for the Control Period from FY 2016-17 to FY 2020-21 as summarised in the Table below:

Table 4-35: Aggregate Revenue Requirement for Control Period from FY 2016-17 to FY 2020-21 as estimated by the Commission (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Power Purchase Cost	6,758.75	6,795.84	6,942.58	7,094.09	7,250.52
2	O&M Expenses	1,982.44	2,155.19	2,343.14	2,547.61	2,770.07
3	Depreciation	70.27	87.13	113.20	130.67	134.39
4	Interest & Finance Charges	15.21	33.88	65.14	80.04	71.49
5	Normative Interest on Working Capital	64.28	70.83	72.94	75.36	78.11
6	Interest on Consumer Security Deposit	25.11	26.42	28.01	29.60	31.19
7	Provision for Bad & Doubtful Debts	0.00	0.00	0.00	0.00	0.00
8	Return on Equity	27.89	44.93	71.28	88.93	92.69
9	Less: Non - Tariff Income	136.72	111.25	111.25	111.25	111.25
10	**Net Aggregate Revenue Requirement**	**8,807.22**	**9,102.98**	**9,525.04**	**9,935.04**	**10,317.20**

5 DETERMINATION OF TARIFF FOR FY 2017-18

In this Section, the Commission has set out its tariff philosophy, tariff design and approved the category-wise retail supply tariff for BSP-TEED for FY 2017-18.

5.1 Recovery of past Revenue Gaps

BSP-TEED has proposed the Revenue Gap for FY 2013-14 to FY 2016-17 as shown in the following Table:

Table 5-1: Revenue Gap for FY 2013-14 to FY 2016-17 as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	Amount (Rs. Lakh)
1	Revenue Gap for FY 2013-14	6266.59
2	Revenue Gap for FY 2014-15	1073.42
3	Revenue Gap for FY 2015-16	1407.15
4	Revenue Gap for FY 2016-17	534.10
5	**Total Revenue Gap**	**9281.26**

BSP-TEED has not proposed to recover the Revenue Gap pertaining to FY 2013-14 to FY 2016-17 from its consumers, as the same is proposed to be funded by Bhilai Steel Plant.

Commission's View

After carrying out the final True-up, the Commission has approved the Revenue Gap of Rs. 5,667.88 Lakh for FY 2013-14, Rs. 521.19 Lakh for FY 2014-15 and Rs. 865.10 Lakh for FY 2015-16. The Commission accepts the proposal of BSP-TEED and has not considered such Revenue Gap for recovery through retail supply tariff for the subsequent years. The Commission notes that these Revenue Gaps are to be funded by Bhilai Steel Plant and shall not be claimed by BSP-TEED in future years.

5.2 Average Cost of Supply and Proposed Tariff for FY 2017-18

BSP-TEED has computed the Average Cost of supply (ACoS) as shown in the following Table:

Table 5-2: Average Cost of Supply as submitted by BSP-TEED (Rs. Lakh)

Sr. No.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Energy Sales (MU)	171.93	179.10	186.67	194.64	203.06
2	Net ARR	8,932.27	9,679.58	10,228.47	10,800.97	11,380.76
3	Revenue at Existing tariff	8,398.17	8,807.79	9,243.58	9,707.44	10,201.41
4	ACoS (Rs. /kWh)	5.20	5.40	5.48	5.55	5.60
5	Average Billing Rate (ABR) (Rs. /kWh)	4.88	4.92	4.95	4.99	5.02
6	ACoS-ABR Gap (Rs. /kWh)	0.31	0.49	0.53	0.56	0.58

Further, as regards the stand-alone Revenue Gap for FY 2016-17, BSP-TEED has not proposed any recovery of this Revenue Gap in FY 2017-18.

