

ORDER  
on  
True up for 2016-17  
of  
CSPDCL, CSPTCL, CSPGCL and CSLDC  
and  
Retail Tariff Order of CSPDCL for 2018-19

Chhattisgarh State Power Distribution Company Limited  
[Petition No. 66/2017 (T)]

Chhattisgarh State Power Transmission Company Limited  
[Petition No. 67/2017 (T)]

Chhattisgarh State Load Dispatch Centre  
[Petition No. 68/2017 (T)]

Chhattisgarh State Power Generation Company Limited  
[Petition No. 69/2017(T)]

Chhattisgarh State  
Electricity Regulatory Commission, Raipur

**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION  
RAIPUR**



Chhattisgarh State Power Distribution Co. Ltd.	.....	P. No. 66/2017(T)
Chhattisgarh State Power Transmission Co. Ltd	.....	P. No. 67/2017(T)
Chhattisgarh State Load Despatch Centre	.....	P. No. 68/2017(T)
Chhattisgarh State Power Generation Co. Ltd.	.....	P. No. 69/2017(T)

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

**In the matter of –**

1. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) Petition for provisional true up for FY 2016-17 and determination of Tariff for FY 2018-19;
2. Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) Petition for provisional true up for FY 2016-17;
3. Chhattisgarh State Load Despatch Centre (CSLDC) Petition for provisional true up for FY 2016-17;
4. Chhattisgarh State Power Generation Company Ltd. (CSPGCL) Petition for provisional true up for FY 2016-17.

## **ORDER**

**(Passed on March 26, 2018)**

1. As per provisions of the Electricity Act, 2003 (hereinafter referred as 'the Act') and the Tariff Policy, 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') 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 Petitions filed by the (i) Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) for approval of provisional true up for FY 2016-17, and determination of tariff for FY 2018-19, (ii) Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) for approval of provisional true up for FY 2016-17, (iii) Chhattisgarh State Load Dispatch Centre (CSLDC) for approval of provisional true up for FY 2016-17, and (iv) Chhattisgarh State Power Generation Company Ltd. (CSPGCL) for approval of provisional true up for FY 2016-17.
3. This Order is passed under the provisions of Section 32(3), Section 45, and Section 62 read with Section 86(1) of the Act. This combined Order is passed by the Commission on the four separate Petitions filed by CSPDCL, CSPTCL, CSLDC and CSPGCL, after having considered all the information and documents filed along with the said Petitions, the information submitted to the Commission after Technical Validation, and after having heard the applicant Companies, the consumers, their representatives and other stakeholders in the Public Hearing held by the Commission.
4. The Petitions were made available on the website of the Commission as well as the Petitioners. The Petitions were also available at the offices of the Petitioners. A public notice along with the gist of the Petitions was also published in the newspapers. Suggestions/objections were invited as per the procedure laid down in the Regulations. Further, the Commission conducted hearings at Raipur on the Petitions on March 6, 2018, March 7, 2018 and March 8, 2018. The Commission also convened a meeting with Members of the State Advisory Committee on January 19, 2018 for seeking their valuable suggestions and comments. Taking into account all the

suggestions/objections and after performing necessary due diligence on each of the issues, the Commission has finalised its views.

5. The Commission has undertaken the provisional true up for FY 2016-17 for CSPDCL, CSPTCL, CSLDC, and CSPGCL, in accordance with the provisions of the CSERC MYT Regulations, 2015 and based on the Provisional Accounts submitted by the Utilities. The final True-up for FY 2016-17 shall be undertaken after filing of True-up Petitions by Utilities based on audited Annual Accounts for FY 2016-17, subject to prudence check.
6. In the Multi-Year Tariff (MYT) Order passed on March 31, 2016, the Commission had approved the ARR and Tariff for the Control Period from FY 2016-17 to FY 2020-21 for CSPGCL, CSPTCL, CSLDC and CSPDCL, in accordance with the provisions of the CSERC MYT Regulations, 2015. Further, the Commission passed the Tariff Order for FY 2017-18 for CSPDCL on March 31, 2017. For CSPDCL, the total power purchase cost has been revised for FY 2018-19, based on the revised sales projections and energy requirement. Also, Non-Tariff Income for CSPDCL for FY 2018-19 has been revised based on provisional income earned in FY 2016-17.
7. The Revenue Gap/(Surplus) of CSPGCL, CSPTCL and CSLDC arising out of provisional True-up for FY 2016-17, along with corresponding carrying/holding cost, have been considered while computing the cumulative Revenue Gap/(Surplus) to be allowed for CSPDCL for FY 2018-19.
8. After applying the holding cost on the Revenue Surplus of CSPTCL for FY 2016-17 arising after provisional True-up, the total Revenue Surplus up to FY 2018-19 has been approved as Rs. 29.98 Crore. After applying the holding cost on Revenue Surplus of CSPGCL for FY 2016-17 arising after provisional true-up, the total Revenue Surplus up to FY 2018-19 has been approved as Rs. 279.52 Crore. After applying the holding cost on Revenue Surplus of CSLDC for FY 2016-17 arising after provisional true-up, the total Revenue Surplus up to FY 2018-19 has been approved as Rs. 1.26 Crore.
9. After applying the carrying cost on Revenue Gap of CSPDCL for FY 2016-17 arising after provisional true-up, the total Revenue Gap up to FY 2018-19 has been approved as Rs. 2357.60 Crore. The combined Revenue Gap/Surplus of CSPDCL, CSPTCL,

CSPGCL, and CSLDC for FY 2016-17 along with carrying/holding cost has been considered in the ARR of CSPDCL for FY 2018-19.

10. For CSPGCL, the ARR for FY 2018-19 was approved in the MYT Order dated March 31, 2016. The Commission in Tariff Order for FY 2017-18 dated March 31, 2017 has revised the Energy Charge Rate for CSPGCL's Generating Stations for FY 2017-18. The same energy charge rates are proposed to be continued for FY 2018-19. The Annual Fixed Cost (AFC) and Energy Charge Rate (ECR) for CSPGCL stations for FY 2018-19 have been approved by the Commission as under:

### **Thermal Power Stations**

Sl.	Particulars	Units	FY 2018-19				
			KTPS	HTPS	DSPM	KWTPP	Marwa
1	Annual Fixed Cost	Rs. Crore	297.12	534.73	491.27	701.94	1871.72*
2	Energy Charge Rate (ex-bus power plant basis)	Rs/kWh	1.927	1.487	1.545	1.264	1.20*
3	Contribution to P&G	Rs. Crore	55.17	57.11	9.38	9.24	20.86

\*AFC and ECR for Marwa TPP is Provisional

### **Hydro Power Station (Hasdeo Bango)**

Sl. No.	Particulars	Units	FY 2018-19
1	Approved Annual Fixed Cost	Rs. Crore	25.97
2	Approved Net Generation	MU	271.26
3	Approved Tariff	Rs./kWh	0.957
4	Contribution to P&G	Rs. Crore	3.81

11. For CSPTCL, the Commission had determined the ARR of Rs. 993.46 Crore for FY 2018-19 in the MYT Order dated March 31, 2016. The Transmission Charge for FY 2018-19 shall be as under:

Sl.	Particulars	Units	FY 2018-19
1	ARR for CSPTCL	Rs. Crore	993.46
2	Less: Past year cumulative revenue surplus	Rs. Crore	29.98
3	Net Approved ARR	Rs. Crore	963.48
4	Monthly Transmission Charges for Medium-term and Long-term Open Access Consumers	Rs. Crore/month	80.29
5	Short-term Open Access Charges	Rs/kWh	0.3492

Further, Transmission Losses of 3.22% for the energy scheduled for transmission at the point or points of injection shall be recoverable from Open Access customers.

12. For CSLDC, the Commission had determined the ARR of Rs. 14.79 Crore for FY 2018-19 in the MYT Order dated March 31, 2016. System Operation Charges are approved as Rs. 11.83 Crore and Intra-State Market Operation Charges as Rs. 2.96 Crore for FY 2018-19.
13. CSPDCL has filed revised ARR for FY 2018-19 of Rs. 11,422.33 Crore. The Commission after prudence check and due scrutiny has approved the ARR at Rs. 11,386.14 Crore.
14. The State Government subsidy has not been taken into account while approving the ARR of CSPDCL for FY 2018-19.
15. CSPDCL, in its Petition, has sought approval for cumulative Revenue Gap of Rs. 2,584.89 Crore for FY 2018-19. The Commission after prudence check and scrutiny has arrived at a cumulative Revenue Gap of Rs. 2,046.83 Crore for FY 2018-19 after adjusting the cumulative Revenue Gap/(Surplus) of CSPDCL, CSPGCL, CSPTCL, and CSLDC. Based on the above, the Commission has approved the revised Tariff Schedule.
16. The Commission has made the following changes in this Order as compared to the Tariff and Tariff categories approved in the previous Tariff Order:
  - a) The tariff for most of the consumer categories has been reduced in order to adjust the Revenue Surplus arising after considering the cumulative Revenue Gap/(Surplus).
  - b) The tariffs for all consumer categories have been approved in such a manner that the cross-subsidies are reduced gradually, and the tariffs for most of the consumer categories is within the band of  $\pm 20\%$  of Average Cost of Supply, as stipulated in the Tariff Policy notified by the Government of India.
  - c) A new sub-category has been created under LV 4 – LV Agriculture Allied Activities named as *LV-4.1 (A): up to 25 HP*. Similarly, a new sub-category under LV 5 – LV Industry has also been created and named as *LV 5.2.3- LV Other Industries (Above 100 HP up to 150 HP)*.

- d) In order to incentivise consumption during non-peak hours and also to increase the consumption of surplus power available in the State, Time of Day Tariff (TOD) has been revised. For consumers covered in TOD tariff, the Energy Charges in the Peak Period shall be billed at 120% of normal rate of Energy Charge instead of existing level of 115%. Similarly, during Non-Peak Period, Energy Charges shall be billed at 75% of normal rate of Energy Charge instead of existing level of 90%.
  - e) For HV-4 Steel Industries, the limit of Load Factor for 33 kV and 11 kV supply sub-categories has been increased to 25% from the existing level of 15%, for exclusive Rolling Mills consumers.
  - f) A discount of 5% on monthly electricity bill (Fixed Charges + Energy Charges) has been given to Dispensaries, Clinics and Hospitals other than Government Hospitals.
  - g) To promote cashless transactions, all banking charges/online payment charges for payment through net banking or debit/credit cards, have been waived off for consumers. Such charges shall be borne by CSPDCL.
  - h) For ready reference, the Tariff Schedule applicable in reference to this Order is appended herewith as **Schedule**.
17. The Order will be applicable from 1<sup>st</sup> April, 2018 and will remain in force till March 31, 2019 or till the issue of next Tariff Order, whichever is later.
18. The Commission directs the Companies to take appropriate steps to implement the Tariff Order.

**SD/-**  
**(ARUN KUMAR SHARMA)**  
**MEMBER**

**SD/-**  
**(NARAYAN SINGH)**  
**CHAIRMAN**

**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION  
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**CORRIGENDUM ORDER**

(Dated 11.04.2018)

The Commission has issued order in the above petitions on 26/03/2018. In the order, an inadvertent typographical error has been noticed in case of tariff schedule for low voltage consumers availing supply on three phase 400 V. The maximum demand permitted at three phase 400 volt is 112.5 kW or 150 HP, accordingly in the tariff schedule for LV Consumers wherever 75kW is appearing, shall be read as 112.5 kW.

**Sd/-  
(ARUN KUMAR SHARMA)  
MEMBER**

**Sd/-  
(NARAYAN SINGH)  
CHAIRMAN**



## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>Description</b>
A&G	Administrative and General
AMC	Annual Maintenance Contract
APTEL	Hon'ble Appellate Tribunal of Electricity
ARR	Annual Revenue Requirement
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
COD	Date of Commercial Operation
CSEB	Chhattisgarh State Electricity Board
CSERC	Chhattisgarh State Electricity Regulatory Commission
CSPDCL	Chhattisgarh State Power Distribution Company Limited
CSPGCL	Chhattisgarh State Power Generation Company
CSPHCL	Chhattisgarh State Power Holding Company Limited
CSPTCL	Chhattisgarh State Power Transmission Company Limited
CSPTTrCL	Chhattisgarh State Power Trading Company Limited
CWIP	Capital Work in Progress
DPS	Delayed Payment Surcharge
DS	Domestic Service
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoCG	Government of Chhattisgarh
GoI	Government of India
HT	High Tension
kcal	kilocalorie
kg	kilogram
kV	kilovolt

<b>Abbreviation</b>	<b>Description</b>
kVA	kilovolt-ampere
kW	kiloWatt
kWh	kilowatt-hour
MAT	Minimum Alternative Tax
ml	Millilitre
MMC	Monthly Minimum Charges
MT	Metric Tonnes
MU	Million Units
MYT	Multi Year Tariff
NTI	Non-Tariff Income
O&M	Operations and Maintenance
PLF	Plant Load Factor
PLR	Prime Lending Rate
PPA	Power Purchase Agreement
R&M	Repair and Maintenance
RoE	Return on Equity
Rs	Rupees
SBI	State Bank of India
SCADA	Supervisory Control and Data Acquisition
SERC	State Electricity Regulatory Commission
SLDC	State Load Dispatch Centre
SLM	Straight Line Method
T&D Loss	Transmission and Distribution Loss
UI	Unscheduled Interchange

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# **1 BACKGROUND AND BRIEF HISTORY**

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## **1.1 Background**

The Chhattisgarh State Electricity Board (CSEB) was restructured by the State Government in pursuance of the provisions of Part XIII of the Electricity Act, 2003. The Government of Chhattisgarh (GoCG) vide notification No. 1-8/2008/13/1 dated December 19, 2008, issued the CSEB Transfer Scheme Rules, 2008 with effect from January 1, 2009. The erstwhile CSEB was unbundled into five different Companies, viz., Chhattisgarh State Power Generation Company Limited (CSPGCL), Chhattisgarh State Power Transmission Company Limited (CSPTCL), Chhattisgarh State Power Distribution Company Limited (CSPDCL), Chhattisgarh State Power Trading Company Limited (CSPTCL), and Chhattisgarh State Power Holding Company Limited (CSPHCL). The assets and liabilities of the erstwhile CSEB have been allocated to the successor Companies w.e.f. January 1, 2009 according to the provisions of the CSEB Transfer Scheme Rules, 2010. The validity of the present Transfer Scheme is extended till December 2018.

## **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.

### **1.3 Procedural History**

The Commission 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 to as MYT Regulations, 2015) on September 9, 2015. Based on the above Regulations, the Commission issued the MYT Order dated April 30, 2016 for CSPGCL, CSPTCL, CSLDC and CSPDCL for the Control Period from FY 2016-17 to FY 2020-21.

CSPDCL filed its Petition on December 11, 2017 for approval of provisional true up for FY 2016-17, and determination of retail tariff for FY 2018-19, which was registered as Petition No. 66 of 2017 (T). CSPTCL filed the Petition for approval of provisional true up for FY 2016-17 and determination of Transmission Tariff for FY 2018-19 on December 12, 2017, which was registered as Petition No. 67 of 2017 (T). CSLDC filed the Petition for approval of provisional true up for FY 2016-17 on December 12, 2017, which was registered as Petition No. 68 of 2017(T). CSPGCL filed the petition for approval of provisional true up for FY 2016-17 for Thermal Generation Stations and Hydro Electric Plants on December 28, 2017, which was registered as Petition No. 69 of 2017 (T).

In this Order, the Commission has undertaken the provisional true up for FY 2016-17 for CSPGCL, CSPTCL, CSLDC and CSPDCL in accordance with the provisions of the MYT Regulations, 2015 and determination of revised ARR and Tariff for CSPDCL for FY 2018-19. Utilities have submitted that due to introduction of new accounting principles its audited accounts for the FY 2016-17 are under preparation and hence Audited Accounts from the Utilities are not available. The Commission in this order has undertaken the provisional true-up based on the available provisional accounts. The Hon'ble APTEL in OP.NO.1 of 2011 has directed the state Commission to ensure that the Annual Performance review, true-up of past expenses has to be carried out on year to year basis.

#### 1.4 Admission of the Petition and Hearing Process

The Petitions filed by CSPTCL, CSPDCL and CSLDC were registered on December 28, 2017 and CSPGCL Petition was registered on December 29, 2017.

The Companies were directed to publish the abridged version of the Petition in Hindi and English newspapers for inviting comments / objections / suggestions from all the stakeholders. The Petitions were made available on the website of the Commission as well as on the Petitioners' websites. As required under Clause 21 of the CSERC (Details to be furnished by licensee etc.) Regulations, 2004, notices inviting suggestions /comments/objections from the stakeholders on the above proposals were published in the leading newspapers namely, Dainik Bhaskar, Nav Bharat, The Hitavada, Patrika, Central Chronicle, The Pioneer, and Hari Bhoomi on December 30, 2017 and December 31, 2017.

A period of twenty-one (21) days was given for submission of written objections and suggestions by the public. The Companies were also directed to submit written replies to the Commission with copies endorsed to the objectors.

In order to have better clarity on the data submitted by the Petitioners and to remove inconsistency in the data, the first Technical Validation Sessions (TVS) were held on January 17, 2018 for CSPGCL, CSPTCL and CSLDC and on January 18, 2018 for CSPDCL with the petitioners. Similarly, the second TVS for CSPGCL and CSPDCL was held on March 5, 2018 with the Petitioners. During the TVS, additional information required for processing of the Petitions was sought from the Petitioners. The Petitioners submitted the additional information sought in the TVS. Notices under Section 94(2) of the Act were published in the following newspapers of the State for hearings:

Newspaper Name	Date of Notice Published
Central Chronicle, Nav Bharat, Hari Bhoomi, Nayi Duniya, Desh Bandhu	March 1, 2018
Patrika, Dainik Bhaskar, The Hitavada, Ambika Vani and Dandakarnaya	February 20, 2018

The objections and suggestions from stakeholders were received on the Petitions filed by CSPGCL, CSPTCL, CSPDCL and CSLDC. The list of persons who filed the written submissions is annexed as **Annexure 1**.



The hearing was held on March 6, 7 and 8, 2018 in the Commission's office at Raipur. The Commission has ensured that the due process as contemplated under the law to ensure transparency and public participation was followed at every stage and adequate opportunity was given to all the persons to offer their views. The list of persons who submitted comments during the Hearing is annexed as **Annexure 2A**.

The issues raised by the stakeholders along with the response of the Petitioners' and views of the Commission are elaborated in Chapter 2 of this Order.

### **1.5 State Advisory Committee Meeting**

A copy of the abridged Hindi and English version of the Petitions were also sent to all the members of the State Advisory Committee of the Commission for their comments.

A meeting of the State Advisory Committee was convened on January 19, 2018 to discuss the Provisional True-up Petition for FY 2016-17 and seek inputs from the Committee. CSPGCL, CSPTCL, CSLDC and CSPDCL gave presentations in the meeting on the salient features of their Petitions. Various aspects of the Petitions were discussed by the Members of the Committee in the meeting. The list of the members who participated in the meeting is annexed as Annexure 2B. The following suggestions and Objections were made/raised:

1. Members raised the following questions regarding CSPGCL's Provisional True-up Petition for FY 2016-17:
  - a. Why the Plant Availability Factor (PAF) for KTPS plant has reduced against that approved in the MYT Order?
  - b. Since, the KTPS plant was on retirement stage and hence, the PAF target was set low by the Commission in the previous MYT Order, even then why there has been such lower achievement?
  - c. Has the loss/gain because of the lower performance mentioned above been accounted in the ARR?
  - d. Commission should levy appropriate penalty as per the Regulations for the PAF being lower than that approved by the Commission.
2. SAC Members raised the following questions regarding the Provisional True-up Petition for FY 2016-17 filed by CSPTCL and CSLDC:
  - a. Why CSPTCL is not showing the actual targets of setting up new transmission lines/substations against that achieved in FY 2016-17?

- What was the actual target given to CSPTCL and what is achieved, and appropriate rationale for under-achievement?
- b. Why there is an increase in Employee expenses and A&G Expenses for FY 2016-17?
  - c. Repair and Maintenance expenses, which improves the services to the consumers and for the betterment of the infrastructure, has been under-utilised as compared to the amount approved by the Commission. The amount approved by the Commission in its MYT Order has not been incurred, and instead there has been a higher expenditure on Employees and A&G.
3. SAC members raised the following questions to CSPDCL on its Petition for Provisional True-up for FY 2016-17 and Proposal for revised ARR and Tariff for FY 2018-19:
- a. Why the audited accounts for FY 2016-17 have not been submitted yet, when it is already 7 months after the time it should be submitted? Commission should look into the rationale and reasoning for such delay and the provision in the Regulations of submitting the provisional accounts should not be taken for granted.
  - b. CSPDCL is selling power from Marwa to Telangana, which is basically a trading business and hence, any loss on this account should not be included in the overall losses of the system. T&D losses booked for the State of Chhattisgarh should be for power supplied to the consumers within the State. Such losses due to trading have been accounted in the past, and hence the Commission need to take cognizance of the fact that such losses are not accounted and consumers of Chhattisgarh do not pay for it.
  - c. CSPDCL has proposed to increase the rebate to the Steel Industries where the Industries running on Load Factor less than 60% should be given rebate of 20%, as against the existing rebate of 15%. Why is there no rebate or incentive available to small and medium scale industries?
  - d. Commission needs to consider whether the Regulations allow the Distribution Company to alter the cross-subsidy on its own.