Further, BSP-TEED submitted that for meeting the ACoS-ABR gap of Rs. 0.49/kWh for FY 2017-18, a tariff increase of 9.9% is required from the present level. Such tariff increase of 9.90% would not be feasible, as the increase would be a tariff shock to the consumers of BSP-TEED. Hence, in order to avoid the tariff shock to the consumers, BSP-TEED has proposed the partial recovery of ACoS-ABR Gap and proposed average tariff increase of 5%. BSP-TEED has proposed uniform increase across the consumer categories.

BSP-TEED has proposed ACoS for recovery for FY 2017-18 as under:

Table 5-3: Average Cost of Supply for FY 2017-18 as submitted by BSP-TEED

Sr. No.	Particulars	FY 2017-18
1	Energy Sales (MU)	179.10
2	ARR for recovery (Rs. Lakh)	9248.18
3	ACoS (Rs. /kWh)	5.16

The existing and the proposed tariff for FY 2017-18 is shown in the following Table:

Table 5-4: Proposed Tariff for FY 2017-18 as submitted by BSP-TEED

Consumer Category	Applicable Tariff (Order dated 7 May 2014)		FY 2017-18 (Proposed Tariff)	
	Fixed Charges	Energy Charge	Fixed Charges	Energy Charge
	Rs. /kWh	Rs/ kWh	Rs. /kWh	Rs/ kWh
LT -1: Domestic				
0 - 201 Units	1.25	1.25	1.31	1.31
201-600 Units	1.85	1.85	1.94	1.94
Above 600 Units	3.00	3.00	3.15	3.15
LT-2: Non-domestic				
0 - 100 Units	2.00	2.00	2.10	2.10
0 - 500 Units	2.85	2.85	2.99	2.99
Above 500 Units	3.20	3.20	3.36	3.36
LT-3: Industry	2.30	2.30	2.42	2.42
LT-4: Public Utilities	3.80	3.80	3.99	3.99
HT-1: Residential	3.25	3.25	3.41	3.41
HT-2: Non-Residential and General Purpose	3.90	3.90	4.10	4.10
HT-3: Public Utilities	4.90	4.90	5.15	5.15

Commission's View

Average Cost of Supply

The Commission has computed the revenue at existing tariff for FY 2017-18 by considering the present applicable tariff, as approved by the Commission in the MYT Order dated May 7, 2014 and projected Energy Sales for FY 2017-18.

After taking into account the approved ARR for FY 2017-18 and the revenue at existing tariff, the Commission has calculated the ACoS and gap at existing tariff as shown in the following Table:

Table 5-5: ACoS-ABR Gap as computed by the Commission for FY 2017-18

Sr. No.	Particulars	FY 2017-18
1	Net ARR approved for FY 2017-18 (Rs. Lakh)	9102.57
2	Less: Revenue from Existing Tariff (Rs. Lakh)	8451.17
3	Revenue Gap/(Surplus) (Rs. Lakh)	651.81
4	Energy Sales (MU)	174.27
5	ACoS (Rs./kWh)	5.22
6	Average Billing Rate (ABR) (Rs./kWh)	4.85
7	ACoS-ABR Gap (Rs./kWh)	0.37
8	Tariff hike (%) for full recovery	7.71%

The Commission notes that BSP-TEED has proposed average tariff increase of 5% and proposed partial recovery of approved ARR for FY 2017-18. This partial recovery of ARR will lead to Revenue Gap, which will need to be considered in subsequent years. Further, the approved tariff would be applicable only for three (3) months of FY 2017-18. If the entire ACoS -ABR gap is considered to be recovered in three (3) months of FY 2017-18, there would be a tariff shock to the consumers. Hence, the Commission is of the view that under-recovery of ARR for FY 2017-18 shall be considered after final True-up for FY 2017-18.

Hence, the Commission has approved an average tariff increase of 7.71% towards the recovery of approved ARR for FY 2017-18. The ACoS approved by the Commission and ARR considered for recovery through tariff in FY 2017-18 is shown in the following Table:

Table 5-6: Approved Average Cost of Supply for FY 2017-18 (Rs Lakh)

Sr. No.	Particulars	FY 2017-18
1	Energy Sales (MU)	174.27
2	ARR for recovery (Rs. Lakh)	9,102.57
3	ACoS (Rs. /kWh)	5.22

Tariff for FY 2017-18

In determining the ARR and the retail supply tariff of BSP-TEED for FY 2017-18, the Commission has been guided by the provisions of the Act, National Electricity Policy (NEP), Tariff Policy, and the CSERC MYT Regulations, 2015.

Section 61 of the Act lays down the broad principles and guidelines for determination of retail supply tariffs. The basic principle is to ensure that tariff should progressively reflect the cost of supply of electricity and gradually reduce the cross-subsidies between categories. The Act lays down special emphasis on safeguarding of consumers' interest and also requires that the costs should be recovered in a reasonable manner. The Act mandates that tariff determination should be guided by factors which "encourage competition, efficiency, economical uses of resources, good performance and optimum investment".

The Act provides that while determining the tariff, the Commission shall not show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. The Tariff Policy notified by the Government of India provides comprehensive guidelines for determination of tariff and determination of ARR of power utilities. The Commission has followed these Guidelines, as far as possible.

The Commission has carried forward the process of tariff rationalization in this Order to ensure that the tariffs of most categories are within ±20% of the ACoS, while at the same time ensuring that no category is faced with a tariff shock. For categories, where the tariffs are beyond ±20% of the ACoS, the Commission has ensured that the cross-subsidies have been reduced.

The Commission has proposed to continue with the present tariff structure of BSP-TEED, wherein Fixed Charges as well as Energy charges are applicable in terms of Rs. per unit. The Commission has considered equal increase in Fixed Charges as well as Energy Charges while determining the tariff of the respective category.

In view of the above, the retail supply tariff approved by the Commission for FY 2017-18 is shown in the following Table:

Table 5-7: Approved Tariff for FY 2017-18

Consumer Category	FY 2017-18	
	Fixed Charges	Energy Charge
	Rs. /kWh	Rs/ kWh
LT -1: Domestic		
0 - 201 Units	1.38	1.38
201-600 Units	2.02	2.02
Above 600 Units	3.23	3.23
LT-2: Non-domestic		
0 - 100 Units	2.16	2.16
0 - 500 Units	3.05	3.05
Above 500 Units	3.43	3.43
LT-3: Industry	2.64	2.64
LT-4: Public Utilities	4.02	4.02
LT-5 – Temporary Supply	1.5 times of tariff as applicable to corresponding category	
HT-1: Residential	3.46	3.46
HT-2: Non-Residential and General Purpose	4.16	4.16
HT-3: Public Utilities	5.14	5.14

The Commission has computed the cross-subsidy with respect to the ACoS, and attempted to ensure that the cross-subsidies are within the limits of ±20% of the ACoS, as laid down in the Tariff Policy as well as several Judgments of Hon'ble APTEL. The category-wise cross-subsidy approved by the Commission for FY 2017-18 is shown in the following Table:

Table 5-8: Approved Cross-subsidy for FY 2017-18

Consumer Category	Approved ACoS (Rs./kWh)	Average Billing Rate (ABR) (Rs./kWh)		Cross-subsidy (Ratio of ABR to ACoS)	
		Existing Tariff	Approved tariff	Existing Tariff	Approved tariff
LT -1: Domestic	5.22	3.54	3.87	73%	74%
LT-2: Non-domestic		6.14	6.58	127%	126%
LT-3: Industry		4.60	5.28	95%	101%
LT-4: Public Utilities		7.60	8.04	157%	154%
HT-1: Residential		6.50	6.92	134%	132%
HT-2: Non-Residential and General Purpose		7.80	8.32	161%	159%
HT-3: Public Utilities		9.80	10.28	202%	197%
Total	**5.22**	**4.85**	**5.22**		

5.3 Applicability of Order

The Order will be applicable from January 1, 2018 and will remain in force till March 31, 2018 or till the issue of the next Tariff Order, whichever is later. The Commission directs BSP-TEED to take appropriate steps to implement the Tariff Order.