- e. CSPDCL collects the Consumer Security Deposit every year. Is there a separate fund where this amount is collected? Does the consumer receive the interest against such deposit?
  - f. If there is a short circuit or overloading in some transformer, and because of that there is case of over voltage for some consumer, and any appliance of the consumer gets damaged, there should be some provision where the CSPDCL should give compensation to the consumer whose appliance got damaged.
4. General comments and suggestions made by the Members of the State Advisory Committee are as follows:
- a. All the orders and proceedings of the Commission should be in both the languages and which is simple and easy and could be easily understood by the common people. Language should not be a barrier to the information passed on to the consumers.
  - b. There should be a mobile based application, which automatically generates the electricity bill and the payment can be made online.
  - c. Rice production this year is very low in the State and therefore, sale of rice in the market is low. Raw rice, which is the raw material for the Rice mills, will be reeling under pressure for coming 6-7 months. Because of less availability of rice in the mills, more than 1500 rice mills will get affected and there would be very low to zero operations for such mills. In such case it is requested to the Commission that there should be some relief to the Fixed Charges paid by the Mills, when no power is consumed till the situation get backs to normal. It should be considered as a natural disaster and there are provisions in the Regulations which needs to be considered.
  - d. It is requested to the Commission to keep all the Rice Mills under Agriculture and Allied Category, as the industry is based on the agriculture production.

The above issues raised by the members of SAC were deliberated during the meeting. The concerns of the members of the SAC have been appropriately addressed in this order.

## **2 HEARING PROCESS, INCLUDING THE COMMENTS MADE BY VARIOUS STAKEHOLDERS, THE PETITIONERS' RESPONSES AND VIEWS OF THE COMMISSION**

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### **2.1 Objections on Provisional True-up for FY 2016-17 of CSPDCL**

#### **2.1.1 Issue of Provisional Balance Sheet and Mismatched Data**

The objector submitted that:

- i. The True-up Petition filed by CSPDCL for FY 2016-17 seeks recovery of huge standalone deficit of Rs. 841.16 Crore but is not supported by Statutory Audit Report and authentic data, hence, final True-up cannot be carried out by the Commission on the basis of Provisional Accounts as per prevailing practice and Regulations.
- ii. Such Provisional True-up may be useful just to draw the guiding principles and to have glimpses of the state of affairs of CSPGCL, CSPTCL and CSPDCL, and in absence of much reliability of data, any Revenue Gap/(Surplus) cannot be passed on to the Retail Tariff of subsequent years.
- iii. Moreover, Provisional True-up also cannot be done efficiently and correctly, as information and data/actual results provided in the present Petitions varies significantly from the Provisional Accounts/statistics, R-15 formats and other Petitions filed by CSPTCL, CSPGCL and CSLDC. CSPDCL has itself accepted that only in Power Purchase Cost, a huge amount of Rs. 422.70 Crore is not reconciling with accounts.
- iv. CSPDCL was directed by the Commission to submit Quarterly Report on reconciliation of Power Purchase Bills, hence, such a huge amount remaining unreconciled is quite surprising, and also reveals the status of compliance of various directives issued by the Commission and state of affairs of un-audited Accounts.
- v. In response to the clarification and additional submission sought by the Commission vide communication dated January 5, 2018, CSPDCL vide its reply dated January 19, 2018, has stated as under for several issues:

*“Due to introduction of new accounting principles, its audited accounts for the year FY2016-17 are under preparation. It has to undergo a further stage of statutory audit thereafter. Under such circumstances, it is difficult to provide*

*the details sought under this para. Commission may kindly like to provide additional time for this purpose.”*

- vi. The case of the other Petitioners is also no better, hence, CSPDCL, CSPTCL, CSPGCL and CSLDC should be directed to submit Statutory Audit Report along with reliable data and information for undertaking True-up for FY 2016-17. Till such time, passing through any suggestive loss/revenue shortfall of FY 2016-17 for recovery in FY 2018-19 shall not be judicious and justifiable.

### **Petitioner’s Reply**

CSPDCL submitted that it has already detailed in the Petition itself that the delay in finalization and subsequent audit of accounts is primarily attributable to introduction of new financial accounting standards.

Further, the provisional true-up has been filed on the basis of available accounts in line with the provisions of MYT Regulations, 2015 and CSPDCL has requested the Commission to kindly consider and approve the same. CSPDCL added that the Audited Accounts for FY 2016-17 will also be submitted to the Commission along with the Petition for final True-up along with relevant supporting justification/documents in due course of time as and when the same is available.

### **Commission’s View**

The Commission has undertaken the True-up for FY 2016-17 based on the provisional Accounts, in accordance with Regulation 10.3 of the CSERC MYT Regulations, 2015, which specifies as under:

*“10.3. In case the audited accounts are not available, the provisional truing up shall be done on the basis of un-audited/ provisional account and shall be subject to further final truing up, as soon as the audited accounts is available.”*

The Commission is of the view that as the Regulations provide for further final truing up once the Audited Accounts are available, the impact, i.e., Revenue Gap/(Surplus) on account of provisional true-up should be passed on in the Tariff of FY 2018-19, in order to avoid the incurrence of carrying/(holding) cost on such amounts. The differential amount, on account of variation between the Provisional Accounts and Audited Accounts shall be adjusted at the time of final truing up. Unless the Revenue Gap/(Surplus) on account of provisional true-up is passed through in FY 2018-19, the entire process of provisional Truing up shall be without any meaning.

However, the Commission agrees that the Power purchase bills are not being reconciled timely. Power purchase amounts to a largest portion of the ARR and it has a significant impact on the ARR of the licensee. It is pertinent to note that the VCA mechanism is in place whereby bi-monthly power purchase cost of the licensee has to be factored in for computation of VCA. It is surprising that how the power purchase cost is also not being reconciled. Accordingly, the Commission is of the view that carrying cost arising due to negligence of the licensee should not be passed on to the consumers of the state during the final true-up.

### **2.1.2 Lack of Information/data on basic function of Tariff Reforms**

The objector submitted that CSPDCL has submitted category-wise number of consumers, their load and consumption, but has not submitted the category-wise revenue realization and Average Billing Rate (ABR), which is very important to determine the direction and pace of Tariff Reforms. The reforms in Retail Tariff Structure initiated by the Electricity Act, 2003 (EA 2003) and stressed by the Tariff Policy ensure implementation of basic guiding principles such as allowance of reasonable revenue for satisfactory working, simultaneously ensuring competitiveness and efficiency, retail tariff to be brought progressively within +/-20% of the Average Cost of Supply (ACoS), and cross-subsidies to be reduced gradually. However, the submission of unreliable, suspicious, and mismatched data presently submitted by the Petitioners do not truly permit adherence to all the above basic guidelines. Hence, the Petitioners should be directed to submit reliable and matching data with proper references for a prudent True-up.

#### **Petitioner's Reply**

CSPDCL submitted that R15 with consumer category and slab-wise revenue along with the Average Billing Rate (ABR) for LT as well as HT consumers for FY 2016-17 has already been submitted to the Commission. CSPDCL added that it adheres to complete professional ethics and transparency in its operations and professional transactions. It has submitted all available data points sought by the Commission so far and shall also cooperate with the Commission in every possible way, abiding by all Rules and Regulations. Further, to bring in more authenticity to the information, same is now being captured in SAP modules across various levels in the organization so as to eliminate human errors in information management.

### Commission's View

The Commission has analysed the Petition submitted and after scrutinizing the same, asked CSPDCL to submit additional information as and when required. It is observed from the R-15 data that, the Agriculture consumers were not been billed as per the Energy Charges approved by the Commission. The licensee was asked to justify the reason for not recovering the revenue from the agriculture consumers as per the applicable tariff. The licensee had submitted that the revenue corresponding to the applicable tariff could not be recovered from Agriculture Consumers who adopted for flat rate prescribed by the State Govt. The Commission is of the view that the licensee should have recovered the revenue corresponding to the energy sales as per the approved rates. Accordingly, the Commission has considered the unrecovered revenue from Agriculture consumers for FY 2016-17 while computing the surplus deficit.

#### 2.1.3 Support from State Government under UDAY Scheme

Under the tri-partite Memorandum of Understanding (MoU) signed between Government of India, Government of Chhattisgarh, and CSPDCL under the Ujwal DISCOM Assurance Yojana (UDAY) [UDAY MoU] on January 25, 2016, it was agreed that the State Government shall take over the future losses of CSPDCL in a graded manner and shall fund 5% of the loss of 2016-17 in 2017-18.

CSPDCL has projected a Stand-alone Deficit of Rs.841.16 Cr during FY 2016-17 but has proposed to load all such revenue deficit on the consumers without making provisions as agreed under UDAY Scheme and hence, the Commission is requested to ensure that the provision of 5% of such deficit (approx. Rs. 42.06 Cr) should be supported by the State Government as a grant under the UDAY scheme.

Similarly, under the UDAY MoU, the State Government has also agreed to take over the debts of CSPDCL as per the following schedule:

Year	Total Debt taken over	Amount of Grant (Rs. Crore)	Timeline for such Grant	Actual release of Grant as per CSPDCL (Rs. Crore)
2015-16	50% of Total Debt	870.12	Last quarter of 15-16	870.12 (True-up Petition 15-16)
2016-17	25% of Total Debt	435.06	End of 2 <sup>nd</sup> quarter of 16-17	Nil (True-up Petition 16-17)

From the above it is clear that CSPDCL has not accounted for huge grant of Rs.435.06 Crore as per the UDAY Scheme, and thereby computed higher Interest Cost, Depreciation and Return on Equity.

Though CSPDCL has submitted that it has not received any Grant towards repayment of loans/debts under UDAY in FY 2016-17, it has not submitted the reasons/reminders/efforts taken by it and the stand of State Government to fulfill its commitment.

The Commission is requested to consider grant of Rs. 435.06 Crore while determining Interest Cost, Depreciation and Return on Equity for FY 2016-17, and if in any case, CSPDCL has not received such committed grant from the State Government, reminders can be sent for an early release.

### **Petitioner's Reply**

CSPDCL would like to submit that it has already detailed the reasons for consideration of T&D losses for 33 kV and below network as per the Regulations, in the Petition itself. It is absolutely wrong to state that CSPDCL is questioning the integrity of either the State Government or Central Government or the Commission. Such comments are unwarranted and CSPDCL requests the stakeholder to refrain from making such comments in this forum.

CSPDCL's current submissions in the Petition flow from Section 108 of the Electricity Act 2003, as reproduced below:

Directions by State Government: ----

*“(1) In the discharge of its functions, the State Commission shall be guided by such directions in matters of policy involving public interest as the State Government may give to it inwriting.*

*(2) If any question arises as to whether any such direction relates to a matter of policy involving public interest, **the decision of the State Government there on shall be final.**”*

Regarding the consideration of commitments by Parties of UDAY MoU other than CSPDCL, CSPDCL would like to highlight that all such actions undertaken by other Parties are duly factored in by CSPDCL in its accounts and the same information is also submitted to the Commission for passing on the benefit of same to consumers at large.



Accordingly, CSPDCL had considered the grant of Rs. 870.12 Crore in FY 2015-16 as approved and released by Government of Chhattisgarh. Further, for the amount corresponding to takeover of loan and transfer of equivalent grant of Rs 435.06 Crore along with amount corresponding to takeover of losses for FY 2016-17, as the State Government has decided not transfer any such amount in FY 2016-17 to CSPDCL, such decision is final and accordingly could not be factored in by CSPDCL, which is in line with the provisions of the Act as well as accounting principles. CSPDCL requested the Commission to consider the submissions of CSPDCL and any further support from Government of Chhattisgarh (GoCG) only on actual disbursement by GoCG and subsequent receipt by CSPDCL.

### **Commission's View**

For the purpose of the provisional True up, the Commission has accepted CSPDCL's submission that no conversion of loan to Grant has happened in FY 2016-17. However, the same is subject to final true-up, and CSPDCL should submit the entire correspondence with the State Government, and the State Government's justification for not providing the necessary Grant support as committed under the UDAY MoU.

#### **2.1.4 CSPDCL's request to revise its Equity Base from FY 2011-12 to FY 2015-16**

The objector submitted that CSPDCL has submitted that the Commission has disregarded its own MYT Regulations for computation of permissible equity for current as well as future years on account of Consumer Contribution and Grants, and has therefore, requested the Commission to rectify the error and approve the corrected capital structure from FY 2011-12 to FY 2015-16. CSPDCL has accordingly revised the capital structure and increased Gross Fixed Assets for the above years and claimed increased amounts under interest on Loan, Depreciation and Return on Equity for FY 2011-12 to FY 2015-16 along with carrying cost.

The objector submitted that the Truing-up of Aggregate Revenue Requirement (ARR) of FY 2011-12 to FY 2015-16 has been undertaken by the Commission in the following Orders:

<b>Truing-up of Year</b>	<b>Date of Final Order</b>
FY 2011-12	12.06.2014
FY 2012-13	12.06.2014
FY 2013-14	23.05.2015
FY 2014-15	30.04.2016
FY 2015-16	31.03.2017

CSPDCL had ample opportunity to agitate the issue by filing a Review Petition before the Commission within 60 days from the date of Order or by filing an Appeal before the Hon'ble Appellate Tribunal for Electricity (APTEL) within 45 days from the date of Order but CSPDCL failed to do so, although in several other issues it opted to agitate before the Commission/APTEL. Hence, CSPDCL cannot be allowed to enjoy unlimited time to agitate this issue now. After substantial delay from the stipulated period to file a Review Petition, the issue does not legally qualify to be addressed by the Commission.

Further, it is shocking that CSPDCL wants to recover interest, depreciation and return on investment made from Consumers' Contribution and Grant given by the Government, from the consumers. If it is allowed by the Commission, then effectively, consumers would be required to pay interest on their own money, which shall be entirely new financial concept.

Considering the above reasons and law-points involved, the objector requested the Commission to reject CSPDCL's plea to re-assess its equity base for the period from FY 2011-12 to FY 2015-16 and to disallow the claim of Rs.120.96 Crore lodged by it. The objector requested the Commission to evaluate GFA and Interest on Loan, Depreciation and Return on Equity for FY 2016-17 without considering the above said claim.

The objector added that if the Commission decides to re-open the issue of equity base of CSPDCL after a lapse of about 4 years, the case of interest on working capital/security deposit and similar other cases are also genuinely required to be re-opened in the interest of justice where consumers have suffered huge loss of money without any lapse or fault on their part.

### **Petitioner's Reply**

CSPDCL submitted that during the course of preparation of this Tariff Petition, it was discovered that the capital structure considered for the purpose of CSPDCL's equity is understated due to the reason that previous Tariff Orders were not in accordance with the terms of respective MYT Regulations. The arguments of the Objectors are baseless and irrelevant under the facts and circumstances of the present case, for the reason given below:

- a) APTEL in the matter of Lafarge India Pvt. Ltd. v/s CSERC & another in Appeal No. 127 of 2013 vide its Order dated 13-03-2015, ruled that the provisions of Limitation Act, 1963 does not apply to the matters pending

before State Electricity Regulatory Commissions and Central Electricity Regulatory Commission.

- b) The correction of capital structure is flowing since FY 2011-12 wherein the wrong computations were done for the first time and thereafter occurred on year to year basis, as it continued to refer the same capital structure as base and computation methodology for subsequent years. During the course of preparation of instant Tariff Petition, its anomaly has been discovered by the Petitioner and cause of action discovered in FY 2011-12 needs to be corrected and only after that the Petitioner would be able to get its correct claim. CSPDCL's claim relies upon the principles of law determined by the Hon'ble High Court of Calcutta in the matter of Sanskar Dastidar V/s Banjulav Dastidar, that

*“Injury that continued thereafter was not continuation of cause of action but continuation of sufferance or damage resulting from the cause of action. Cause of action continued till date, which was admittedly within three years of filing written statement setting up counter claim. Held that counter claim was not barred by limitation”.*

- c) That in the stated case of CSPDCL, since the cause of action has first time arrived in the Tariff order of earlier years and continued till now leading to understatement of equity structure and causing two tier injuries, i.e., one-time claim of Rs. 120.96 crore as well as recurring understatement for future years.
- d) That while error/mistake in the capital structure is sought to be rectified for the first time in the current Petition, the correction is being sought from FY 2011-12 onwards, i.e., from the Financial Year when the error appeared for the 1st time and subsequently perpetuated to future years. The correction of this mistake/error will eventually impact the true-up revenue/gap surplus of the relevant years. CSPDCL requested the Commission to consider and approve the rectification of this error.
- e) Also, the carrying cost now claimed is nothing but the time value of the money, which otherwise would have been available with the Petitioner had the error/mistake in capital structure not been there in the first place itself at the time of true-up of respective years, which flows from the Judgement dated 9th October 2015 in Appeal No. 308 of 2013, wherein the Hon'ble APTEL ruled as under:

*“The Revenue Gap/Surplus are decided by the State Commission after hearing the Appellant. The calculation of Interest on surplus/carrying cost is only a mathematical calculation based on the principle of time value of money and hence there is no violation of principle of natural justice”.*

### **Commission’s View**

The Commission’s detailed views and ruling on CSPDCL’s request for restatement of the capital structure for FY 2011-12 to FY 2015-16 and related claims for increased amounts under interest on Loan, Depreciation and Return on Equity along with carrying cost, are elaborated in Chapter 6 of this Order.

#### **2.1.5 Applicability of Distribution Losses agreed under UDAY Scheme**

As per the CSERC MYT Regulations, 2015, the Distribution Loss trajectory for 33 kV and below system for CSPDCL for each year of the Control Period has been specified as under:

FY 2016-17 - 22.0%

...

FY 2018-19 - 20.0%

...

CSERC MYT Regulations (1<sup>st</sup> Amendment) effective from April 1, 2016 introduces the following proviso in Clause 71.3 of the Principal Regulations -

*“Provided that if the State Utility enters into an agreement with Government of India and/or Chhattisgarh Government and energy loss trajectory committed in this agreement is contrary to that as specified in this regulation, the energy loss trajectory agreed under the agreement shall prevail over the energy loss specified in this Regulations.”*

Under the UDAY MoU, the Distribution Losses have been agreed at significantly lower levels, as reproduced below:

*“1.3 (c) The CSPDCL shall endeavor to reduce AT&C Losses from 22.50% in FY2014-15 to 15% by FY2018-19 as per the following trajectory:*

<b>Year</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>AT&amp;C Loss</b>	21.00	18.93	18.00	15.00

CSPDCL in the present Petition has stated that the MoU cannot be recognized or accepted as an Agreement, and hence, the conditions/undertakings of UDAY do not fall within the scope of 1st Amendment to the CSERC MYT Regulations 2015. Accordingly, CSPDCL has not considered the targets specified under UDAY for computation of incentives/penalties for Distribution Losses.

The objector submitted that it is clear from the first amendment to the CSERC MYT Regulations, 2015 that the targets specified under the UDAY MoU shall prevail over the targets specified in the MYT Regulations. The amendments were brought in at a much later date after signing the UDAY MoU, and CSPDCL never agitated against the said provision earlier and hence, the intentions of CSPDCL are quite questionable.

The objector submitted that legally a MoU is also a type of Agreement although with relaxed provisions and following are the basic similarities/differences between the two:

- a) An Agreement refers to concordance between legally competent parties, which is generally negotiated. Conversely, MoU is a type of Agreement between legally competent parties, which is non-binding in nature.
- b) A MoU is referred to as a written legal document, which completely describes the principles of an arrangement between the two or more Parties forming a bilateral/ multilateral Agreement duly signed by the Parties.
- c) A MoU lacks legal enforceability, however, if any one of the Parties has done anything against the MoU and due to this the other Party has suffered any loss, then the aggrieved Party has the right to recover loss because the Parties are bound by estoppel.
- d) The elements of an Agreement are Offer and Acceptance while the elements of a MoU are Offer, Acceptance, Intention, and Consideration.
- e) An Agreement is of binding nature, whereas a MoU is binding upon the Parties if the MoU is signed in exchange for monetary consideration.