This Order and Tariff Schedule of detail order shall supersede the Order and Tariff Schedule applicable as per Order dated May 7, 2014 and billing shall be done as approved in this Order.

6 TARIFF SCHEDULE FOR FY 2017-18

Tariff Schedule for Low Tension (LT) Consumers

This tariff schedule is applicable to all LT consumers as follows:

1. Single-phase, 230 Volts up to a maximum connected load of 3 kW, and
2. Three-phase, 400 volts, for maximum demand up to 75 kW in case of demand based tariff or for maximum contracted load of 100 hp in case of other tariff, as applicable.

LV-1 Domestic

1. Applicability

This tariff is applicable to domestic light and fan and power used for all domestic appliances, in residential premises and institutional residential hostels. This tariff is also applicable to Gurudwaras, Temples, Churches, and Mosques, religious and spiritual institutions.

2. Tariff

	Slab	Fixed Charge (Rs. / kWh)	Energy Charge (Rs. / kWh)	Minimum Fixed Charge
LT-1 Domestic	0 - 201	1.38	1.38	Single Phase: Rs. 50/month Three Phase: Rs. 100/month
	201-600	2.02	2.02	
	>600	3.23	3.23	

LV-2 Non-Domestic

1. Applicability

This tariff is applicable to light and fan and power to shops, show rooms, business houses, offices, educational institutions, public buildings, town halls, clubs, gymnasium and health clubs, meeting halls, places of public entertainment, circus, hotels, cinemas, railway stations, private clinics and nursing homes including X-rays plant, diagnostic centres, pathological labs, carpenters and furniture makers, juice centres, hoardings and advertisement services, public libraries and reading rooms, typing institutes, internet cafes, STD/ISD PCO's, FAX/ photocopy shops, tailoring shops, photographers and colour labs, laundries, cycle shops, compressors for filling air, toy making industry, nickel plating on small scale, restaurants, eating establishments, Government circuit houses/rest houses, guest houses, marriage gardens, farmhouses being used for commercial purposes, book binders, petrol pumps and service stations, HT industrial consumers seeking separate independent LT connection in the same premises of HT industrial connection and other consumers not covered under any other category of LT consumers.

2. Tariff

LT-2 Non-Domestic	Slab	Fixed Charge (Rs. / kWh)	Energy Charge (Rs. / kWh)	Minimum Fixed Charge
	0 – 100	2.16	2.16	Single Phase: Rs. 100/month Three Phase: Rs. 200/month
	100-500	3.05	3.05	
	>500	3.43	3.43	

LV-3 L.T. Industry

1. Applicability

These tariffs are applicable to light and fan and power for industries such as, flour mills, hullers, grinders for grinding masala, power looms, rice mills, dall mills, oil mills, ice factories, cold storage plants, ice candies; laboratories of engineering colleges, ITIs and polytechnics and industrial institutions; workshops and fabrication shop etc.

2. Tariff

LT-3 Industry	Fixed Charge (Rs. / kWh)	Energy Charge (Rs. / kWh)
	2.64	2.64

LV-4 Public Utilities

1. Applicability

This tariff is applicable to public utilities such as water supply schemes, sewage treatment plants and sewage pumping installations, crematorium, traffic signals and lighting of public streets including public parks and archaeological and other monuments when requisition for supply is made by Public Health Engineering Department, local bodies, Gram Panchayats or any organization made responsible by the Government to maintain these services.

2. Tariff

LT-4 Public Utilities	Fixed Charge (Rs. / kWh)	Energy Charge (Rs. / kWh)
	4.02	4.02

LV-5 L.T. Temporary Supply

1. Applicability

This tariff category is for connections of temporary in nature. Temporary supply cannot be demanded by a prospective consumer as a matter of right but will normally be arranged by the Petitioner when a requisition is made subject to technical feasibility.