The objector submitted that while going through the MoU entered by CSPDCL with the Government of India and Government of Chhattisgarh under UDAY Scheme and its above said submissions, it was observed that the denial of CSPDCL to fulfill the objectives and target agreed under UDAY scheme raises serious questions on the intentions, reliability and credibility towards the reforms initiated under the EA 2003.

It is well understood that when the agreed MoU is silent on any penal provisions against total/partial failure towards achieving the defined objectives, CSPDCL is bound by the estoppel and its written acceptance towards the terms and conditions of the scheme. The rule of estoppel is codified in Section 115 of the India Evidence Act, 1872.

Intermittent relaxation of the target for reduction in AT&C Losses permissible under the MoU is a matter of consideration amongst the affected Party/Parties of the said MoU and since the said target is required to be achieved in its finality, this cannot be pleaded as ground for relaxation before the Commission.

The objector submitted that from the above submission of CSPDCL in the present Petition, it seems that it is neither confident of achieving the agreed targets nor does it have confidence in the Central and State Governments towards fulfillment of their respective commitments as per MoU. In this manner, CSPDCL is expressing lack of confidence in its owner, since it is a State-owned company.

The objector submitted that CSPDCL has submitted that it will not be prudent to link the target of AT&C Losses agreed under the UDAY MoU and trajectory of Energy Loss for 33 kV and below system specified by the Commission. This is technically not acceptable since the Distribution Loss for 33 kV and below is a part of AT&C Losses and any agreed target on AT&C Losses will automatically have impact on the determination of Distribution Losses.

Considering all above reasons and law-points involved, the objector requested the Commission to reject CSPDCL's prayer for not considering the AT&C Loss agreed by it under UDAY Scheme while allowing distribution losses at 33 kV and below for FY 2016-17, and also to reject the claim of incentive (share of gain) on account of reduction in Distribution Losses.

### **Petitioner's Reply**

CSPDCL submitted that it has raised the claim towards distribution losses as per the MYT Regulations, 2015 and its amendments. In the present case, the UDAY document is a tripartite understanding wherein other than CSPDCL, GoCG and Central Government are the signatories. In this context, the settled position of law regarding Memorandum of Understanding (MoU) as ruled by the Hon'ble Supreme Court in the matter of Monnet Ispat & Energy Ltd. v/s Union of India and others in Civil Appeal No. 3285 of 2009 on 26-07-2012 is that *"it is true that by the MoU entered into between the State Government and Monnet certain commitment were*

*made by the State Government but firstly, such MoU is not a contract as contemplated under Article 299 (1) of the Constitution of India and secondly in granting of Mining lease of a property of the State, The State Government has a discretion to grant or refuse to grant any Mining lease. Obviously, the State Government is required to exercise its discretion subject to the requirement of the law”.*

Accordingly, MoU need not be treated as an Agreement and therefore implications of the UDAY scheme may not be considered for the purpose of evaluation of performance of CSPDCL.

### **Commission’s View**

The Commission’s detailed views and ruling on the Distribution Loss levels to be considered for the trueing up for FY 2016-17 and the revised ARR for FY 2018-19, are elaborated in Chapter 6 and 7 of this Order.

#### **2.1.6 Revising the Capital Structure**

The objector submitted that while determining Closing Gross Fixed Assets (GFA), Capital Work in Progress (CWIP), Total Capital Expenditure (Capex), amount of Consumer Contribution and Grant for FY 2016-17, CSPDCL has taken different values, rather than the approved values in the True-up Order of FY 2015-16, as shown below:

<b>Particulars</b>	<b>Closing Value FY 2015-16, Rs Crore (True-up Order)</b>	<b>Opening Value FY 2016-17 taken by CSPDCL, Rs Crore</b>
Gross Fixed Asset (GFA)	5,159.28	5,159.00
Capital Work in Progress (CWIP)	1,586.88	2,273.74
Capital Expenditure (Capex)	6,746.16	7,432.74
Consumer Contribution & Grant	3,192.31	2,268.05

As a result, CSPDCL has computed higher value of Depreciation, Interest Cost and Return on Equity (RoE). Further, the amount submitted in the Petition for CWIP during FY 2016-17 differs from the Provisional Accounts submitted by CSPDCL as shown below:

<b>Particulars (in Rs. Crore)</b>	<b>Petition Form F3 page 119</b>	<b>Provisional Balance Sheet - Note 6.1(c)</b>
Opening Balance of CWIP (1.4.16)	2,273.74	1,971.48
Add: Fresh Investment During the year	1,364.52	-
Less: Total capitalization during the year	662.93	-
Closing Balance of CWIP (31.3.17)	2,975.33	1,971.48

From the above, it is clear that CSPDCL is submitting unauthenticated and contradictory data in the present Petition supported by Affidavit. The objector requested the Commission to apply prudence check on such calculations and to allow lower expenses considering the closing value of True-up of FY 2015-16 and the details of CWIP and Capitalization as per Provisional Accounts for FY 2016-17.

#### **Petitioner's Reply**

CSPDCL submitted that the aforementioned changes are due to correction in capital structure, which has resulted in consequential effects like depreciation, RoE, etc., as adequately detailed in the Petition itself.

CSPDCL added that all data has been submitted as per Provisional Accounts and as per proper computations.

#### **Commission's View**

The Commission has considered the closing values of GFA, CWIP, Consumer Contribution and Grants for FY 2015-16 as approved in the True-up Order, as the opening values for FY 2016-17. It is to be noted that the true-up of FY 2015-16 and of previous years have been done based on the audited accounts. The capital expenditure and addition to GFA have been considered based on the provisional Accounts for FY 2016-17. All capital related expenses have been computed accordingly. The Commission's calculations in this regard are elaborated in Chapter 6 of this Order.

#### **2.1.7 Discrepancy in quantum of sale of power and revenue**

The objector submitted that the quantum of sale of power and revenue as submitted by CSPDCL does not match within the Petition as shown below:



Particulars	Data-1	Data-2
HV & EHV Sale, MU	HV Sale 5,710.72 EHV Sale 2,654.77 Total 8,365.49 (Petition, Page 13)	8,361.75 (Petition, page 14)
EHV Sale, MU	2,654.77 (CSPDCL Petition, page 14)	2,667.72 (CSPTCL page 64-81) (including BSP Sale)
Revenue from Sale of Power, Rs Crore	10,725.78 (Petition, page 50)	10,789.02 (Pr. Balance Sheet, Note 8.1)

The objector submitted that it will not be justifiable and prudent to assess actual sale of power and its revenue on the basis of provisional and contradictory data. Hence, the Commission should direct CSPDCL for statutory audit and submission of reliable and authentic data before carrying True-up for FY 2016-17.

#### **Petitioner's Reply**

The HV and EHV sale amounts to 8,365.49 MU. CSPDCL stated that it would like to stick with Rs 10,725.78 crore as revenue from sale of power, as the balance revenue of Rs. 63.24 crore pertains to various items like fuse charges, reconnection fee, public lighting maintenance, service charges, load reduction charges, NSC Charges, meter testing charge, audit recoveries, maintenance charges feeder, Load reduction charges, etc., which has been considered under Non-Tariff Income.

#### **Commission's View**

In addition to the Petition, the Commission sought various other data from CSPDCL for verification. The Commission has undertaken the Provisional True-up for FY 2016-17 based on the available data and shall undertake the final true-up once the Audited Accounts are available. The Commission's analysis of head-wise expenses and revenue for the true-up for CSPDCL for FY 2016-17 are elaborated in Chapter 6 of this Order.

#### **2.1.8 Huge Increase in O&M expenses**

The objector submitted that a huge increase has been observed in O&M expenses of CSPDCL, as shown below:

<b>Particulars (Rs. Crore)</b>	<b>FY 2015-16 True-up</b>	<b>FY 2016-17 Approved</b>	<b>FY 2016-17 Claim</b>	<b>Increase over FY 2015-16</b>
Sales, MU	18,620.45	19,831.25	19,162.51	2.9%
O&M Expenses including contribution to P&G Fund	1,248.12	1,365.06	1,463.11	17.2%
Repair & Maintenance Expenses	121.91	125.95	190.10	55.9%
Administrative & General Expenses		135.52	153.28	13.1%

From the above, it is seen that CSPDCL has no control over its ever-rising expenses, but the sales have not increased in proportion to the rise in expenses. Hence, the UDAY Scheme is needed for CSPDCL but it is not committal towards the objectives of the Scheme even after deriving monetary benefit out of it. The objector requested the Commission to be vigilant over the ever-rising expenses, and while truing-up, such rise in expenses should be compared with the rise in sales, thereby examining the efficiency and cost parameters.

#### **Petitioner's Reply**

CSPDCL submitted that sales, employee costs, etc., are uncontrollable parameters. Further, the reasons for increase in controllable parameters are also detailed in the Petition itself. CSPDCL would also like to emphasize that monetary benefits of any scheme are not retained by CSPDCL but passed on to the consumers only.

#### **Commission's View**

The Commission has allowed the O&M expenses on normative basis and has shared the efficiency gain/(loss) between the actual O&M expenses and normative expenses, in accordance with the CSERC MYT Regulations, 2015, as elaborated in Chapter 6 of this Order.

#### **2.1.9 Share of loss on account of Increased O&M Expenses**

The objector submitted that CSPDCL, in the present Petition, has incorrectly excluded certain A&G expenses, while computing the sharing of gains/losses on account of O&M expenses.

### **Petitioner's Reply**

CSPDCL submitted that it has already explained in detail the uncontrollable nature of various expenses in the Petition itself and requested the Commission to consider the same.

### **Commission's View**

The Commission has shared the efficiency gain/(loss) between the actual O&M expenses and normative expenses, in accordance with the CSERC MYT Regulations, 2015, without excluding the heads of A&G expenses as proposed by CSPDCL, for reasons elaborated in Chapter 6 of this Order.

#### **2.1.10 Discrepancy in Cost of power purchased and quantum procured from CSPGCL and Central Generating Stations**

The objector submitted that:

- a) Per unit cost of Power purchased by CSPDCL from CSPGCL stations has increased by about 49% against the per unit cost approved by the Commission in the MYT Order. Similarly, the per unit cost of power purchased from the Central Generating Stations (CGS) by CSPDCL has increased by more than 8% against the per unit cost approved by the Commission in the MYT Order.
- b) Such hike/increase cannot be attributed to costly power purchase from Marwa Thermal Power Plant alone. Marwa TPP has also generated 203.42 MU of Infirm Power, which is available at Rs.1.50 per unit only as approved earlier by the Commission in similar cases.
- c) CSPDCL's submission of the quantum of power purchased from CGS and NSPCL as 7851.49 MU and 253.82 MUs does not reconcile with CSPTCL's submission of 7704.02 MU from CGS and 247.22 MU from NSPCL. Such discrepancy has resulted in a huge un-reconciled power purchase amount of Rs. 422.70 Crore.
- d) Power Purchase quantum from CSPGCL stations during FY 2016-17 is not reconciling with the quantum submitted by CSPGCL and CSPTCL in their respective submissions, as shown below:

<b>Power Station</b>	<b>CSPGCL</b>	<b>CSPTCL</b>	<b>CSPDCL</b>
DSPM	3,672.68	3,672.68	
HTPS	5,353.65	5,362.85	
Korba (W)	3,155.96	3,155.96	

Power Station	CSPGCL	CSPTCL	CSPDCL
KTPS	2,000.85	2,000.85	Not Submitted
Hasdeo-Bango	146.62	146.46	
Marwa (Infirm)		203.42	
Marwa (Firm)		2,170.75	
<b>Total</b>	<b>Not Submitted</b>	<b>16,712.97</b>	<b>16,727.30</b>

- e) Similarly, cost of power purchased from CSPGCL during FY 2016-17 shows a un-reconciled amount of Rs. 583.06 Crore, as shown below:

Particulars	Cost, Rs Cr
Revenue from Sale of Power (CSPGCL T.P. Pg. 89) (excluding Marwa)	4,473.41
Water and SLDC Charges	112.98
Marwa (Infirm) @1.50 (approved by Commission)	30.51
Marwa (Firm) @3.90 (approved by Commission)	846.59
Total	5,463.49
Power Purchase Cost submitted by CSPDCL	6,046.55
Difference (requires reconciliation)	583.06

- f) From the above, it is clear that a huge amount of Rs. 583 Crore requires reconciliation with CSPGCL Accounts, which is not submitted before the Commission along with True-up Petition for FY16-17. This un-reconciled amount of Rs. 583 Crore is over and above the reported un-reconciled amount of Rs.422.70 Crore, hence, total amount requiring reconciliation is as high as Rs. 1,005.76 Crore.
- g) From the submission made by CSPTCL in its Petition, it has been observed that CSPDCL has not procured any power from CGS like Hirakud, KSTPS II and KSTPS III since August 2016 in spite of having allocated quota of power. No reason has been specified for the same.

### Petitioner's Reply

CSPDCL has submitted the Provisional Accounts for FY 2016-17. If the Commission desires, it may further submit power purchase invoices of various CGS, which shows fixed and energy charge separately. CSPDCL added that in the MS Excel model shared with the Commission, it has also submitted separate fixed and energy cost of procuring power from CGS from April to September 2017, to work out realistic projections for FY 2018-19.

CSPDCL further submitted that it has deducted Rs 422.70 crore from the net power purchase cost to restrict its claim for the purpose of provisional true-up in line with the Provisional Accounts. Any deviation, whether positive or negative, post the reconciliation of power purchase cost and subsequent audit of the accounts will be submitted along with detailed justification at the time of final True-up of FY 2016-17.

### **Commission's View**

The Commission has undertaken the Provisional True-up for FY 2016-17 based on the available data and shall undertake the final true-up once the Audited Accounts are available along with all reconciled amounts. The Commission's analysis of power purchase quantum and cost for the true-up for CSPDCL for FY 2016-17 is elaborated in Chapter 6 of this Order.

#### **2.1.11 Higher cost of Renewable Power and lower quantum of Concessional Power**

The Objector submitted that:

- a) CSPDCL has purchased power from Biomass sources and solar power at Rs. 5.94/kWh and Rs. 6.90/kWh against Rs. 5.50/kWh and Rs. 6.50/kWh, respectively, approved by the Commission in the MYT Order.
- b) CSPDCL has purchased only 1561.66 MU at Rs. 1.92/kWh against the approved quantum of 2154.96 MU approved in the MYT Order. This reduced quantum of power purchase is causing an additional burden of Rs. 168 Crore to the consumers.
- c) The quantum of Power Purchase from Renewable sources submitted by CSPDCL is 1208.58 MU against the quantum submitted by CSPTCL as 1458.58 MU. Such a huge unreconciled power purchase quantum may cause additional burden on consumers by way of Renewable Purchase Obligation (RPO).

### **Petitioner's Reply**

The quantum and cost of power purchase from various sources is dependent on various external factors, which are beyond the reasonable control of CSPDCL. However, all the power purchase elements can be counter verified through the power purchase bills. Further, duly reconciled quantum and cost will be submitted for the approval of the Commission at the earliest along with relevant documentary proof.

### **Commission's View**

The Commission's analysis of power purchase quantum and cost for the true-up for CSPDCL for FY 2016-17, including the issue of lower purchase of concessional power and the higher rate of purchase from RE sources, is elaborated in Chapter 6 of this Order.

#### **2.1.12 Discrepancy in Sale of Surplus Power**

The Objector submitted that:

- a) CSPDCL has shown lower realization from sale of Surplus Power at Rs. 3.72/kWh in its Petition as compared to the average realization of Rs.4.04/kWh approved in the MYT Order for FY 2016-17.
- b) Similarly, the entry booked against the sale of surplus power in the provisional Accounts is Rs. 1234.88 Crore as against Rs. 1037.19 Crore submitted by CSPDCL in its Petition. This difference of approximately Rs. 198 Crore may cause an additional burden on the consumers.
- c) CSPDCL has not submitted the detailed break-up of such sale of Surplus Power, hence, it is difficult to apply prudence check on claim of lower realization. Sale of such Power to Kerala at Rs.4.40 per unit and an average realization of only Rs.3.72 per unit give space for suspicion.

### **Petitioner's Reply**

CSPDCL submitted that the revenue from sale of surplus power depends on market rates over which CSPDCL has no control. Also, relevant account books are submitted to the Commission for prudence check.

### **Commission's View**

The CSPDCL was directed in the previous tariff orders to maintain the accounts in such a way that UI charges for over-drawal and under-drawal from regional pool be reflected separately. Similarly, the state UI pool for over-injection and under-injection be also incorporated in the accounts. It was also directed that the VCA charges and trading of electricity be shown separately in the accounts. It is very unfortunate to note that even after the repeated directions the accounts are not prepared as per the directives and regulatory requirements. This creates a confusion among the stakeholders and it is also difficult for the Commission to analyze the data properly. During the TVS the licensee was again directed to submit the break-up. Thereafter, the Commission has undertaken the Provisional True-up for FY 2016-17 based on the

available data and shall undertake the final true-up once the Audited Accounts are available along with all reconciled amounts. The Commission's analysis of power purchase quantum and cost for the true-up for CSPDCL for FY 2016-17 is elaborated in Chapter 6 of this Order.

### **2.1.13 Understating the Intra-State Transmission losses and discrepancy in total Transmission Cost**

The Objector submitted that:

- a) CSPDCL in its additional submission has accepted that it has considered Intra-State Transmission loss at the end of CSPTCL as 3.22% instead of actual loss of 2.81%. Concealment of actual intra-State Transmission Loss may have an impact of about 83 MU costing about Rs.32 Cr at average power purchase cost.
- b) It is observed that there is a discrepancy in the intra-State and total Transmission Cost claimed by CSPDCL in its True-Up Petition which is as under:

<b>Particulars</b>	<b>Amount (Rs.Cr)</b>
Intrastate Transmission Cost claimed by CSPDCL	835.41
Intrastate Transmission Cost claimed by CSPTCL in its Petition (Pg. 39)	823.49
Excessive Claim by CSPDCL	11.92
Total Transmission Cost claimed by CSPDCL	1,162.93
Total Transmission Cost as per Provisional Balance Sheet, Note No.9.1	1,250.49

### **Petitioner's Reply**

CSPDCL has already provided the details of intra-State and inter-State Transmission Losses in the 'W' worksheet of the MS Excel model shared with the Commission. CSPDCL added that losses on 33 kV and below network are computed considering only following 4 factors:

- Generators injecting power directly to Distribution Network (MU)
- Sum of joint meter reading taken by CSPDCL and CSPTCL at 33 kV (Import Only)(MU)
- Import at inter-State interface with Madhya Pradesh at 11 kV
- Export at inter-State interface with Madhya Pradesh at 11 kV

Thus, losses of CSPTCL has practically no bearing on the distribution losses below 33 kV as claimed by CSPDCL.

### **Commission's View**

The objections were examined and the details were asked from the CSPTCL. As per the provisional accounts the break-up of the revenue demanded from the users of CSPTCL were examined and is shown in Chapter 4 of the order. Applying the prudence check the Commission has undertaken the Provisional True-up for FY 2016-17 based on the available data and shall undertake the final true-up once the Audited Accounts are available along with all reconciled amounts. The Commission's analysis of Energy Balance and Transmission Charges for the true-up for CSPDCL for FY 2016-17 is elaborated in Chapter 6 of this Order.

#### **2.1.14 Deviation in actual and booked contribution to the Pension and Gratuity Fund**

The Objector submitted that:

- a) CSPDCL has submitted in the Petition that it has paid Rs. 298.80 Cr towards Contribution to Pension & Gratuity Fund as the same was approved by the Commission in the Tariff Order. However, the provisional Balance Sheet reveals actual contribution of Rs. 1233.19 Crore.
- b) CSPDCL has borrowed additional funds from Banks for Working Capital and is bearing huge interest cost on it. CSPDCL has transferred huge additional amount of Rs.934.39 Cr to Pension & Gratuity Fund and is now paying a huge interest amount of Rs.67.60 Cr on borrowing as Cash Credit Limit or Working Capital. Such financial irregularity shall prove dangerous to CSPDCL and any ill-effect will have to be borne by the consumers ultimately.

### **Petitioner's Reply**

CSPDCL submitted that the actual contribution to P&G fund is strictly as per the approvals of the Commission only.

### **Commission's View**

The Commission has considered only the actual amount of Contribution to Pension & Gratuity Fund in FY 2016-17, i.e., Rs. 298.80 Crore, rather than the amount including provisioning towards Pension & Gratuity Fund, in line with the practice of not considering provisioning of expenses. The Commission has allowed the Interest on Working Capital on normative basis only, and actual borrowings of CSPDCL have not been factored into the tariff.