2. Tariff

Fixed Charge and Energy Charge shall be billed at one and half times the normal tariff as applicable to corresponding consumer category.

Notes:

(a) An amount equal to estimated bill for 3 Months or for the period of temporary connection requisitioned whichever is less is payable, before serving the temporary connection subject to replenishment from time to time and adjustment in the last bill after disconnection.
(b) No temporary connection shall be served without a meter.
(c) Connection and disconnection charges shall be paid as per the schedule of miscellaneous charges.
(d) No rebates/concessions under any head shall be applicable to temporary connections.
(e) A month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or part thereof.
(f) Any expenditure made by the Licensee for providing temporary supply up to the point of supply, shall be paid by the consumer.
(g) Surcharge at the rate of 2% per month or part thereof on the outstanding amount of the bill shall be payable in addition, from the due date of payment of bill, if the bill is not paid by the consumer within the period prescribed.

Terms and Conditions of L.T. Tariff

i. Energy will be supplied to the consumer ordinarily at a single point for the entire premises of the consumer.
ii. L.T. connections shall be served for maximum connected load of 75 kW/100 HP.
iii. Contracted load / connected load in kW / HP / kVA in fraction shall be rounded off to the next whole number.
iv. Provision of billing in case of excess supply
In case the connected load of any LT consumer, except non-domestic light and fan and domestic consumer, is found at any time in excess of contracted load, the consumer shall also have to pay charges at tariff (fixed and energy charge) corresponding to the excess load at the rate of one and half times the normal tariff for the excess load to the extent of 20% of contracted load and at the rate of two times of the normal tariff if the excess load is found beyond 20% of contracted load for actual period of enhancement of load or 6 (six) months whichever is less, including the month in which the excess load is detected and shall be continued to be billed at this rate till the excess load is removed or contracted load is enhanced.

v. Delayed payment surcharge

If the bill is not paid by the consumer within the period (due date) prescribed for payment of bill, a surcharge @ 1.5% per month or part thereof, except for LT-5 temporary supply, on the total outstanding amount of the bill (including arrears, if any, but excluding amount of surcharge), subject to minimum of Rs. 5, shall be payable in addition, from the due date of payment as mentioned in the bill.

vi. Advance payment rebate

A rebate @ 0.5% per month shall be payable on the net amount of advance at the end of billing cycle of that particular month, subject to the net amount of advance being not less than Rs. 1000/-, and shall be adjustable in next month's bill.

vii. Rounding off

The bill shall be rounded off to the nearest multiple of Rs. 10. Difference, if any, between the bill amount before and after rounding off, shall be adjusted in the next month's bill.

For example:- If the total amount of bill is Rs. 235.00, then the bill shall be rounded off to Rs. 240 and Rs. 5.00 will be credited in next month's bill, whereas if the total amount of bill is Rs. 234.95, then the bill will be rounded off to Rs. 230 and Rs. 4.95 will be debited in next month's bill.

In view of the above provision no surcharge will be leviable on outstanding amount, which is less than Rs. 10.

viii. Tax or Duty

The tariff does not include any tax or duty, etc., on electrical energy that may be payable at any time in accordance with any law in force. Such charges, if any, shall be payable by the consumer in addition to tariff charges.

ix. Meter Hire

Meter hire shall be charged as per the schedule of miscellaneous charges to all categories of LT consumers except the consumers of domestic light and fan category. Domestic light and fan category consumers shall not be required to pay such charges.

x. Applicability of Tariff

In case of any dispute about applicability of Tariff to a particular LT category, the decision of the Commission shall be final and binding.

xi. All the above conditions of Tariff shall be applicable to the consumer notwithstanding the provisions, if any, in the Agreement entered into by the consumer with the Petitioner.