### **2.1.15 Computation of Working Capital and Interest thereon**

The Objector submitted that:

- a) While calculating the Working Capital requirement, CSPDCL has considered Rs. 963.91 Crore as its receivables equal to one month of the expected revenue from sale of power, which translates to revenue from sale of power during FY 2016-17 of Rs. 11566.92 Crore. However, the revenue from sale of power as submitted by CSPDCL in the present Petition is Rs. 10725.78 Crore for FY 2016-17.
- b) The Revenue from sale of power during FY 2016-17 as submitted by CSPDCL is Rs. 10725.78 Crore against the actual revenue of Rs. 10789.02 Crore as per the Provisional Balance Sheet.

#### **Petitioner's Reply**

CSPDCL submitted that working capital requirement is computed on normative basis and requested the Commission to take prudent view on the same.

#### **Commission's View**

In response to a query from the Commission, CSPDCL clarified that the revenue of Rs. 10789.02 Crore shown in the Provisional Accounts includes an amount that has been considered under NTI by CSPDCL. The Commission has accordingly considered the Revenue from Sale of Power and NTI, as shown by CSPDCL in its Petition, as the same is consistent with the figures shown in the Provisional Accounts.

The Commission has computed the Working Capital requirement for FY 2016-17 on normative basis only, and one month of actual revenue considered by the Commission, has been included in the Working Capital requirement.

### **2.1.16 Reduction in Non-Tariff Income**

The Objector submitted that CSPDCL has submitted Non-Tariff Income of Rs. 201.99 Crore only which is much lower than the Rs. 322.83 Crore approved by the Commission in the Tariff Order for FY 2016-17. CSPDCL has not provided any reasons for such a huge variation of around 37.4% from the approved projections.

#### **Petitioner's Reply**

CSPDCL submitted that NTI is essentially a non-regular and additional source of income. However, most of the heads covered under NTI are not fixed in nature and thus cannot be considered as recurring source of income. For example, net income

from sale of scrap, interest on fixed deposits receipts, supervision charges, recovery from staff, load reduction charges, miscellaneous charges, recovery from theft of electricity, etc., are dependent on prevailing market conditions and consumer requirements and thus cannot be fixed at a particular level for the purpose of recovery/income.

### **Commission's View**

The Commission has considered the NTI based on the figures shown in the Provisional Accounts, for the purposes of provisional true-up for FY 2016-17.

### **2.1.17 Turnaround of CSPDCL and its progress under UDAY Scheme**

The Objector submitted that:

- a) The UDAY scheme, as a tri-partite agreement between GoI, GoCG and CSPDCL, has been introduced to bring reforms and turnaround the financial health of CSPDCL by infusing more funds and several facilities and in turn CSPDCL has committed to achieve certain targets for technical and financial efficiency. Contrary to it, CSPDCL's performance witnessed a lower growth in all the parameters of technical and financial efficiency, as shown below:

<b>Particulars</b>	<b>FY16-17 approved by Commission</b>	<b>FY16-17 Actual Results</b>	<b>Deviation</b>	<b>Growth over FY15-16</b>
Sales (MU)	19,831	19,162	(-)3.4%	(+)2.9%
Expenses (Rs Cr) (other than Power Purchase)	1,834.71	1977.56	(+)7.8%	(+)11.8%
Standalone Profit/ (Deficit)	873.52	(841.16)	1,714.68	(823.11)
Av Billing Tariff Rate (Rs/kWh)	6.04	5.60	(-)7.3%	(+)16.7% [4.80]
AT&C Losses	19.50% (UDAY)	23.45%	(+)20.3%	

### **Petitioner's Reply**

Not submitted.

### **Commission's View**

The Commission has undertaken the provisional true-up for FY 2016-17 based on available Provisional Accounts and after due prudence check, based on available data. The final true-up for FY 2016-17 shall be undertaken after submission of the Audited

Accounts by CSPDCL. The UDAY MoU has been duly factored into the computations, as elaborated in Chapter 6 of this Order.

### 2.1.18 Preparation of R-15 and status of defective meters and Assessed Billing cases

The Objector submitted that:

- a) It has been observed that that there is no uniformity in the submission of CSPDCL with respect to R-15, several data like number of Stopped and Burnt Meters and number of Assessed Cases are intentionally hidden so that it is very difficult to have an ‘Bird’s Eye-view’ to have an overall picture of distribution system. There are also several data-based and calculation errors due to which the very purpose of preparing R-15 has been lost.
- b) Moreover, R-15 (Annual) for FY 2016-17 submitted along with present True-up Petition differs largely from the R-15 (7 months) submitted previously along with the Tariff Petition for FY 2017-18, which indicates that R-15 for FY 2016-17 is being manufactured.
- c) The Commission through its previous Tariff Orders had directed CSPDCL several times to reduce the number of billing based on assessed cases and bringing down the defective meters in the range of 2-2-5%, which is not abided by CSPDCL. Ignoring directives from the Commission, CSPDCL is trying hard to conceal such important information but the data submitted in R-15 for FY 2016-17 (7 months) along with the Tariff Petition for FY 2017-18 reveals quite alarming facts, as shown below:

Revenue Category	No of Consumers	Assessed Cases			Defective Meters		
		Number	FY 15-16	FY 16-17	Number	FY 15-16	FY 16-17
BPL Consumer	15,50,793	8,46,301	57%	55%	66,550	4.3%	4.3%
Other Domestic	22,35,487	1,89,568	5%	8.5%	1,13,837	3.3%	5.1%
Non-Domestic	2,90,551	9,786	2%	3.4%	7,638	2.1%	2.6%
Agriculture	3,74,260	2,53,424	61%	68%	27,988	7.2%	7.5%
<b>TOTAL LT</b>	<b>45,99,634</b>	<b>13,39,236</b>	<b>28%</b>	<b>29%</b>	<b>2,19,678</b>	<b>3.8%</b>	<b>4.8%</b>

- d) Data from LT R-15 and its analysis shows that CSPDCL is not sure about actual Energy Consumption and in large number of cases, billing is done on assessment basis. Hence, it is also obvious that Meter Reading is not done on regular basis. Number of Defective Meters is looming large and increasing in spite of several directives and orders from the Commission.

- e) It is also observed that R-15 format is being prepared by CSPDCL using SAP Software and the Commission is not authorized to look directly into the data fed into SAP system. Hence, the Commission should inspect SAP data directly and regularly for better feedback and control.

### **Petitioner's Reply**

Not submitted

### **Commission's View**

The Commission is deeply concerned about the high and increasing number of defective meters and assessed cases, which shows that the sales figures submitted by CSPDCL are not metered sales, but largely assessed sales, especially for LT agriculture and BPL category consumers. It is surprising that based on the such large assessed sales the licensee is claiming to achieve the energy loss target and claiming an incentive for the same. The Commission has asked the CSPDCL to clarify the position regarding the same, but no reply was submitted by CSPDCL. This shows that the licensee itself is not in a position to justify its claim. The Commission has dealt this issue appropriately in detail and is elaborated in Chapter 6 of this Order.

### **2.1.19 Discrepancy in Adjusting the surplus from True-up of CSPGCL, CSPTCL & CSLDC**

The Objector submitted that:

- a) In the present Petition, CSPDCL has adjusted the surplus revenue from the True-up Petition of CSPGCL, CSPTCL and CSLDC for FY 2016-17, which is not reconciling with the True-up Petition submitted by these entities, as shown below:

<b>Entity</b>	<b>True-up Petition of Entity, Rs. Crore</b>	<b>Adjustment of Revenue Surplus by CSPDCL, Rs. Crore</b>	<b>Difference</b>
CSPGCL	257.40 With carrying cost	122.05	(-)135.35
CSPTCL	18.61 without carrying cost	18.61	Carrying cost
CSLDC	0.74 Without carrying cost	0.74	Carrying cost

### **Petitioner's Reply**

Not submitted

### **Commission's View**

The Commission has considered appropriately the Revenue Gap/(Surplus) after provisional true-up of CSPGCL, CSPTCL, CSLDC, and CSPDCL for FY 2016-17, as elaborated in Chapters 3, 4, 5, and 6, respectively. These Revenue Gap/(Surplus), with due carrying/holding cost for 2 years, have been considered for computing the cumulative Revenue Gap/(Surplus) of CSPDCL for FY 2018-19, as elaborated in Chapter 8 of this Order.

#### **2.1.20 Computation of Rate of Return on Equity (RoE)**

The Objector submitted that the Commission, while computing the RoE in the MYT Order, has not considered grossing up RoE with MAT Rate and has considered 15.5% as RoE for the Control Period. In case CSPDCL actually pays Income Tax for any year of the Control Period, then the rate of RoE shall be appropriately grossed up at the time of truing up for that year. Since CSPDCL has not paid any Income Tax during FY 2016-17 and hence, it is erroneous to consider RoE as 16%.

### **Petitioner's Reply**

Not submitted.

### **Commission's View**

The Commission has considered the rate of RoE as 16% for FY 2016-17, in accordance with the MYT Regulations, 2015, without grossing up for MAT rate, as CSPDCL has not paid any Income Tax in FY 2016-17.

#### **2.1.21 Erroneous presentation of Banking of Power**

The Objector submitted that:

- a) It has been observed that the quantum of Banked Power is quite high and is purchased in one year and used/sold in later years or vice-versa. Amount of such power may be Rs. 800 Cr to Rs. 1,000 Cr evaluated at Average Power Purchase Cost. If the quantum and cost of such Banked Power is not accounted in the same Financial Year, it is going to create several problems like accounting and statutory lapses, viz.,
  - a. Banked Power is Stock in Hand (positive or negative, as the case may

- be) and it should be accounted in the Balance Sheet and Profit/Loss Account of CSPDCL.
- b. By not accounting the quantum and cost of such Banked Power in the same financial year, Revenue Surplus or Deficit may be siphoned to the coming years, which will create artificial Stand-alone Profit/ Loss for that particular Financial Year.
  - c. It is against the basic principles of accounting and Accounting Standards being followed.
  - d. It is against the statutory provisions of Income Tax.
- b) It should further be noted that Himachal Pradesh Electricity Board Ltd (HPSEB) is also accounting such Banked Power in the same Financial Year.
  - c) It is also observed that CSPDCL has not provided the details of such Banked Power like Banking Partner/s, Banked Quantum, Date and Time of such Banked Quantity, effective UI Rates on such time, Agreed Date and Time for Reverse Banking, etc., along with the present True-up Petition, hence, it is not possible to ascertain the benefits derived from such methodology.

### **Petitioner's Reply**

Not submitted.

### **Commission's View**

The Commission agrees with the objector that the details of the Banking should be properly maintained in detail and clearly incorporated in the petition. It is expected that the banking transactions are carried out in a transparent manner, so that there is no confusion regarding the same.

In this Order, the Commission has given certain directives to CSPDCL regarding accounting for Banked Power and for submission of the necessary data along with the Petition for final true-up for FY 2016-17, and the benefits should reach to CSPDCL and its consumers.

## **2.2 Objections on Proposals for Annual Revenue Requirement for FY 2018-19 of CSPDCL**

### **2.2.1 Reduction of Retail Tariff of all Categories by 10%**

The Objector submitted that:

- a) In the present Petition, CSPDCL has estimated a huge stand-alone Revenue Surplus of Rs. 2,476.22 Cr during FY 2018-19 at the existing level of Retail Tariff. CSPDCL has also proposed to increase Retail Tariff of all Categories by 5 paise/ kWh in order to recover remaining amount of Revenue Deficit.
- b) The existing level of Retail Tariff is substantially high and consumers, specially Industries, are unable to bear such high cost of electricity supply. The GoCG has acknowledged this fact very well and has provided External Subsidy to Steel Industries, Agriculture Pumps, BPL Consumers, etc.
- c) It is also observed that in FY 2019-20, CSPDCL shall earn a huge Revenue Surplus at the existing level of Retail Tariff and there shall be no Carry Forward Revenue Deficit of previous years, hence, a reduction of about 20% in Retail Tariff may occur in FY 2019-20.
- d) It is suggested that Carry Forward Losses from FY 2016-17, of Rs. 2,585 Crore as claimed by CSPDCL, should be recovered into 2 parts, i.e., to reduce retail tariff of all consumers by 10% from existing levels in FY 2018-19 and remaining in FY 2019-20 along with carrying cost, so that Retail Tariff can be stabilized at least for 2 years.

### **Petitioner's Reply**

CSPDCL submitted that the proposal for carrying forward losses of FY 2016-17 in 2 years is against the provisions of MYT Regulations, 2015 wherein true-up of ARR has to be filed on year to year basis, which is also subjected to prudence check by the Commission under scrutiny of controllable parameters.

### **Commission's View**

The Commission has considered the Revenue Gap/(Surplus) after provisional true-up of CSPGCL, CSPTCL, CSLDC, and CSPDCL for FY 2016-17, as elaborated in Chapters 3, 4, 5, and 6, respectively. These Revenue Gap/(Surplus), with due carrying/holding cost for 2 years, have been considered for computing the cumulative Revenue Gap/(Surplus) of CSPDCL for FY 2018-19, as elaborated in Chapter 8 of this Order. The category-wise tariffs have been determined accordingly, in order to recover the cumulative revenue requirement of CSPDCL for FY 2018-19, as approved by the Commission in this Order.

### 2.2.2 Sales Forecast

The Objector submitted that:

- a) The R-15 for FY 2017-18 (6 months) suggests a total sale of 10,502.07 MU while the Annual Forecast for FY 2018-19 is 21,759.49 MU, amounting to an estimated increase of only 3% over FY 2017-18, which seems to be insufficient.
- b) R-15 for FY 2017-18 (6 months) suggests a sale of 6,203.9 MU in LT Categories while the Annual Forecast for FY 2018-19 is 12,600.56 MU, amounting to an estimated increase of only 1.5% over FY 2017-18. Looking into the increase in BPL consumers and Agriculture Pump Connections, it seems to be insufficient.
- c) R-15 for FY 2017-18 (6 months) suggests a sale of 564.70 MU to BPL Domestic Category while the Annual Forecast for FY 2018-19 is 336.51 MU, which seems to be erroneous.
- d) R-15 for FY 2017-18 (6 months) suggests a sale of 2,709.88 MU in Domestic Category including BPL, while the Annual Forecast for FY 2018-19 is 5,475.91 MU, which amounts to an estimated increase of only 1% over FY 2017-18. Looking into the increase in consumers, it seems to be insufficient.
- e) R-15 for FY 2017-18 (6 months) suggests a sale of 240.22 MU in LV-5 Industry Category, while the Annual Forecast for FY 2018-19 is 562.94 MU, which amounts to an estimated huge increase of 17% over FY 2017-18. Looking into the past records and very high tariff and other problems faced by this category, it seems to be impossible.
- f) R-15 for FY 2017-18 (6 months) suggests a sale of 1,080.96 MU in HV-3 Other Industrial & General-Purpose Category, while the Annual Forecast for FY 2018-19 is 2,510.80 MU, which amounts to an estimated huge increase of 16% over FY 2017-18. Looking into very high tariff of this category, it seems to be impossible.
- g) R-15 for FY 2017-18 (6 months) suggests a sale of 2,276.37 MU in HV-4 Steel Industries Category while the Annual Forecast for FY 2018-19 is 4,518.11 MU, which amounts to an estimated decrease of about 1% over FY 2017-18. Looking into the external tariff subsidy by the State Government and other initiatives for rationalization of tariff and various incentives, the estimation of decrease in the consumption of HV-4 Steel Industries seems to be erroneous and unrealistic.



### **Petitioner's Reply**

Not Submitted.

### **Commission's View**

The Commission has projected the category-wise sales for FY 2018-19 based on the actual sales in previous years, the appropriate Compounded Annual Growth Rate (CAGR), and actual sales in the first half of FY 2017-18, as elaborated in Chapter 7 of this Order.

#### **2.2.3 Energy Loss**

The Objector submitted that:

- a) In the Tariff Petition for FY 2018-19, CSPDCL has considered the Distribution Loss below 33 kV as 20% and Distribution Loss including EHV sales as 17.93%. However, being a signatory to the tri-partite MoU between GoI, GoCG and CSPDCL under UDAY scheme, CSPDCL made a commitment to reduce the AT&C losses as prescribed in the MoU. For FY 2018-19, the agreed AT&C losses under UDAY scheme is 15% and should be considered by the Commission.

### **Petitioner's Reply**

Not Submitted.

### **Commission's View**

The Commission's detailed views and ruling on the energy Loss levels to be considered for the truing up for FY 2016-17 and the revised ARR for FY 2018-19, are elaborated in Chapter 7 of this Order.

#### **2.2.4 Inter-State Transmission Losses**

The Objector submitted that:

- a) In the present Petition for FY 2018-19, CSPDCL has suggested to consider actual weighted average transmission loss of last 12 months of Western Region from August 2016 to July 2017, which is 3.63% as reported by CSPDCL.
- b) When the Petition was submitted in the month of December 2017, considering losses up to July 2017 is not judicious and the period considered is overlapping with that considered in previous Tariff Order FY 2017-18. The

Commission is requested to approve inter-State Transmission Losses as 3.52%, which is actual average yearly loss from the WRLDC website against the claimed losses of 3.63% by CSPDCL.

**Petitioner's Reply**

Not Submitted.

**Commission's View**

The Commission has considered the inter-State transmission losses of 3.66%, based on the actual inter-State transmission losses in FY 2016-17, for the purpose of projecting the Energy Requirement for FY 2018-19, which shall be trued up based on actuals subsequently.

**2.2.5 Power Purchase from Marwa TPP of CSPGCL and subsequent Inter-State Sale**

The Objector Submitted that:

- a) The Commission in the MYT Order for FY 2016-17 stated that Power generated from Marwa is considered as being sold inter-State at the rate of Rs.4.40 per kWh in FY 2016-17 and considered as being sold to Telangana from FY 2017-18 onwards, at a trading margin of 7 paise/kWh. However, in the present Petition for FY 2018-19, CSPDCL has proposed to sell such power procured from Marwa TPP at a rate of Rs.3.90 per kWh, without any trading margin. Moreover, the statutory and other charges such as water charges, CSLDC charges, intra-State transmission charges, intra-State transmission losses, Start-up Power Charges, and P&G Fund Contribution are loaded on retail consumers, contrary to the Order of the Commission.
- b) Further, FCA Charges for Marwa TPP were also recovered from retail consumers. When consumers objected to the recovery of such FCA Charges from retail consumers, CSPDCL accepted its mistake and allowed an adjustment, without giving any detailed calculations of such adjustments.

**Petitioner's Reply**

Not Submitted

**Commission's View**

The sale of energy to Telangana has commenced in FY 2017-18. Therefore, during truing up of FY 2017-18, the issues raised would be addressed protecting the interest of consumers of State.

## **2.2.6 Retail Tariff Proposals for Mini-Steel Plants under HV-4 Steel Industries Category**

The Objector submitted that:

- a) Mini-Steel Plants working within Chhattisgarh and drawing electricity from CSPDCL are facing very stiff competition from other Steel Hubs in the country like Jharkhand, Orissa, West Bengal (DVC), Punjab, etc. other States like Madhya Pradesh and Gujarat are also providing cheaper electricity to attract such industries within their States. Moreover, Steel Plants having Captive Generation within the State and Steel Plants situated in Jindal Park, Raigarh (Chhattisgarh) are also posing a great threat to the survival of such Mini Steel Plants.
- b) Such Mini Steel Plants are able to survive only with the help of external subsidy from the GoCG, but there is a question about how long such support will continue, as such subsidy is available for 6 months only, although extended three times.
- c) A close comparison of retail tariff for Mini-Steel Plants in States such as Orissa, Jharkhand, Madhya Pradesh, Punjab and Gujarat indicate that sincere efforts have been made to keep the effective retail tariff of Mini Steel Plants below Rs. 5.00 per kWh. The Commission is requested to design the retail tariff for Mini-Steel Plants category in a manner so that the effective tariff for this category could be reduced.
- d) Carry forward of losses for FY 2016-17 in 3 years so that the same benefit can be passed on to all the consumers in FY 2018-19.
- e) Reduce ABR for HV-4 from Rs.7.62/kWh proposed at present.
- f) Allow Load Factor incentive from 50% to 69% at 1% for every 1% increase in load factor instead of from 60% to 79% as proposed by CSPDCL. This will have minimum impact on revenue as also provide relief for many industries in HV-4 category.
- g) Increase 'planned Load Shedding hours' as proposed by CSPDCL from 30 hours to 60 hours, for the purpose of computation of Load Factor.
- h) Increase night TOD discount to 25% from 10% at present.
- i) Reduce Demand Charges from Rs.375 per kVA to Rs.200 per kVA.

- j) Make separate category for Power Intensive Steel industry having above 50% Load Factor. This will enable directed incentives to this power intensive sector for the benefit of all.

### **Petitioner's Reply**

CSPDCL submitted that the proposal of carrying-forward losses of FY 2016-17 in 2 years is against the provisions of MYT Regulations, 2015 wherein true-up of ARR has to be filed on year to year basis, which is also subjected to prudence check by the Commission under scrutiny of controllable parameters.

### **Commission's View**

The Commission's detailed tariff philosophy and categorization is elaborated in Chapter 8 of this Order.

### **2.2.7 Suggestions/Objections on Retail Tariff Proposal for FY 2018-19**

The Objector suggested that:

- a) A separate Tariff Category/Sub-category for Power Intensive Steel Industries, consuming more than 10 lakh units every month or maintaining an average Load Factor above 50%, like Mini Steel Plants, etc., should be formed in order to monitor their problems and subsequent resolution effectively.
- b) Demand Charges should be reduced to Rs.200 per kVA per month from the present level of Rs.375 per kVA per Month. Energy Charges should also be reduced so that the effective retail tariff of Mini Steel Plants comes below Rs.5.00 per kWh, in order to be competitive with other States.
- c) Effective night tariff under ToD Tariff is also highest although CSPDCL has surplus power during most of the time in the year, which is surrendered to the grid at a very low realization of Rs.1-2 per kWh. Hence, ToD Incentive during Off-Peak Hours should be increased to earlier level of 25%.
- d) Looking into varying surplus in off-peak hours around the year, incentive can be designed on Punjab Pattern, where incentive increases with the availability of surplus power.
- e) Load Factor Incentive should be given from a Load Factor of 50% in a step-wise manner with a capping of 20% maximum.
- f) Load Factor should be computed on Maximum Demand (MD) instead of Contract Demand (CD).

- g) In the present Petition, CSPDCL has proposed to consider 30 hours as power-off hours every month, which should be increased to 60 hours looking into frequency of load shedding, power cuts and shut down during weekly maintenance day.
- h) Relief of 20% in the Contract Demand (i.e., permission to run at 120% of CD during off-peak hours without attracting any penal charges) should be continued, but ToD Tariff should be made applicable on such excessive consumption.

### **Petitioner's Reply**

CSPDCL submitted that:

- a) The suggestion to create a separate tariff category for power intensive industries on the basis of consumption is unfounded because existing sub-category in HV-4 Steel Industries is divided upon criteria of supply voltage and Load Factor, wherein Load Factor is an indirect parameter to control the consumption. Since the existing tariff structure itself has a control on consumption of units, hence, there is no need to have a separate tariff categorization.
- b) The proposal to reduce Demand Charges to Rs. 200/- per kVA from Rs. 375/- per kVA on monthly basis and Energy Charges suitably to result in average billing rate of Rs. 5/- per kWh is without any study and basis. Tariff structure prevailing in few States cannot be taken as a basis for retail tariff design in this State. CSPDCL has submitted a retail tariff proposal having an inbuilt Load Factor incentive mechanism leading to a rebate of maximum 20% in Energy Charges. By doing so, the effective tariff of this category would come down to below average cost of supply, which in turn benefits the Steel Industries.
- c) Further, the Objector has relied upon the average realization rate of unscheduled interchange (UI) under-drawal for determination of night-time tariff under TOD, which is baseless because CSPDCL ought to carry surplus power during off peak hours on 24x7 basis for the purpose of assuring availability to consumer. It may be appreciated that climatic changes / weather conditions affect the balance between availability and demand thereby leading to circumstances wherein under-drawal is caused. This is inevitable under the grid conditions and beyond the control of the Distribution Licensee. However, under the approved practice, since UI itself is a result of events, which are beyond the scope of planning, the same cannot be relied as a ground to design the tariff for retail supply.

- d) In the present Petition, the limit of Load Factor incentive has been reduced from 65% to 60%. This change is proposed to cover more number of consumers in the scope of incentive. The Objector's proposal to consider a Load Factor of 50% for the purpose of incentive is without any technical study or experience. Further any incentive is commercially viable provided it guarantees an optimum level of performance. The base line of 50% for this purpose is incorrect and therefore, should not be relied upon.
- e) The proposal of the objector to evaluate Load Factor on Maximum Demand instead of Contract Demand is against the Terms & Conditions of Supply between the Licensee and the consumer. The Contract Demand is a legal understanding between the consumer and the Licensee, while the Maximum Demand is a variable depending upon the usage of electrical gadgets by the consumer. The Load Factor is a calculation based upon the ability of the consumer to avail its Contract Demand that results into electricity consumption recorded in the meter.
- f) The proposal of CSPDCL to consider 60 hours as power off hours for the purpose of calculation of Load Factor is based upon system reliability of supply to this category of HT consumers. Therefore, proposal given by the objector, which has no basis, should not be relied upon.

### **Commission's View**

The Commission's detailed tariff philosophy and categorisation are elaborated in Chapter 8 of this Order.

### **2.2.8 Retail Tariff proposal for Low Load Factor Steel Rolling Mills under HV-4 Steel Industries Category**

The Objector submitted that:

- a) As per R-15 for FY 2015-16 and FY 2016-17 (from April to October) submitted by CSPDCL, it is clear that average Load factor for LLFI Steel Rolling Mills is above 17%. It is also evident in the Commission's Tariff order for FY 2017-18, where the approved average Load Factor for FY 17-18 was 24%.
- b) The Commission has prescribed a capping of only 15% for lower demand charges. Approving a capping above normal higher values would have been judicious but as a result of Commission's previous orders, such Low Load Factor Industries are denied from availing lower demand charges as decided

by the Commission itself in its previous orders.

- c) CSRA has carried a survey amongst some of its members availing Low Load Factor Industries Tariff, which shows that there were only 8% consumers who were always below 15% Load Factor during FY 2016-17, but which has increased to 28% in FY 2017-18. It is because of the capping that the consumers having Load Factor near 15-17% are trying to curtail their production and electricity consumption due to the capping of 15% as crossing it would result in huge monetary burden for them. Thus, such erroneous capping of 15% has initiated a negative trend in several consumers who are just above it and who were earlier billed at lower demand charges in earlier energy bills but are now finding themselves helpless and are suffering huge monetary loss.
- d) It may be noted that if Load shedding/No-load condition is also taken into account while computing the average Load Factor, it shall further increase well above 17%. It is also to be noted that CSPDCL is not providing the details of such power-off hours along with the monthly energy bills. It is observed that power-off hours during night hours are also taken into account in the case of stand-alone steel Rolling Mills who are known to be single shift production industry and do not generally work during night hours, hence, such practice is illogical and not judicious.
- e) As per the consumption during FY 2016-17, about 92% of such low Load Factor consumers would suffer due to such imposition of 15% capping on Load Factor. Hence, it is requested that capping of 30% on Load Factor to avail lower demand charges would be justifiable as majority of such low Load Factor steel rolling mills would be covered under it.
- f) The average tariff of Rs. 9.06/kWh for such low Load Factor industries is about 158% of the Average Cost of Supply (ACoS) of Rs. 5.72/kWh, as the Tariff Order for FY 2017-18 and hence, the tariff for Low Load Factor Steel Rolling Mills is not within the band of +20% of the ACoS, which is a declared objective of the Commission.
- g) The Average Billing rate (ABR) of such Low Load Factor Steel Rolling Mills is not only the highest amongst all the consumers within Chhattisgarh but is second highest among the Industrial States such as Maharashtra, Orissa, Punjab, MP, Gujarat and others in the 20% Load Factor category.

## **Petitioner's Reply**

CSPDCL submitted that:

- a) The prayer of notifying a sub-category for Rolling Mill is baseless because the Commission has taken into consideration the basis of Load Factor to sub-categorize HV-4 tariff category. The limit of 15% is arrived on the basis of historical data obtained from the Revenue Statements provided by the Distribution Licensee as input during the tariff proceedings. The Applicant under the garb of capping Load Factor from 15% to 30%, wants the benefit of lower demand charges of Rs. 100/- per kVAh up to a Load Factor limit of 0 to 30% without giving justified reasons. The re-determination of Load Factor capping from 15 to 30% would have commercial implications on the Petitioner's revenue.
- b) It can be verified from the records that the Petitioner has supplied at a reliability index of more than 99% to the aforesaid category of consumers. In this way, optimum utilization of Contract Demand by a Steel Rolling Mill operating under single shift justifies the limit of 15% load factor.
- c) Average billing rate for HV-4 tariff categories claimed in the Petition shows that the proposed tariff for this consumer category is within the limits of 120% of average cost of supply.
- d) The Electricity Bill is a statement comprising commercial information in accordance with the approved Supply Code. Information about power-off hours can be evaluated from Load Factor, Contract Demand, billed units and total number of hours during the billing period. There are technical limitations in providing additional information in electricity bills and therefore, additional information about power-off hours in monthly energy bills would be difficult.
- e) There is no agreed understanding or written agreement between HV-4 Steel Rolling Mill consumer category to restrict their load to single shift only. Moreover, notification of Load Factor-based demand charges and energy charges is commercially viable for supply of electricity as consumer would be billed as per usage. In view of the above, proposal for not taking power-off hours during night period for Steel Rolling Mill is against the terms of the Supply Agreement and Supply Code.



### **Commission's View**

After taking into consideration all the relevant aspects and the data submitted by petitioner and objector, load factor limit for availing less demand charges for exclusively Rolling mills has been specified as 25%. The Commission's detailed tariff philosophy and categorisation are elaborated in Chapter 8 of this Order.

#### **2.2.9 Reasonable fixation of Tariff for Railways**

The Objector submitted that:

- a) The traction tariff as proposed by CSPDCL should further be reduced to the level of net power purchase cost of CSPDCL.
- b) Railways should be given the status of Deemed Licensee.
- c) The Railway Non-Traction Load should be considered as Public Utility similar to LV-6: Public Utility Category.

#### **Petitioner's Reply**

CSPDCL submitted that:

- a) The Tariff Policy provides that the consumer tariff should remain within the limits of +/-20% of Average Cost of Supply (ACOS). ACOS is the per unit rate of expense incurred by the Distribution Licensee, comprising the Power Purchase Expense including Transmission Charges and SLDC Charges, O&M expenses, Depreciation, Interest on Working Capital, Return on Equity, etc. The proposal of Railways to consider only Average Power Purchase cost of CSPDCL considers only power purchase expense and no other network expense, which is mandatory for evaluation of ACOS, hence, it is not consistent with the provisions of the Act.
- b) The issue of providing Deemed Licensee status has already been raised by the objector in a separate Petition. Since the same objections have been raised here again carrying almost similar facts, hence, under the principle of res-judicata, they cannot be taken into consideration for the purpose of this Petition. Similarly, the issue of Open Access is not a subject of CSPDCL's Tariff Petition and the Objector has filed a separate Petition regarding the same.
- c) The Objectors request to consider Railways' Non-traction load under LV-6 Public Utility category is a tariff design issue under Section 62(3) of the Act. Under the existing structure, non-traction load of Railways is billed under HV-

3 and LV-2, respectively. The aforesaid tariff structure is continuing since inception of the regulatory regime and the Objector has not justified the reasons for change in tariff design.

### **Commission's View**

The tariff of the Railway has been designed in a way such that it balances the interest of the consumers and Petitioner. A significant reduction in tariff has been considered for Railways. The Commission's detailed tariff philosophy and categorisation are elaborated in Chapter 8 of this Order.

#### **2.2.10 Suggestions on Retail Tariff and other charges for LV-5 LT Industries**

The Objector submitted that:

- a) The Average Billing Rate (ABR) of LT Industries is much higher than that prevalent in other States, therefore, the ABR should be reduced.
- b) Existing Demand Charges are much higher than that prevalent in other States, therefore, Demand Charges should be reduced to Rs. 125/HP/Month.
- c) Load Factor incentives should be introduced in similar manner as given to HT Industries and as made available to LT Industries in Madhya Pradesh, so that more electricity consumption will be encouraged using the same infrastructure. At present, no such relief is being given in Chhattisgarh.
- d) Power Factor incentive should be increased and should be made applicable step-wise for each percent improvement as available in Madhya Pradesh, so that qualitative consumption of electricity will be encouraged.
- e) Capping of LT Industrial Load should be increased from the existing 100 HP to 150 HP like in other States so that hurdles in expansion of such industries will be removed.
- f) There should be no Supply Affording Charges for enhancement of existing load.
- g) Possibility of Supply Affording Charges being borne by DISCOM should be explored by allowing such expenses under Capital Expenditure Plan and subsequent interest.
- h) If any industrial consumer is willing to opt for HT Supply, Supply Affording Charges should be liberally derived by adjusting such charges paid by the consumers to avail LT supply.

- i) Security Deposit (SD) of 1.5 times the average consumption should be held instead of existing 2.0 times.

**Petitioner's Reply:**

CSPDCL submitted that the proposal given by the Applicant is based upon comparison with the tariff structure of different States, which is incomplete. Comparing ABR available of different States is prudent only when the Revenue Statement of each State is available. The figures indicated by the Objector are reproduction of Tariff Orders of other States while CSPDCL figures are based on R-15 for FY 2016-17. CSPDCL has proposed tariffs in such a way that the ABR is kept within the limits of  $\pm 20\%$  of ACOS.

**Commission's View**

The Objector's suggestion for reviewing the demand charges for LT-Industry has been considered. The tariff for the sub-category of this category has been designed in such a way that the ABR is within  $\pm 20\%$  of ACoS. Some of the issues raised are beyond the scope of this petition. The Commission's detailed tariff philosophy and categorisation are elaborated in Chapter 8 of this Order.

**2.2.11 Rebate in tariff for Export Oriented Unit**

The Objector submitted that due to the recession in the market, the Textile export industries are facing financial constraints and production is adversely affected, and the industry has become a BIFR unit. Therefore, the Commission is requested to provide rebate in Tariff for Export Oriented Textile units.

**Petitioner's Reply**

Not Submitted

**Commission's View**

The Commission's detailed tariff philosophy and categorisation are elaborated in Chapter 8 of this Order. The tariff of the consumers is designed based on the nature of consumption and its load profile and the applicable voltage etc. The tariff is designed in such way that the expenses of the licensee is recovered from the sale of electricity.

**2.2.12 Distribution Losses considered on higher side**

The Objector submitted that:

- a) CSPDCL has considered the Distribution Loss as 20% for FY 2018-19,

however, for FY 2016-17 the actual distribution loss was 20.92% against 22%.

- b) The CAGR for LV domestic inclusive of BPL category is 12.2%, hence, by this increase in the LV domestic users, the fixed distribution losses shall remain same and only the variable losses will increase. So, overall loss % shall be reduced.
- c) The considered Distribution Loss of 20% is very high and against the intent of the MoU signed under UDAY scheme which mandates CSPDCL to reduce the AT&C losses from 22.50% in FY 2014-15 to 15% by FY 2018-19.

#### **Petitioner's Reply**

Not Submitted

#### **Commission's View**

The Commission's detailed views and ruling on the Distribution Loss levels to be considered for the truing up for FY 2016-17 and the revised ARR for FY 2018-19, are elaborated in Chapter 6 and 7 of this Order.

### **2.2.13 Reduced Cost of Purchase**

The Objector submitted that the cost of power purchase from various sources for FY 2018-19 is considered as Rs. 3.60 per kWh, which is on lower side as compared to the actual cost of power purchase of Rs. 4.04 per kWh for FY 2016-17.

#### **Petitioner's Reply**

Not submitted.

#### **Commission's View**

The Commission has considered the cost of power purchase from various sources for FY 2018-19, based on the actual cost of power purchase in the first half of FY 2017-18 and after factoring a suitable escalation in the rates for purchase from sources other than CSPGCL, as elaborated in Chapter 7 of this Order.

### **2.2.14 High Agriculture Tariff and defective meters**

The Objector submitted that:

- a) The Commission determines the Agriculture tariff within +/-20% of the ACOS, and the tariff is increasing every year. The cost of power consumed for agriculture activities should be reduced.

- b) The number of defective meters remains the same and still there is no concrete infrastructure in place to bill the consumers as per the meter readings and the burden of inefficiency is borne by the farmers.
- c) In the absence of metering infrastructure in agriculture sector, CSPDCL is booking sales to this category without any readings and trying to reduce the Distribution Losses and claiming subsidy in the name of power supplied to the farmers. Hence, it is matter of urgency to put in place some fool-proof system for meter reading.
- d) The Commission is determining the tariff within +/- 20% of ACOS but has not given any basis or rationale as to why a category is kept in a particular range. There was a time when Railways were supplied power at tariff higher than ACoS, which is now supplied power at tariff lower than ACOS. Such similarities could be drawn for steel industries also. If the subsidy provided by the GoCG is included, the tariff to this category works out to be lower than ACOS. Therefore, the Commission needs to explain the Tariff Philosophy and Tariff design.

#### **Petitioner's Reply**

Not submitted.

#### **Commission's View**

The Commission is deeply concerned about the high and increasing number of defective meters and assessed cases, which shows that the sales figures submitted by CSPDCL are not metered sales, but largely assessed sales, especially for LT agriculture and BPL category consumers. It is surprising that based on the such large assessed sales the licensee is claiming to achieve the energy loss target and claiming an incentive for the same. The Commission has asked the CSPDCL to clarify the position regarding the same, but no reply was submitted by CSPDCL. This shows that the licensee itself is not in a position to justify its claim. The Commission has dealt this issue appropriately in detail and is elaborated in Chapter 6 of this Order.

#### **2.2.15 Huge payment towards Pension Fund Contribution**

The Objector submitted that:

- a) The Contribution made towards Pension Fund ranges from Rs 480 Crore to Rs 680 Crore, which is around 5% of the total ARR.
- b) The Committee formed for allocating the Pension Fund decides the annual

contribution towards this Fund. It is observed that pension liabilities, which were not met in the past, are now being burdened on the present consumers. The Commission needs to keep an eye on the functioning of the Committee, because decisions made by the Committee prima facie indicate breach of provisions made under the Tariff Policy. The Tariff Policy mandates that decade old liabilities such as Pension Funds and any contribution for future should not be passed on to the consumers.

#### **Petitioner's Reply**

Not submitted.

#### **Commission's View**

The Commission has considered the Contribution to Pension Fund for FY 2016-17 as well as FY 2018-19, as approved in the MYT Order dated March 31, 2016, without any change.

### **2.2.16 Increase the Contract Demand for LT Industry category**

The Objector submitted that:

- a) In order to increase the production, various new machineries are in use in the small-scale industries. It is not possible to operate heavy machinery under the present 100 HP or 75 kW load. Since, these industries are based on limited capital, they cannot shift to the HT category as it would be a financial burden for them.
- b) This category is charged in excess for power consumption within the peak hours, as adopted from the State of Gujarat. However, in the State of Gujarat, the Connected Load for LT industry category is 100 kW or 135 HP load. The Commission is requested to increase the connected load for LT Industry category to 150 HP or 112 kW.

#### **Petitioner's Reply**

Not submitted.

#### **Commission's View**

The Commission has enhanced the limit for availing supply on LV from the existing limit of 100 HP to 150 HP. However, the metering of such consumers shall be done on HV. The LV consumers who has availed connections up to 100 HP and wants to enhance its load further up to 150 HP by transiting its category from LV to HV, but,

does not want to invest capital expenditure on transformers, substations and accessories. The Consumer has its option to approach the distribution licensee for installation of transformer s/s, and related accessories, by the licensee and recovering such expenses through monthly rent from the consumers as per the prevailing rules. The licensee is advised to examine the same and take action appropriately.

#### **2.2.17 To restructure the tariff category for Rice Mills**

The Objector submitted that:

- a) De-husking and Polishing intermediary is the part of primary agriculture activity and hence, should be considered under the Agriculture Allied Activity category, i.e., LV-4 and HV-9.
- b) At present the higher limit under LT-Industry category is 100 HP and 75 KW. With the availability of 200-300 HP transformers and improved infrastructure this limit could be extended to 150 HP. Also, at present, upto 20% of connected load, penalty of 150% and for more than 20% of connected load, penalty of 200% is imposed on fixed and energy charges. Initially it was 130%, and hence, should be kept minimum.
- c) Regarding two-part tariff, it is unfortunate that there is a difference in billing under LV 5.2.2 and LV 5.3 for 100 HP and 75 kW. Under LV-5.2.2, the Fixed Charge is Rs.150 HP/month and Energy Charge is Rs.5.70/kWh, and under LV-5.3, the Fixed Charge is Rs. 200/HP/month and Energy Charges are Rs.5.90/kWh. Such difference is not judicious and hence should be changed.
- d) In the past, Rice mills were considered seasonal industries, and based on consumption for 3-4 months, rebate was given to this category. In the present year, the Rice Mills because of unavailability of Rice will not be able to operate throughout the year and pay electricity bills on time. Therefore, the Commission is requested to create a separate category for Rice Mills and provide rebate to this category.
- e) The Objector submitted that the tariff for Dal/Rice mills for LT category is Rs. 7.98/kWh, whereas, under HT category it is Rs. 8.97/kWh, which is amongst the highest in the States like Punjab, Gujarat, Orissa, and Maharashtra. Very high tariff for this category is making the sector lagging behind in competition with other industrial states. The Commission is requested to rationalise the tariff under this category to encourage the investment in this sector.