Tariff Schedule for High Tension (HT) Consumers

This tariff schedule is for consumers who avail supply at 33 or 11 KV.

HT-1 H.T. Residential

1. Applicability

This tariff is applicable for providing bulk supply at one point to residential colonies and multi-storied residential buildings provided that connected load of non-domestic nature for common basic amenities for the residents and other general-purpose load put together shall not be more than 10% of total connected load other than drinking water supply, sewage pumping and street light.

2. Tariff

HT-1- HT Residential	**Fixed Charge (Rs. / kWh)**	**Energy Charge (Rs. / kWh)**
	3.46	3.46

HT-2: H.T. Non-Residential and General Purpose

1. Applicability

This tariff is applicable for supply to establishments such as offices, hospitals, hotels, educational institutions, stadium, guest houses, clubs, etc., having mixed load or non-industrial and / or non-residential load. This tariff is also applicable to all other H.T. consumers not covered specifically in any other HT Tariff category.

2. Tariff

HT-2 H.T. Non-Residential and General Purpose	**Fixed Charge (Rs. / kWh)**	**Energy Charge (Rs. / kWh)**
	4.16	4.16

HT 3: H.T. Public Utilities

1. Applicability

This tariff is applicable for supply of power to public water supply schemes, sewerage treatment and pumping installations including the energy used for lighting purposes.

2. Tariff

HT-3 - H.T. Public Utilities	**Fixed Charge (Rs. / kWh)**	**Energy Charge (Rs. / kWh)**
	4.16	4.16

3. Determination of Demand

The maximum demand of supply in each month shall be two times the largest number of Kilo Volt Ampere hours delivered at the point of supply during any consecutive 30 minutes in the month as per sliding window principle of measurement of demand.

HT-4: Temporary Connection at H.T

1. Applicability

This tariff is applicable to all H.T. connections of temporary nature at 11 kV. Temporary supply cannot be demanded by a prospective consumer as a matter of right but will normally be arranged by the Licensee when a requisition is made subject to technical feasibility.

2. Tariff

Fixed Charge and Energy Charge shall be billed at one and half times the normal tariff as applicable to corresponding consumer category.

Notes:

(a) An amount equal to estimated bill for 3 months or for the period requisitioned, whichever is less; is payable in advance before the temporary connection is served subject to replenishment from time to time and adjustment in the last bill after disconnection.

(b) If maximum demand is found more than the contract demand in any billing month, the billing shall be done at one and half times / two times of the energy charges and demand charges as applicable, in case of exceeding contract demand in a permanent connection, and shall be calculated as per clause v of terms & conditions of HT tariff.

(c) Any expenditure made by BSP-TEED up to the point of supply for giving temporary connection shall be payable by the consumer as per prescribed procedure.
(d) Connection and disconnection charges shall be paid separately.
(e) No rebates/concessions under any head shall be applicable to temporary connections.
(f) Month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or for part thereof.
(g) Other terms and conditions of the relevant category of tariff shall also be applicable.
(h) Surcharge at 2% per month or part thereof on the outstanding amount of the bill shall be payable in addition from the due date of bill, if the bill is not paid by the consumer within the period prescribed.

Terms and Conditions of HT Tariff

i. Point of Supply

Power will be supplied to a consumer ordinarily at a single point for entire premises. The HT connections for connected load above 75 kW / 100 HP shall be given at supply voltage of 11 kV by providing HT tri-vector meters with demand indicators.

ii. Rounding off

The amount of H.T. energy bill shall be rounded off to the nearest multiples of Rs. 10.

iii. Delayed Payment Surcharge

If the bill is not paid by the consumer within the period prescribed (due date) for payment of the bill, a surcharge @ 1.5% per month or part thereof, on the total outstanding amount of the bill (including arrears, if any but excluding amount of surcharge), shall be payable in addition, from the due date of payment as mentioned in the bill.