**Petitioner's Reply:**

CSPDCL submitted that:

- a) It is quite evident that Rice Mills are a food processing industry, which is operated through machineries and hence, kept under the said category. The facts produced by the objector do not have any rational basis to include the Rice Mills under Agriculture Allied Category.
- b) The proposal of increasing the LT-industry limit to 150 HP can take place only when the Supply Code Regulations are amended. Hence, this Proposal is beyond the scope of the present Tariff Petition.
- c) The proposal regarding two-part tariff is not clear, hence, response to it is not possible. Also, tariff design is the functional responsibility of the Commission and hence, it is beyond the scope of CSPDCL to comment upon the issue.
- d) The Commission from its first Tariff Order has kept Rice Mills under the present category and it is not judicious to create a separate category based on problems faced by this category of Industries.

**Commission's View:**

The Tariff for LT-industry has been rationalised to the great extent and even the sub-categories were brought within +/-20% ACoS. This will address the concern of the objector. The Commission's detailed Tariff Philosophy and categorisation are elaborated in Chapter 8 of this Order.

**2.2.18 To rationalise the Tariff for Poultry Farms**

The Objector submitted that more than one lakh farmers in the State are associated and dependent on the Poultry farms for their livelihood. Poultry farms are dependent on domesticated birds and any outbreak of disease results into huge losses to the farmers. Therefore, the Commission is requested to give poultry farms the status of Agriculture category to encourage the farmers engaged in this occupation.

The Commission has determined Rs.5.50/kWh as Energy Charges and Rs. 375/kVAh as Fixed Charges. The tariff for the same category in the State of Maharashtra is Rs.4.56/kWh as Energy Charges and Rs.40/kVA as Fixed Charges. The Objector submitted that there should be separate category for Hatcheries, Poultry, farms, Dairy, Fisheries, Breeding Farms, Sericulture, Tissue culture, Aqua-Culture Laboratories, and Milk Chilling Plant and for having lower tariff for this category.



### **Petitioner's Reply**

CSPDCL submitted that:

- a) In the present tariff structure, the above-mentioned activities are covered separately under Agriculture-Allied category, and therefore, there is no question of creating a separate tariff category for this sector.
- b) The objector has compared the tariff for the same category with neighbouring States to argue that competitiveness with the neighbouring States should be the base for designing tariff for a particular sector, which is against the principles of the Tariff Policy and therefore, not acceptable.
- c) Tariff design and consumer categorisation is a functional responsibility of the Commission under Section 62(3) of the Electricity Act, 2003.

### **Commission's View:**

The Tariff for Agriculture-Allied category has been rationalised to the extent possible taking into consideration of the relevant aspects. The Commission's detailed Tariff Philosophy and categorisation are elaborated in Chapter 8 of this Order.

### **2.2.19 To reduce the Tariff for Agriculture and Allied category**

The objector submitted that to fulfil the dream of doubling the income of farmers and to achieve the targets set under Start-up India and Stand-up India, the tariff for Agriculture and Allied category should be rationalised and Demand Charges should be revoked.

The Objector further submitted that:

- a) Flat rate billing should be levied on all the submersible pumps as is done in other States and the bill should not include any other charges than the flat rate.
- b) Uninterrupted supply should be provided from evening 5 pm to 11 pm to all the domestic rural consumers. Most of the meters on the submersible pumps are not working and billing is done on the basis of the assessment.
- c) Because of overloaded transformers, Maximum Demand seems inflated and hence, Maximum Demand charges should not be added.
- d) Atal Jyoti scheme should be implemented in all the districts of the State and the length of the Atal Jyoti lines should be reduced to prevent the maintenance hurdles and hence tie points in between the lines.

**Petitioner's Reply:**

CSPDCL submitted that most of the points raised are beyond the scope of the present Tariff Petition, however, the tariff design and consumer categorisation are a functional responsibility of the Commission under Section 62(3) of the Electricity Act, 2003.

**Commission's View:**

The Tariff for Agriculture and Agriculture-Allied category has been rationalised to the extent possible taking into consideration of the relevant aspects. A new sub-category has been created for LT Agriculture-Allied consumers having load upto 25 HP and the tariff has been kept reasonable. The Commission's detailed Tariff Philosophy and categorisation are elaborated in Chapter 8 of this Order.

**2.2.20 To consider 'not-for-Profit' NGOs under Domestic Category**

The Objector submitted that the Commission in its Tariff Order has considered Public Trusts under domestic category, but registered not-for-profit Organizations and NGOs, were not covered under the domestic category. However, the Government of India through different departments directed that registered not-for-profit organisations, registered public trusts, and companies registered under Clause 25 of the Companies Act, 1956 shall be given equal treatment. The Commission is therefore requested to consider registered not-for-profit organisations under the Domestic Category.

**Petitioner's Reply**

Not submitted.

**Commission's View**

The Commission's detailed Tariff Philosophy and categorisation are elaborated in Chapter 8 of this Order.

**2.2.21 To remove Hospitals, Clinics and Nursing Homes from Commercial tariff slabs**

The Objector submitted that:

- a) There is no separate category for power consumption in Medical and related professions and institutions and CSPDCL is collecting bills from this sector under commercial slabs.

- b) Medical services are one of the basic and necessary public services provided by the professionals in this field and hence, charging them under commercial slabs is not judicious. The Supreme Court of India in its several Judgments upheld the categorisation of Medical services as necessary public service. The Commission has kept Medical services and associated institutions such as Hospitals, Clinics and Nursing Homes under commercial category.

### **Petitioner's Reply**

CSPDCL submitted that consumer categorisation under Section 62(3) of the Act is a statutory function of the Commission. However, the Petitioner accepts the proposal and direction by the Commission, if the proposed categorisation has no impact on the annual revenue of CSPDCL.

### **Commission's View**

The issues raised by the objector has been considered appropriately. The Commission's detailed Tariff Philosophy and categorisation are elaborated in Chapter 8 of this Order.

### **2.2.22 CSPDCL's Agreement with CPPs for payment of unscheduled injection and Parallel Operation Charges**

The Objector submitted that:

- a) The unscheduled injection by CPPs are occasional unplanned injection of smaller quantum/duration and do not come under 'short-term open access', so SLDC charges payable by Short-term Open Access customers should not be applicable on them. Also, being unplanned injections; there is no role of scheduling by SLDC in these cases. Hence, the Commission is requested to clarify in its Tariff Order for FY 2018-19, that the SLDC Operating Charges shall not be payable by CPPs entering into Agreement with CSPDCL for unscheduled injection.
- b) CSPDCL in the draft Agreement has put a limit of minimum 1 MW unscheduled injection to be done by a CPP to become eligible to get payment for the same. Unscheduled injections of a CPP by its very nature are often less than 1 MW; so, this limit unduly penalises the CPP. As the maximum amount payable for such unscheduled injection is anyway subject to a cap of Rs. 1.5/kWh, directions may be issued for removal of this limit of minimum 1 MW injection.

- c) In the Tariff Order for FY 2017-18, the Commission determined Parallel Operation Charges at the rate of Rs.21/kVA/Month and revised the methodology for billing of Parallel Operation Charges, but CSPDCL is continuing the billing as per old methodology.

**Petitioner's Reply**

CSPDCL submitted that SLDC Operating Charges payable by Short-term open access consumers is correct and proper as per the terms & conditions of existing Tariff Order sub-clause 13(e) under clause 11.2.12. Accordingly, an Open Access consumer is obliged to pay operation charges to SLDC at the rate of Rs. 2000/- per day. The other points raised in the objections are irrelevant for the purpose of instant Tariff Petition.

**Commission's View:**

The Open Access charges are required to be levied as per the Open Access Regulations only. The issue of Parallel operation charges is beyond the scope of the present petition.

**2.2.23 To remove Solar Power producers from start-up Power Consumers**

The Objector submitted that:

- a) The Commission should either allow netting of energy and determine suo-motu modalities of netting of energy on kWh basis as observed by the Commission in its Order dated October 7, 2016 in Petition No. 15 & 16 of 2016, or else, the Commission should create a separate category for Solar power projects which are not start-up power consumers and would be billed at the rate quite lower than the rate applicable to HV-7 category.
- b) There should be not be requirement of getting separate connection and maintaining Contract Demand for importing power by Solar Direct Project.

**Petitioner's Reply**

Not submitted.

**Commission's View:**

This issue has been dealt appropriately.

**2.2.24 Provision for Contract Demand in two steps for South Eastern Coalfields and related issues:**

SECL submitted that:

- a) In some of the mines, Contract Demand exceeded during rainy season every year (for 3 months) as compared to rest of the period, but there is no such provision and additional charges for contract demand have been paid.
- b) Being a bulk consumer of electricity, CSPDCL should supply SECL mines electricity supply through dedicated feeder to ensure un-interrupted power supply and regular production and considering other safety requirements, as SECL is paying full cost of power lines as per their requirement.
- c) SECL Kusmunda Area deposited Rs. 26.83 Crore on 31.01.2017 to CSPTCL for construction of 132 kV DCSS tower line from Chhuri sub-station of CSPTCL to proposed 132 kV Kusmunda sub-station. SECL Sub-station is in the final stage of commissioning but the said 132 kV tower line is still not completed and the physical progress of work is not up to desired level.
- d) Unreliable power supply to Coal Mines under Bishrampur Area of SECL through 132/33 kV Sub-station of CSPDCL at Bishrampur. Also, few deficiencies such as broken insulators, conductors loosened, broken stay wire, etc., have been observed. The Commission is requested to look into the matter.
- e) Loss of coal production in the mines of Baikunthpur area due to low voltage since 132/33 kV substation, Salka has failed on 28.12.2017.
- f) Rajgamar 33 kV power feeder is facing frequent power failure and therefore, needs elaborate maintenance and change of insulators, etc.
- g) Power failure from Kotmi sub-station for a period of 57 hours due to faults in 33 kV overhead line feeding power from Kotmi sub-station to Rani Atari sub area.
- h) Two 33 kV feeders are coming from Bishrampur to Bhatgaon, which are dedicated feeders to supply 33 kV power to Bhatgaon Area, SECL. This line is facing voltage problems and due to low voltage, SECL's machines are giving frequent problem, thereby affecting the production.

### **Petitioner's Reply**

CSPDCL submitted that the above said objections are beyond the scope of this Petition and therefore, it is difficult for CSPDCL to respond to its objections/proposals.

### **Commission's View**

Most of the issues raised by SECL are beyond the scope of the present Tariff Petition filed by CSPDCL for FY 2018-19. However, the Commission has taken up this issue separately with the licensee.

#### **2.2.25 Miscellaneous Objections**

The other Objectors submitted that the following observations can be made from the Tariff Petition of CSPDCL:

- a) Despite being rich in natural and human resources and being energy surplus State, the electricity bills are increasing, because, Energy Charges and Fixed Charges are billed separately.
- b) There is no audit of the huge amount received against agriculture subsidy for agriculture pumps.
- c) There is no need for unbundling CSEB and the Commission should learn from the States like Tamil Nadu, Kerala, Himachal Pradesh and others where there is one single Electricity Company undertaking all the electricity business.
- d) Meter reading has been sub-contracted to private parties, who are issuing bills at their discretion, which results in unrest among the citizens.
- e) Under the Saubhagya scheme, CSPDCL is organising camps and receiving application for new connections rather than conducting door-to-door survey and providing connection.
- f) A separate tariff category should be created in line with LV-7, to boost up manufacturing of solar related equipment like solar cooker, solar heater, solar lamp, solar cell, etc. The condition of minimum Contract Demand of 50 kW for solar related equipment, devices and assemblies, should be reduced.

#### **Petitioner's Reply**

CSPDCL submitted that the proposal for creating a separate category for solar manufacturing units relates to creation of a new tariff category and goes against the Commission's efforts in its earlier Orders to rationalize the present tariff structure which is simple, practical and easy to implement. This proposal is likely to result in distortions as the existing tariff structure already contains a specific tariff for IT Industries both under HT&LT. Further, that under the present tariff design, LV-2 Non-domestic and HV-3 other Industrial general purpose Non-Industrial tariff category can be applicable to proposed Industries by default.

### Commission's View

The Commission's detailed Tariff Philosophy and categorisation are elaborated in Chapter 8 of this Order.

## 2.3 Objections on Provisional True-up for FY 2016-17 for CSPGCL

### 2.3.1 Discrepancy in Cost of power and quantum sold by CSPGCL

The Objector submitted that:

- a) The per unit cost of power purchased by CSPDCL from CSPGCL stations has increased by about 49% against the per unit cost approved by the Commission in the MYT Order.
- b) Such hike/increase cannot be attributed to costly power purchase from Marwa Thermal Power Plant alone. Marwa TPP has also generated 203.42 MU of Infirm power, which is available only at Rs. 1.50 per kWh, as approved earlier by the Commission in similar cases.
- c) The quantum of power purchased, as submitted by CSPDCL, is 7851.49 MU from Central Generating Station and 253.82 MU from NSPCL, as against the 7704.02 MU from CGS and 247.22 MU from NSPCL, as submitted by CSPTCL. Such discrepancy has resulted into a huge unreconciled power purchase amount of Rs. 422.70 Crore.
- d) Power Purchase quantum from CSPGCL stations during FY 2016-17 is not reconciling with the quantum submitted by CSPGCL and CSPTCL in their respective submissions, as shown in the Table below:

Power Station	CSPGCL	CSPTCL	CSPDCL
DSPM	3,672.68	3,672.68	Not Submitted
HTPS	5,353.65	5,362.85	
Korba (W)	3,155.96	3,155.96	
KTPS	2,000.85	2,000.85	
Hasdeo-Bango	146.62	146.46	
Marwa (Infirm)		203.42	
Marwa (Firm)		2,170.75	
	Not Submitted	16,712.97	16,727.30

- e) Similarly, the cost of power purchased from CSPGCL during FY 2016-17 shows a unreconciled amount of Rs. 583.06 Crore, as shown in the Table below:

<b>Particulars</b>	<b>Cost, Rs Crore</b>
Revenue from Sale of Power (CSPGCL T.P. Pg. 89) (excluding Marwa)	4,473.41
Water and SLDC Charges	112.98
Marwa (Infirmary) @ 1.50 (approved by Commission)	30.51
Marwa (Firm) @ 3.90 (approved by Commission)	846.59
Total	5,463.49
Power Purchase Cost submitted by CSPDCL	6,046.55
Difference (requires reconciliation)	583.06

- f) From the above, it is quite clear that a huge amount of Rs. 583 Crore requires reconciliation with CSPGCL Accounts, which is not submitted before the Commission along with the True-up Petition for FY16-17. This unreconciled amount of Rs. 583 Crore is over and above the reported unreconciled amount of Rs. 422.70 Cr, hence, total amount which requires reconciliation is as high as Rs. 1,005.76 Cr.
- g) From the submission made by CSPTCL in its Petition, it has been observed that CSPDCL has not procured any power from Central Generating Stations like Hirakud, KSTPS II and KSTPS III since August 2016 in spite of having allocated quota of power. No reason has been specified for the same.
- h) Similarly, it is also observed that CSPDCL has procured power from Central Generating Stations like KSTPS-I, II and VII and K II only since August 2016 in spite of having allocated quota of power. No reason has been specified for the same.

#### **Petitioner's Reply**

- a) CSPDCL has submitted provisional accounts of FY 2016-17. If the Commission desires, it may further submit power purchase invoices of various CGS which shows fixed and energy charge separately. CSPDCL added that in the current MS Excel model that CSPDCL has shared with the Commission, it has also submitted separate fixed and energy cost of procuring power from CGS from April to September 2017, to work out realistic projections for FY 2018-19.
- b) CSPDCL has deducted Rs. 422.70 crore from the net power purchase cost to restrict its claim for the purpose of provisional true-up in line with the Provisional Accounts. Any deviation, whether positive or negative, post the reconciliation of power purchase cost and subsequent audit of the accounts



will be submitted along with detailed justification at the time of final True-up of the FY 2016-17.

**Commission's View**

The Commission has undertaken the Provisional True-up for FY 2016-17 based on the available data and shall undertake the final true-up once the Audited Accounts are available along with all reconciled amounts. The Commission's analysis of power purchase quantum and cost for the true-up for CSPDCL for FY 2016-17 is elaborated in Chapter 6 of this Order.

### 3 PROVISIONAL TRUE-UP FOR CSPGCL FOR FY 2016-17

#### 3.1 Background

CSPGCL, in accordance with the MYT Regulations, 2015, filed the Petition for provisional Truing up for FY 2016-17 for its existing Thermal Generating Stations, viz., HTPS, KTPS (East), DSPM TPS, 500 MW Korba West TPP, and Hasdeo Bango Hydro power plant.

CSPGCL submitted that it has filed the Petition based on Provisional Annual Accounts for FY 2016-17. It submitted that CSPGCL is in the process of migrating to Ind-AS system of accounting practice, and the one-time exercise of mapping prevailing accounting practices to Ind-AS/IFRS may take some time, because of which finalisation of Accounts is still in process.

In accordance with the MYT Regulations, 2015, the Commission has undertaken provisional Truing up for FY 2016-17 based on unaudited/provisional Accounts submitted by CSPGCL. The final Truing up for FY 2016-17 shall be done on the basis of Audited Accounts.

#### 3.2 Generation Capacity of Existing Generating Stations

The details of the existing Generating Stations (having Commercial Operation Date (COD) prior to FY 2016-17) is shown in the following Table:

**Table 3-1: Generation Capacity (MW) of existing Generating Stations**

Sr. No.	Particulars	No. of Units & Capacity (MW)
1	Korba East Thermal Power Station (KTPS)	$(4 \times 50) + (2 \times 120) = 440$ MW
2	Hasdeo Thermal Power Station (HTPS)	$4 \times 210 = 840$ MW
3	1x500 MW Korba West Thermal Power Plant (KWTPP)	$1 \times 500$ MW = 500 MW
4	Dr. Shyama Prasad Mukherjee Thermal Power Station (DSPM)	$2 \times 250 = 500$ MW
5	Mini Mata Hasdeo Bango Hydro Electric Project	$3 \times 40 = 120$ MW

#### 3.3 Commissioning of LDCC for KWTPP and allied issues

##### CSPGCL's Submission

CSPGCL submitted that as per Regulation 11.1 of the MYT Regulations, 2015, "uncontrollable factors" comprise factors that were beyond the control of the

applicant, and could not be mitigated by the Applicant. Further, CSPGCL submitted that in the Order dated March 31, 2017, the Commission held that:

*“... It is noted that coal is being fed from the old LDCC and the power plant does not have any alternate arrangement for coal transportation. The transport by LDCC is much cheaper than the transport by any other means. Further, it was noted in the previous Order that delay in LDCC cannot be totally attributable to CSPGCL. In view of this, there appears some merit in submission of CSPGCL regarding the relaxation of PAF for HTPS and KWTPP. After considering all the relevant aspects into consideration and perusal of coal availability data, the Commission in exercise of its power to relax under Regulation 77 of MYT Regulations, 2012, revises the normative PAF to 81% for HTPS and KWTPP both ...”*

CSPGCL also submitted that the Commission, at the time of MYT Order, had allowed Long Distance Coal Conveyor (LDCC) capitalisation in FY 2017-18 in acknowledgement of uncontrollable factors after due diligence. CSPGCL further submitted that in the next Order, the Commission also acknowledged that there exists a substantive ground for relaxation in Plant Availability Factor (PAF) up to September 2017. CSPGCL also claimed that the constraint has led to critical coal stocks on daily basis. Therefore, CSPGCL has claimed that the issue of capitalisation in FY 2016-17 and relaxation in Normative PAF due to uncontrollable factors during the period are already settled issues.

As regards the status of work, CSPGCL submitted that the work at LDCC and cross over above the Railway Lines, was being rigorously pursued. Chief Secretary, GoCG, has intervened in the matter and stressed upon railway authorities for urgency of this work. CSPGCL claimed that it has worked out solutions for legal, administrative and technical issues and taken up the work expeditiously. CSPGCL submitted that it has made deposit with Railways against its demand note for shifting of signal and telecom cables. CSPGCL also submitted that erection of conveyor structure has been completed but sections covered under way leave right of Railway is yet to be completed. CSPGCL further claimed that since the ‘Bridge Rules’ (issued by Ministry of Railways, Government of India) have undergone changes, necessitating further amendments in drawings and designs, the revised drawings have been re-submitted to Railways, after due vetting by experts. Also, CSPGCL expected that the system may be fully operational in less than a year, after completion of work, detail safety checks and trial run.

CSPGCL claimed that as per Indian Railway Act 1889, Railways' permission for any crossover above the railway line, is a legal binding. Further, as per settled position of law, implications of such approval and change in conditions of approval qualify as Change in law.

In view of above, CSPGCL requested the Commission to consider Normative PAF for HTPS and KWTPP at the level allowed in the previous Order (True-up for FY 2015-16) by exercising its power under Regulations 12/83/85 of MYT Regulations, 2015.

CSPGCL submitted that Corporate Insolvency Resolution Process has been initiated against BOP lead contractor – M/s Tecpro Systems Ltd., which has been admitted by National Company Law Tribunal (NCLT). Further, NCLT has appointed Interim Resolution Professional (IRP). CSPGCL has made direct payments to sub-vendors/contractors after taking concurrence of M/s. Tecpro and has got work done. This has resulted in delay in completion of some last mile works, which do not have immediate effect on performance. Hence, CSPGCL has made no prayer for relaxation of performance norms on this count of BOP works, other than LDCC works.

In view of the above, CSPGCL requested the Commission to allow extension of cut-off date by a year. Further, CSPGCL clarified that no cost escalation (beyond the approved capital cost of Rs. 3,719 Crore) has been prayed for.

### **Commission's View**

Regarding the commissioning of LDCC for KWTPP, the Commission in Order dated March 31, 2017 held as under:

*“In the previous Order, the Commission has allowed the relaxation to KWTPP as a special case. The Commission has recognised the reasons for such relaxation, which includes not only operational difficulties but also the overall coal shortage scenario in FY 2014-15. In this Petition also, CSPGCL has submitted various arguments seeking relaxation in performance parameters of HTPS and KWTPP. The norms once fixed have to be complied with and relaxation is an exception. The various arguments submitted for problems relating to ash handling, new technologies and so on cannot be agreed to. However, the only submission which appears justifiable is lower availability of coal. It is noted that coal is being fed from the old LDCC and the power plant does not have any alternate arrangement for coal transportation. The transport by LDCC is much cheaper than the transport by any other means. Further, it was noted in the previous Order that delay in LDCC cannot be totally attributable to CSPGCL. **In view of this, there appears some merit in submission of CSPGCL regarding the***

***relaxation of PAF for HTPS and KWTPP. After considering all the relevant aspects into consideration and perusal of coal availability data, the Commission in exercise of its power to relax under Regulation 77 of MYT Regulations, 2012, revises the normative PAF to 81% for HTPS and KWTPP both. The consequences of performance below this level shall be treated in accordance with the applicable Regulations.***

***At the same time CSPGCL is directed to make all efforts for expeditious completion of new LDCC and submit a status report within 3 months from the issue of this Order. Further, CSPGCL may note that no relaxation in PAF on this ground will be considered after Sept 2017.” (emphasis added)***

From the above, it is seen that the normative PAF for HTPS and KWTPP has been revised to 81% after taking into account the issue of delay in commissioning of LDCC. Further, the Commission directed CSPGCL to make all efforts for expeditious completion of new LDCC. As regards the anticipated date of commissioning of LDCC, CSPGCL submitted that LDCC is expected to be commissioned in less than a year. No firm date has been submitted for commissioning. So, the Commission sought the present status of the work. In this regard, CSPGCL submitted the following status of work post the filing the Petition:

- (1) Sr. Divisional Engineer (East), SECR, Bilaspur has raised a demand note on December 28, 2017 towards way leave permission process. CSPGCL submitted the details on January 1, 2018.
- (2) Further, CSPGCL submitted the Launching scheme for the work of overhead crossing of rail track by coal conveyor system to Sr. Divisional Engineer (East), SECR, Bilaspur on January 4, 2018.
- (3) The approved drawings were also submitted for issue of land lease and permission as per Railway/Government norms on January 6, 2018. A request was also filed for intimation of Codal Charges to be submitted. Order of work has already been placed on M/s Tecpro and estimate has already been submitted to Railways.
- (4) The final way leave permission along with permission to start excavation work from Indian Railways is awaited. The matter is being pursued on daily basis.

The Commission notes that the coal to HTPS is fed from the existing coal conveyor system for power plant, which is around 14 km long. No alternate system (MGR/Rail network) exists. At present, KWTPP is also getting supply from the same existing coal conveyor system. The Commission, in its Order dated March 31, 2017 had

relaxed the PAF norms considering the merit in the submission of CSPGCL regarding the lower coal availability. However, during FY 2016-17, the availability of coal was not an issue. The delay in commissioning of LDCC led to critical coal stocks on daily basis. The Commission sought clarification from CSPGCL regarding the reasons for not opting for the alternative methods for transporting the coal from bunker to plants. In this regard, CSPGCL submitted as under:

*Transportation of Coal by Road* – Coal transportation by road surrounded by dense population is not a feasible solution. Further, Korba falls in the critically polluted area. In such areas, open coal transportation may attract the wrath of Pollution Control authorities. Also, the sheer number of trips plying through the city is not desirable. Hence, the coal transport by road is not feasible.

*Transportation of Coal by Rail* – For transporting coal by Rail to HTPS and KWTPP requires considerable land acquisition involving residential private land, which is an added limitation and challenge for transportation of coal by rail. At present, coal transportation is being done at KTPS through own wagons and locomotives, but major part of rail network is controlled by Indian Railways. Similarly, coal transportation is wholly done by Indian Railways at DSPM TPS. The capital cost for MGR System or rail network and LDCC is approximately the same. However, the O&M cost incurred on coal transportation is shown in the following Table:

**Table 3-2: Coal Transportation Charges as submitted by CSPGCL**

Station	Transportation Charges (Rs./MT)		
	2014-15	2015-16	2016-17
HTPS	71.80	77.73	73.78
KTPS	94.85	158.23	180.07
DSPM	267.43	328.89	243.11

Further, based on the best estimates, the truck transportation cost can be presumed as about 1.5 times the cost of transportation through Rail. If the above differential costing is converted to the impact on Energy Charge Rate (ECR), then with normative benchmarks of HTPS, the impact works out to additional ECR of about 8 paise/kWh for transportation through own railway system, about 14 paise/kWh for transportation through Indian Railways, and about 20 paise/kWh for road transportation. From cost economy point of view too, the coal transport through LDCC is the best option. The transportation of coal through LDCC offers an inherent economic advantage over all other proven means of coal transportation.

From the above submission of CSPGCL, it is observed that, at present, no alternative route, other than existing coal conveyor system, is feasible for transportation of coal for HTPS and KWTPP. It is noted that coal is being fed from the old LDCC and the power plant does not have any alternate arrangement for coal transportation. The transport by LDCC is much cheaper than the transport by any other means. The delay in commissioning of LDCC is affecting the operation of HTPS and KWTPP. However, from the submission of CSPGCL, it is noted that this delay cannot be attributable to CSPGCL.

**In view of this, there appears to be some merit in submission of CSPGCL regarding the relaxation of PAF for HTPS and KWTPP. The reasons stated by the Petitioner appear to be not under the control of the Generating Company. Therefore, being special and exceptional circumstances, the Commission in exercise of its powers to relax under Regulation 83 of MYT Regulations, 2015, revises the normative PAF to 81% for HTPS and KWTPP for FY 2016-17. Being provisional true up at this stage, no relaxation has been considered in any other parameter for HTPS and KWTPP. This issue will be taken up during final true up. The consequences of performance below this level shall be treated in accordance with the applicable Regulations.**

At the same time, the Commission is of the view that the commissioning of LDCC cannot be delayed endlessly. Moreover, the relaxation in PAF norms does not relieve CSPGCL of the responsibility of taking strenuous efforts for expeditious completion of new LDCC. To understand this, the Commission sought details of pending activities with timelines from CSPGCL, which were submitted by CSPGCL as under:

- (1) Structure foundation work shall be done immediately after start of excavation work. Erection of structure and fabrication work on both sides of TRs is expected to be completed in *Two months* subject to clearance of Railways. Further, as per railway norms, the settlement period for foundation is *45 days*.
- (2) Conveyor galleries (3 Nos.) shall be erected depending upon block allowed by Railway. Railway line outage permission may take about *a month* after erection of Trestles on both side of railway track. Once conveyor galleries are erected, the work of belt loading shall be initiated. As per standard safety practices segment wise trials shall take *a month time*.
- (3) After completion, the integration with old system shall also be undertaken. Simultaneously, PLCC interlocks and protection checks and combined run shall take about *Two months*.

- (4) A settlement period to resolve teething issues minimum about *Three months'* time will also be required. The integrated system is expected to be fully commissioned within a year.

The activity-wise timelines as submitted by CSPGCL are summarised in the following Table:

Work	Nos. of days
Foundation Casting and Settlement	45
Erection of Structure	60
Railway permission for installation of galleries	30
Fabrication, welding and belt loading	60
Integration with old system along with PLCC interlock protection check and trial run	60
Settlement period to resolve teething issues	90

From the above submission of CSPGCL, it is noted that the LDCC work may be completed by the end of FY 2018-19.

Further, the Commission notes that Corporate Insolvency Resolution process has been initiated against BOP contractor, M/s. Tecpro Systems Ltd. The Commission sought the action plan for completion of LDCC work in this situation. CSPGCL submitted that action plan to tackle vendor crisis was put in place well before the formal declaration of Corporate Insolvency Resolution of M/s. Tecpro. It is noted that KWTPP work has been considered as *Ongoing Project* in the proceedings. At present, there is no bar on IRP appointed by NCLT on this issue.

Apart from LDCC work, it is also noted that other minor works of KWTPP are also pending. CSPGCL submitted that the balance non-plant work amounts to Rs. 20 Crore. The pending work mostly relates to air-conditioning-ventilation and other services in the administrative building, widening and tarring of various roads, construction of certain service roads, etc. As per contract, in case of short closure, CSPGCL has right to carry out the works through other vendors, at the cost and consequences of M/s. Tecpro, which can be recovered from the retention amount held by CSPGCL. Thus, no cost escalation will occur.

**The Commission in earlier Order has approved cut-off date for additional capitalisation as September 30, 2017. Considering the above, the Commission finds it necessary to extend the cut-off date for additional capitalisation approved for KWTPP. After considering all relevant aspects in this regard, the**



Commission approves the extension of cut-off date till January 31, 2019, for completion of additional capitalisation approved by KWTPP. The Commission directs CSPGCL to make all possible efforts to complete LDCC work and other pending works on or before January 31, 2019. No further extension shall be allowed by the Commission beyond January 31, 2019 for additional capitalisation. No escalation of cost shall be considered pertaining to such extension. The approved project cost of KWTPP shall be considered as final.

### 3.4 Normative Annual Plant Availability Factor (NAPAF)

#### CSPGCL's submission

CSPGCL submitted the actual PAF for its stations as compared to NAPAF approved by the Commission in the MYT Order, as shown in the Table below:

**Table 3-3 Actual Plant Availability Factor for FY 2016-17 as submitted by CSPGCL**

Station	NAPAF	Actual PAF
KTPS	65.45%	58.27%
HTPS	83.00%	80.63%
DSPM	85.00%	93.10%
KWTPP	85.00%	76.50%

As regards DSPM, CSPGCL submitted that DSPM has performed better than the norms stipulated in the MYT Order. CSPGCL has not prayed for revision / relaxation (except for the issues such as Transit Loss / IOWC, which are already covered in Appeal No. 222 of 2015, for which the consequential impact on the instant Petition, if any, shall occur in accordance with the final Judgment in the Appeal) and has proposed to share the gains as per MYT Regulations, 2015.

As regards HTPS and KWTPP, as discussed in earlier Section of this Chapter, CSPGCL prayed the Commission to approve the NAPAF of 81% for HTPS and KWTPP after exercising the powers conferred under Regulations 12/83/85 of the MYT Regulations, 2015.

As regards KTPS, CSPGCL submitted that during the year, the coal supply from SECL was so low that even with Normative SHR and Auxiliary Consumption, KTPS could not have operated at PLF more than 60.52%. Further, CSPGCL claimed that theoretical options such as import of coal or procurement of high grade coal through e-auction are infeasible for the plant as such coal has very high CV and blending becomes must for operation of such an old plant. Further, CSPGCL cited the report of

the Group formed by CEA under the directions of Secretary (Power) for studying the range of blending of imported coal with domestic coal. CSPGCL submitted that the existing plant does not have facility as proposed in the said report, and its installation will need huge capital investments. Further, CSPGCL claimed that with imminent closure, it will not be prudent to make such investments. The Commission has also directed CSPGCL to avoid capital investments. Further, CSPGCL submitted that since in the old plants, lot of work is to be done manually, non-achievable targets put pressure on plant authorities, particularly O&M authorities to bypass safe operation practices and maintenance with plant operation. CSPGCL submitted that in the previous Order, Commission's view was:

*“...Regarding the availability of coal, the Commission is of the view that it is the primary responsibility of the Generating Station to arrange the supply of coal. KTPS is equipped with adequate FSA for supply of Annual Contracted Quantity of 27 lakh tonnes. Any shortfall in supply of coal is the responsibility of CSPGCL and the same has to be sorted out with Coal India Ltd. ...”*

In the above context, CSPGCL submitted that FSA allows Coal India to supply coal from any mine. In the beginning of FY 2016-17, Coal India started supplying the high-grade coal from Surakachar Mines, which resulted in spiking of ECR and high FCA. CSPGCL submitted that State Government had to intervene due to severity of the matter. In consumer interest, CSPGCL made continuous and rigorous pursuance to arrest the supply from Surakachar. CSPGCL also claimed that PAF of KTPS was in the range of 57% to 58%, which is optimal as compared to other plants in India of similar capacity. CSPGCL requested the Commission to revise the PAF norms for CSPGCL to 'maximum achievable level'.

### **Commission's View**

The Commission has verified the actual availability of the Generating Stations for FY 2016-17 through CSLDC's certificate as submitted by CSPGCL. The Commission has considered the actual availability as per CSLDC's certificate for FY 2016-17 for undertaking sharing of gains and losses.

As regards DSPM, the Commission approves the NAPAF of 85% as per the MYT Order. Further, for HTPS and KWTPP, as discussed in earlier Section of this Chapter, the Commission approves NAPAF of 81% for both Stations, after relaxation.

In case of KTPS, the Commission notes that CSPGCL has already filed an Appeal regarding the issue of PAF before Hon'ble APTEL in Appeal No. 222 of 2015. However, CSPGCL submitted that the facts and grounds made in Appeal No. 222 of

2015. CSPGCL sought relaxation in PAF on account of shortage of coal supply from Coal India. The Commission notes that arrangement of fuel is the primary responsibility of generator. Further, it is noted that Coal India had made the coal available from alternate source from Surakachar Mines. This alternate coal arrangement has led to increase in ECR and thereby FCA, which put an additional burden on the consumer. The Commission notes that the Government of Chhattisgarh has intervened the matter and decided to stop off-take of coal from Surakachar Mines. All this has led to shortage of supply of coal to KTPS and thereby lower availability. The Commission notes that this is a special case and additional burden of cost has been avoided in the interest of the consumer. In view of the above, the Commission finds merit in the submissions of CSPGCL and approves NAPAF of 60.52% for KTPS for FY 2016-17 by exercising powers under Regulation 83 of MYT Regulations, 2015. The Commission further clarifies that this relaxation has been allowed as special case and the same shall not be considered as precedence for other matters.

The PAF approved by the Commission for provisional True-up of FY 2016-17 is shown in the following Table:

**Table 3-4: Approved Plant Availability Factor for FY 2016-17**

Station	NAPAF	Actual PAF
KTPS	60.52%	58.27%
HTPS	81.00%	80.63%
DSPM	85.00%	93.10%
KWTPP	81.00%	76.50%

### 3.5 Auxiliary Energy Consumption

#### CSPGCL's Submission

CSPGCL has submitted the actual Auxiliary Energy Consumption for its stations for FY 2016-17, as shown in the Table below:

**Table 3-5: Auxiliary Energy Consumption for FY 2016-17 as submitted by CSPGCL**

Station	MYT Order	CSPGCL's Submission
KTPS	11.25%	12.65%
HTPS	9.70%	9.76%
DSPM	9.00%	7.78%

Station	MYT Order	CSPGCL's Submission
HBPS	1.00%	0.61%
KWTPP	5.25%	5.00%

CSPGCL submitted that all its stations performed better than the norms except KTPS and HTPS.

As regards KTPS, CSPGCL submitted that since Auxiliary Energy Consumption (AEC) norms adopted in the Regulation / Order are same as were adopted in previous Regulation / Order and relaxation on these parameters is subjudice in the Appeal No. 222 of 2015, CSPGCL had not made detailed submissions for relaxation in these norms. CSPGCL claimed that by taking CPRI Report values and with arithmetical corrections in calculations, normative AEC works out to 13.2%. CSPGCL also claimed that actual AEC achieved by KTPS was better than the corrected norms. Accordingly, CSPGCL requested the Commission to consider aforesaid corrections in norms and to allow gains accordingly.

As regards HTPS, CSPGCL submitted that CERC in the IEGC has acknowledged that outage has definite impact on AEC and Station Heat Rate (SHR). CSPGCL further submitted that the Commission had also acknowledged the above principle in the MYT Order as under:

*“... As far as CSPGCL's prayer for allowing impact of outage on norms of operation is concerned, the relaxation in norms shall be decided at the time of true-up in accordance with the provisions in IEGC under the heading “Technical minimum schedule for operation of CGS and ISGS ...”*

CSPGCL claimed that PAF, AEC, and SHR for HTPS suffered due to partial load operations caused by uncontrollable problem in LDCC for coal. CSPGCL further requested that the normative AEC for HTPS should be adjusted in accordance with the MYT Order, (as per computation methodology given under Indian Electricity Grid Code) to 9.76%.

### **Commission's Views**

CSPGCL has filed Appeal No. 222 of 2015 before the Hon'ble APTEL on the issue of AEC for KTPS as approved in Order dated May 23, 2015. Since, the matter is sub-judice before the Hon'ble APTEL, AEC has been considered as approved for KTPS in the MYT Order.

As regard HTPS no relaxation in AEC has been considered at this stage.

The actual AEC for FY 2016-17 has been considered as submitted by CSPGCL for the purpose of sharing of efficiency gains and losses. Further, the normative AEC for FY 2016-17 has been considered for computation of normative net generation in the provisional true-up for FY 2016-17, as shown in the Table below:

**Table 3-6: Approved Auxiliary Energy Consumption for FY 2016-17**

Station	MYT Order	Normative for Provisional Truing up	Actuals
KTPS	11.25%	11.25%	12.65%
HTPS	9.70%	9.70%	9.76%
DSPM	9.00%	9.00%	7.78%
HBPS	1.00%	1.00%	0.61%
KWTPP	5.25%	5.25%	5.00%

### 3.6 Gross Generation and Net Generation

#### CSPGCL's Submission

CSPGCL submitted the actual gross generation and net generation for FY 2016-17 as shown in the Table below:

**Table 3-7: Gross Generation and Net Generation for FY 2016-17 as submitted by CSPGCL (MU)**

Station	MYT Order		Actual	
	Gross Generation	Net Generation	Gross Generation	Net Generation
KTPS	2,325.78	2,064.13	2,290.56	2,000.85
HTPS	6,107.47	5,515.05	5,932.51	5,353.65
DSPM	3,723.00	3,387.93	3,982.41	3,672.68
HBPS	274.00	271.26	147.52	146.62
KWTPP	3,723.00	3,527.54	3,322.10	3,155.96
<b>Total</b>	<b>16,153.25</b>	<b>14,765.91</b>	<b>15,675.10</b>	<b>14,329.76</b>

#### Commission's Views

The billing mechanism has been changed from October 2014 to three-part ABT billing, wherein scheduled energy is being considered. However, for the purpose of provisional true-up, the Commission has relied on actual generation instead of scheduled generation. The impact of any variation on account of actual generation vis-à-vis scheduled generation shall be treated separately. The Commission has

considered the actual Gross Generation and actual Net Generation as submitted by CSPGCL, duly verified with the monthly Statements, for the purpose of sharing of efficiency gains and losses.