iv. Advance Payment Rebate

A rebate @ 0.5% per month will be payable on net amount of advance at the end of the billing cycle of that particular month, subject to the net amount of advance is not less than Rs. 20,000 and shall be adjustable in next month's bill.

v. Provision of billing in case of excess supply

In case the connected load of any HT consumer (presently being billed on single part tariff) is found at any time in excess of contracted load, the consumer shall also have to pay charges at tariff (fixed and energy charge) corresponding to the excess load at the rate of one and half times the normal tariff for the excess load to the extent of 20% of contracted load and at the rate of two times of the normal tariff if the excess load is found beyond 20% of contracted load for actual period of enhancement of load or 6 (six) months whichever is less, including the month in which the excess load is detected and shall be continued to be billed at this rate till the excess load is removed or contracted load is enhanced.

The excess supply availed in any month shall be charged along with the monthly bill and shall be payable by the consumer.

The billing of excess supply at one and half times/two times of the normal tariff applicable to consumer is without prejudice to the Licensee's right to discontinue the supply in accordance with the provisions contained in the Chhattisgarh State Electricity Supply Code (Supply Code)

No rebate / incentive is payable on such excess supply.

vi. Meter Hire

Meter hire shall be charged as per the schedule of miscellaneous and general charges of the H.T. Category consumers.

vii. Tax or Duty

The tariff does not include any tax or duty, etc., on electrical energy that may be payable at any time in accordance with any law / State Government Rules in force. Such charges, if any, shall be payable by the consumer in addition to tariff charges.

viii. Applicability of Tariff

In case of any dispute about applicability of Tariff to a particular HT category, the decision of the Commission shall be final and binding.

ix. All the above conditions of Tariff shall be applicable to the consumer notwithstanding the provisions, if any, in the agreement entered into by the consumer with the Petitioner.

7 DIRECTIVES FOR BSP-TEED

Certain directives were issued in previous Tariff order dated May 7, 2014 to BSP-TEED. In response, BSP-TEED has submitted the compliance to the Commission's directives which has been noted by the Commission. The Commission in the present order issues the following directives:

1. To achieve 100% metering in its license area and file the status report at the earliest.

2. To explore all other alternatives to reduce power purchase cost; including the purchase from open market at rate not exceeding the applicable rate of NSPCL for that respective period.

3. To fulfil the Solar RPO requirement either by actual purchase of Solar power or purchase of equivalent RECs.

4. The Commission directs BSP-TEED to submit the revised details of Capital expenditure schemes planned during Control Period including physical status of implementation, scope of work, cost benefit analysis, funding arrangement, etc., in the next Tariff Petition.

8 ANNEXURE

Table 8-1: List of Persons who submitted written submission/comments on Petition No.9/2017(T)

Sr. No.	Name
1.	Shri Dinesh Kumar Pandey (Mahamantri), Bhilai Ispat Mazdoor Sangh, CG
2.	Shri Gyanchand Jain (President), Bhilai Steel City, Chamber of Commerce, Bhilai, CG
3.	Shri Shesh Narayan Sharma, Sector-1, Bhilai, CG
4.	Shri Ravishankar (Sangathan Sachiv), Hindustan Steel Employees Union (Affilated to CITU & SWFI), Bhilai, CG
5.	Shri M.S.Shant Kumar, Communist Party of India (MARXIST) zila Samiti, Durt CG
6.	Shri P.R.Verma, Housing Lease (6^{th} Phase) Sanyukta Sangharsh Samiti, Bhilai Nagar, CG
7.	Shri Ramesh Pal, Housing Lease (6^{th} Phase) Sanyukta Sangharsh Samiti, Bhilai Nagar, CG
8.	Shri Tikamlal Verma, Housing Lease (6^{th} Phase) Sanyukta Sangharsh Samiti, Bhilai Nagar, CG
9.	Shri Rajendra Kumar Sharma, Bhilai Lok Srijan Samiti, Bhilai Nagar, CG
10.	D.V.S. Reddi, Bhilai, CG