Further, the normative AEC for FY 2016-17 has been considered in the computation of normative net generation in the provisional true-up for FY 2016-17, as shown in the Table below:

**Table 3-8: Gross and Net Generation for FY 2016-17 approved by the Commission (MU)**

Station	Normative		Actual	
	Gross Generation	Net Generation	Gross Generation	Net Generation
KTPS	2,522.88	2,239.06	2,290.56	2,000.85
HTPS	6,107.47	5,515.05	5,932.51	5,353.65
DSPM	3,723.00	3,387.93	3,982.41	3,672.68
HBPS	274.00	271.26	147.52	146.62
KWTPP	3,723.00	3,527.54	3,322.10	3,155.96
<b>Total</b>	<b>16,350.35</b>	<b>14,940.84</b>	<b>15,675.10</b>	<b>14,329.76</b>

### 3.7 Gross Station Heat Rate

#### CSPGCL's Submission

CSPGCL submitted the actual Gross Station Heat Rate (GSHR) vis-à-vis normative GSHR approved for FY 2016-17 for existing Generating Stations, as shown in the Table below:

**Table 3-9: Actual GSHR for FY 2016-17 (kcal/kWh)**

Station	MYT Order	Actual
KTPS	3,110	3187.66
HTPS	2,650	2671.78
DSPM	2,500	2435.54
KWTPP	2,375	2494.55

CSPGCL submitted that DSPM has performed better than the norms specified, while HTPS and KWTPP have under-achieved in terms of GSHR mainly due to partial loading of the plant. All the above stations were also subjected to Backing Down

Instructions (BDIs) from SLDC and the impact of backing down on SHR is without prejudice to the submissions, contentions and claims of CSPGCL in the matter.

As regards KTPS, CSPGCL submitted that since SHR norms adopted in the Regulation / Order are same as were adopted in previous Regulation / Order and relaxation on these parameters is sub-judice in Appeal No. 222 of 2015, CSPGCL had not made detailed submissions for relaxation in these norms. Further, CSPGCL submitted that by taking CPRI Report values and with arithmetical corrections in calculations, SHR works out to 3250 kcal/kWh. CSPGCL requested the Commission to consider aforesaid corrections in norms and to allow gains accordingly for provisional True-up for CSPGCL for FY 2016-17.

As regards HTPS and KWTPP, CSPGCL submitted that CERC in the IEGC has acknowledged that outage has definite impact on AEC and SHR. CSPGCL claimed that AEC and SHR for HTPS and KWTPP suffered due to partial load operations caused by uncontrollable problem in LDCC for coal.

CSPGCL requested that the normative SHR for HTPS and KWTPP be adjusted as per computation methodology given under Indian Electricity Grid Code, from 2650 kcal/kWh and 2375 kcal/kWh to 2671.78 kcal/kWh and 2428.44 kcal/kWh, respectively, for provisional True-up for FY 2016-17.

### **Commission's Views**

CSPGCL has filed Appeal No. 222 of 2015 before the Hon'ble APTEL on the issue of SHR for KTPS as approved in Order dated May 23, 2015. Since, the matter is sub-judice before the Hon'ble APTEL, SHR has been considered as approved for KTPS in the MYT Order. Further, as regards HTPS and KWTPP, the issue has already been addressed in earlier Section of this Chapter. Hence, no relaxation in SHR has been considered at this stage. For DSPM, GSHR has been considered as approved in the MYT Order.

The actual SHR for FY 2016-17 has been considered as submitted by CSPGCL for the computation of actual Fuel Cost. Further, the normative SHR for FY 2016-17 has been considered for computation of normative Fuel Cost. SHR approved by the Commission after provisional truing up for FY 2016-17 is shown in the following Table:

**Table 3-10: Approved GSHR in Provisional True-up for FY 2016-17 (kcal/kWh)**

Station	MYT Order	Normative for Provisional Truing up	Actual
KTPS	3,110	3,110	3187.66
HTPS	2,650	2,650	2671.78
DSPM	2,500	2,500	2435.54
KWTPP	2,375	2,375	2494.55

### 3.8 Secondary Fuel Oil Consumption

#### CSPGCL's Submission

CSPGCL has submitted the actual Secondary Fuel Oil Consumption (SFOC) for FY 2016-17 as 1.59 ml/kWh for KTPS, 0.61 ml/kWh for HTPS, 0.19 ml/kWh for DSPM, and 0.51 ml/kWh for KWTPP. The actual SFOC is lower than normative for all generating stations, except KWTPP. For KWTPP, CSPGCL submitted that MYT Regulations, 2015 forced steep reduction in norm from 1 ml/kWh to 0.50 ml/kWh, but the deviation from the norm was very nominal, i.e. 0.01 ml/kWh, which was attributed to part load operations due to coal shortage.

#### Commission's Views

For the purpose of sharing of efficiency gains/losses, actual SFOC for FY 2016-17 has been considered vis-a-vis normative SFOC considered for computation of normative fuel cost, as shown in the Table below:

**Table 3-11: Approved SFOC for FY 2016-17 (kcal/kWh)**

Station	MYT Order	Normative considered for Provisional Truing up	Actual
KTPS	2.00	2.00	1.59
HTPS	0.80	0.80	0.61
DSPM	0.50	0.50	0.19
KWTPP	0.50	0.50	0.51

### 3.9 Transit Loss

#### CSPGCL's Submission

CSPGCL has performed better in transit loss than normative approved by the Commission for FY 2016-17 for all existing Generating Stations. CSPGCL has



submitted the actual transit loss as 1.13% for KTPS, 0.19% for HTPS, 0.13% for DSPM, and 0.19% for KWTPP.

### Commission's Views

As regards the categorisation of DSPM as pithead or non-pithead, CSPGCL has filed an appeal before the Hon'ble APTEL against the Tariff Order dated May 23, 2015. As the matter is sub-judice, the normative transit loss of 0.20% has been considered for DSPM treating it as a pithead station as considered in MYT Order. The actual transit loss for FY 2016-17 has been considered as submitted by CSPGCL for the purpose of sharing of efficiency gains and losses. Further, the normative transit loss for FY 2016-17 has been considered for computation of normative fuel cost for FY 2016-17, as shown in the Table below:

**Table 3-12: Approved Transit loss for FY 2016-17**

Station	MYT Order	Normative considered for Provisional Truing up	Actual
KTPS	1.15%	1.15%	1.13%
HTPS	0.20%	0.20%	0.19%
DSPM	0.20%	0.20%	0.13%
KWTPP	0.20%	0.20%	0.19%

### 3.10 Calorific Value and Price of Fuel

#### CSPGCL's Submission

CSPGCL submitted the actual calorific value and price of fuels for its thermal power stations for FY 2016-17, as shown in the following Table:

**Table 3-13: Actual Calorific Value and Price of fuels for FY 2016-17**

Station	Coal		Secondary Fuel (HFO +HSD)	
	Calorific Value (kcal/kg)	Actual Price of Fuel (Rs./MT)	Calorific Value (kcal/kL)	Actual Price of Fuel (Rs./kL)
KTPS	3266.71	2217.59	10000	33615.47
HTPS	3378.60	1713.72	10000	43270.25
DSPM	3587.80	2039.11	10000	50758.17
KWTPP	3428.19	1713.72	10000	43270.25

### Commission's View

As regards HTPS and KWTPP, since the common facility is used for transportation of coal, the Commission sought clarification from CSPGCL regarding methodology adopted/process followed for allocation of coal to KWTPP and HTPS during FY 2016-17. CSPGCL clarified that the methodology adopted in the present Petition is same as settled by the Commission in previous year true-up. Accordingly, landed price of coal has been considered on integrated basis and the same rate has been used for computation of fuel cost for both the plants. The Commission accepts the submission of CSPGCL and accordingly considered the landed price of coal for HTPS and KWTPP.

The details of month-wise Gross Calorific Value (GCV) for each Generating Station for FY 2016-17 were scrutinised. The calorific values of fuels for FY 2016-17 have been considered as submitted by CSPGCL. The actual prices of Secondary Fuel Oil for FY 2016-17 have been considered same as submitted by CSPGCL. The landed price of coal has been re-computed considering the approved transit and handling loss for FY 2016-17, for computation of normative Fuel Cost.

The calorific value of fuel and price of fuel considered by the Commission for computation of normative fuel cost for FY 2016-17 is shown in the following Table:

**Table 3-14: Calorific Value and Price of fuels for FY 2016-17 approved by the Commission**

Station	Coal		Secondary Fuel (HFO +HSD)	
	Calorific Value (kcal/kg)	Normative Price of Fuel (Rs./MT)	Calorific Value (kcal/kL)	Normative Price of Fuel (Rs./kL)
KTPS	3,266.71	2,221.29	10,000	33,615.47
HTPS	3,378.60	1,713.81	10,000	43,270.25
DSPM	3,587.80	2,040.64	10,000	50,758.17
KWTPP	3,428.19	1,713.81	10,000	43,270.25

### 3.11 Fuel Cost

#### Commission's Views

Based on the approved performance parameters, calorific values of fuels and fuel prices, the normative fuel cost has been computed for FY 2016-17 as shown in the Table below:

**Table 3-15: Station-wise Approved Fuel Cost in Provisional True-up for CSPGCL for FY 2016-17**

Station	Actual					Normative Approved after Provisional True-up				
	Cost of Coal (Rs. Crore)	Cost of Oil (Rs. Crore)	Total (Rs. Crore)	Net Generation (MU)	Fuel cost per unit (Rs./kWh)	Cost of Coal (Rs. Crore)	Cost of Oil (Rs. Crore)	Total (Rs. Crore)	Net Generation (MU)	Fuel cost per unit (Rs./kWh)
KTPS	493.18	12.27	505.45	2000.85	2.53	530.09	16.96	547.05	2239.06	2.44
HPS	802.13	15.75	817.87	5353.65	1.53	818.50	21.14	839.64	5515.05	1.52
DSPM	550.82	3.90	554.72	3672.68	1.51	528.32	9.45	537.77	3387.93	1.59
KWTTP	413.41	7.37	420.78	3155.96	1.33	441.10	8.05	449.16	3527.54	1.27
<b>Total</b>	<b>2259.54</b>	<b>39.28</b>	<b>2298.82</b>	<b>14183.15</b>	<b>1.62</b>	<b>2318.01</b>	<b>55.60</b>	<b>2373.61</b>	<b>14669.58</b>	<b>1.62</b>

### 3.12 Annual Fixed Charges for CSPGCL

Regulation 35 of the MYT Regulations, 2015 specifies the components of Annual Fixed Charges (AFC) for CSPGCL as under:

- (a) Return on Equity;
- (b) Interest and Finance charges;
- (c) Depreciation;
- (d) Interest on Working Capital;
- (e) Operation and Maintenance Expenses and;

Less:

- (f) Non-Tariff Income

In addition to the above, the Commission has approved the Contribution to Pension Fund as a part of AFC in the MYT Order for Control Period from FY 2016-17 to FY 2020-21.

### 3.13 Capital Cost and Additional Capitalisation

#### CSPGCL's Submission

CSPGCL has considered the opening capital cost and capital structure of existing Thermal and Hydro Stations same as the closing values for FY 2015-16 as approved in True-up Order. The additional capitalization during the year has been considered as per provisional Annual Accounts/Fixed Asset Register for FY 2016-17. CSPGCL has segregated the capital expenses and R&M expenses, in compliance with the directives of the Commission and in line with the approach adopted by the Commission in Order dated June 12, 2014 and subsequent letter No. 1705 dated October 27, 2014.

Further, CSPGCL has also considered de-capitalisation towards recoveries/reconciliation of certain sub-components, which were already capitalised, instead of considering under Other Income.

As regards KWTPP, post preparation of accounts last year, CSPGCL noticed that correction entry in the GFA was required due to migration of the accounting software. Accordingly, CSPGCL had reduced the additional capitalization by Rs. 90.12 Crore in FY 2015-16. CSPGCL submitted that as the same entry has already been considered in True-up for FY 2015-16, hence, the same is not considered for FY 2016-17. During FY 2016-17, additional capitalisation of Rs. 12.81 Crore was done. The overall capitalisation of the project till date is Rs. 3588.52 Crore, which is within the approved project cost of Rs. 3719.37 Crore.

### Commission's Views

The station-wise additional capitalisation submitted by CSPGCL and additional capitalisation incurred as per the Provisional Annual Accounts for FY 2016-17 have been duly scrutinised. The Commission has considered the additional capitalisation for KTPS, HTPS, DSPM and Hasdeo Bango as submitted by CSPGCL and as per the provisional accounts of FY 2016-17.

The capitalisation of KWTPP has been scrutinized in line with the capital expenditure approved in Order dated September 22, 2015. It was found that the additional capitalisation of Rs. 12.81 Crore for KWTPP, after reversal of the interest on advance to contractor of Rs. 13.74 Crore, is in order. As regards the correction entry in GFA relating to migration of accounting software, the Commission has not considered any adjustment in FY 2016-17 as it has already been considered in True-up for FY 2015-16.

The additional capitalisation approved in the provisional Truing up for FY 2016-17 is shown in the Table below:

**Table 3-16: Approved Additional Capitalisation in true up for FY 2016-17 (Rs. Crore)**

Station	MYT Order	CSPGCL Petition	Approved after provisional true up
KTPS	7.00	6.86	6.86
HTPS	11.30	32.00	32.00
DSPM	3.96	2.07	2.07
HBPS	-	-	-
KWTPP	-	12.81	12.81
<b>Total</b>	<b>22.26</b>	<b>53.75</b>	<b>53.75</b>

### 3.14 Means of Finance for Additional Capitalisation

#### CSPGCL's submission

CSPGCL submitted that the actual equity addition towards additional capitalisation is higher than 30%. However, in line with the provision of Regulations 17.1 and 17.3 of the MYT Regulations, 2015, debt:equity ratio of 70:30 has been considered for the additional capitalisation in FY 2016-17.

#### Commission's Views

As regards the funding of additional capitalisation, the Commission notes that the actual equity addition is more than 30% as per the Provisional Accounts for FY 2016-17. The Commission has considered the normative debt:equity ratio of 70:30 in accordance with MYT Regulations, 2015. The equity in excess of 30% of capitalisation has been considered as normative loan for the purpose of provisional Truing up. However, the Commission may review on actual equity deployed at time of final truing up. The means of finance for additional capitalisation for FY 2016-17 is approved as shown in the following Table:

**Table 3-17: Approved Means of Finance for existing stations for FY 2016-17**

Station	CSPGCL Petition			Approved after Provisional True up		
	Equity	Debt	Total	Equity	Debt	Total
KTPS	2.06	4.80	6.86	2.06	4.80	6.86
HTPS	9.60	22.40	32.00	9.60	22.40	32.00
DSPM	0.62	1.45	2.07	0.62	1.45	2.07
HBPS	-	-	-	-	-	-
KWTTP	3.84	8.97	12.81	3.84	8.97	12.81
<b>Total</b>	<b>16.12</b>	<b>37.62</b>	<b>53.75</b>	<b>16.12</b>	<b>37.62</b>	<b>53.75</b>

### 3.15 Depreciation

#### CSPGCL's Submission

As regards DSPM and KWTTP, CSPGCL submitted that the depreciation has been computed by applying the weighted average depreciation rate on the average regulatory GFA during the year. The weighted average depreciation rate has been computed by applying the category-wise scheduled rates specified in Regulation 24.4 of the MYT Regulations, 2015, as shown in the Table below:

**Table 3-18: Depreciation for DSPM and KWTP for FY 2016-17 as submitted by CSPGCL (Rs. Crore)**

Particulars	DSPM		KWTP	
	MYT Order	CSPGCL Petition	MYT Order	CSPGCL Petition
Opening GFA	2335.24	2333.70	3665.79	3561.97
Additional Capitalization	3.96	2.07	0.00	12.81
Closing GFA	2339.20	2335.77	3665.79	3574.78
Average GFA	2337.22	2334.73	3665.79	3568.37
Weighted Average Rate of Depreciation	5.50%	5.49%	5.17%	5.17%
<b>Depreciation for FY 2016-17</b>	<b>128.53</b>	<b>128.15</b>	<b>189.68</b>	<b>184.38</b>

As regards HTPS, CSPGCL has computed the average depreciation rate on assets added after April 1, 2010 as per MYT Regulations, 2015. The depreciation for assets capitalized after April 1, 2010 has been calculated as shown in the following Table:

**Table 3-19: Depreciation for HTPS for FY 2016-17 as submitted by CSPGCL (Rs. Crore)**

Particulars	MYT Order	CSPGCL Petition
Depreciation for assets up to FY 2009-10	-	-
Depreciation for assets added after FY 2009-10	-	-
Opening GFA on additional capitalization from FY 2010-11 onwards	346.64	348.30
Additional Capitalization during the year	11.30	32.00
Closing GFA	357.94	380.30
Average GFA	352.29	364.30
Depreciation rate (%)	5.38%	5.33%
<b>Depreciation for FY 2016-17</b>	<b>18.95</b>	<b>19.43</b>

As regards KTPS, CSPGCL submitted that 90% of the closing GFA has been reduced by accumulated depreciation till previous year. The balance depreciation has been divided by the balance useful life to compute the depreciation for FY 2016-17 as per methodology adopted by Commission in the MYT Order, as shown in the Table below:

**Table 3-20: Depreciation for KTPS for FY 2016-17 as submitted by CSPGCL (Rs. Crore)**

Particulars	MYT Order	CSPGCL Petition
Opening GFA as per Order	671.63	668.32
Additional Capitalisation	7.00	6.86
Closing GFA	678.63	675.18
90% of GFA	610.77	607.66
Accumulated Depreciation up to FY 2015-16	363.59	363.92
Balanced Depreciable value	247.18	243.74
Balance useful life	5.00	5.00
<b>Depreciation for FY 2016-17</b>	<b>49.43</b>	<b>48.75</b>

As regards Hasdeo Bango, CSPGCL has computed the depreciation in accordance with the first proviso of Regulation 24.4 and in line with the methodology adopted in the MYT Order, by spreading the balance depreciable value over the balance useful life, as shown in the Table below:

**Table 3-21: Depreciation for HSPS for FY 2016-17 as submitted by CSPGCL (Rs. Crore)**

Particulars	MYT Order	CSPGCL Petition
Opening GFA	109.90	109.90
Additional Capitalisation	-	-
Closing GFA	109.90	109.90
Accumulated Depreciation up to last year	61.78	61.78
90% of GFA excluding land	98.91	98.91
Balance amount to be depreciated	37.13	37.13
Remaining Useful Life	14.00	14.00
<b>Depreciation for FY 2016-17</b>	<b>2.65</b>	<b>2.65</b>

### Commission's Views

The Commission has detailed the methodology for computation of depreciation for existing Generating Stations in the MYT Order. CSPGCL has clarified that no asset

has been retired during FY 2016-17 as per Provisional Accounts pertaining to plants under consideration.

For KTPS, the Commission was allowing the depreciation for KTPS based on scheduled depreciation rate as specified in CSERC MYT Regulations till FY 2015-16. However, in MYT Order, the Commission has changed the methodology and approved Depreciation over the balance useful life of the Units (till FY 2020-21) by considering the anticipated closure of 50 MW Units. As per retirement schedule considered in MYT Order, Unit 3 was proposed to be retired in June 2016, Unit 1 in March 2017, Unit 2 in December 2017 and Unit 4 in June 2018. However, the Commission notes that no 50 MW Units were retired during FY 2016-17. CSPGCL submitted that 2 nos. of 50 MW Units were due for retirement in FY 2016-17 in compliance of the closure notice received from Chhattisgarh Environmental Conservation Board. However, pending appeal before the Hon'ble Green Tribunal, plant was kept in operation. Moreover, CSPGCL confirmed that the retirement of plant would be in FY 2020-21. Since, it is presumed that all Units of KTPS will be retired by FY 2020-21 as per original schedule, the Commission has not considered any deviation in methodology for allowing depreciation.

In view of the above, the Commission continues with the methodology of depreciation as approved in MYT Order and approves the depreciation over balance useful life of the plant, for the purpose of the provisional Truing up.

For HTPS, the Commission in its Order dated June 12, 2014, adopted a methodology wherein the balance depreciable value of original capital cost of the asset is depreciated over balance useful life of assets, i.e., up to FY 2015-16. Hence, no balance depreciation value for original capital cost has been considered from FY 2016-17 onwards, since it has already been allowed till FY 2015-16. For the additional capitalisation after 2010, the depreciation on average GFA and depreciation rate based on scheduled depreciation rate of 5.33% has been considered.

For DSPM, the Commission has computed depreciation on average GFA by applying the weighted average depreciation rate of 5.49% based on scheduled rates specified in the MYT Regulations, 2015.

In case of KWTPP, the depreciation rate has been considered based on the actual depreciation reported in the Provisional Accounts for FY 2016-17, which has been applied on the revised opening GFA and asset addition during the year approved in this Order.



For Hasdeo Bango, the depreciation has been considered over the balance useful life of the plant, as per methodology adopted in past Orders.

In view of the above, the Commission approves the Depreciation for FY 2016-17 after provisional Truing up, as shown in the following Table:

**Table 3-22: Depreciation approved for CSPGCL for FY 2016-17 (Rs. Crore)**

Particulars	KTPS	HTPS	DSPM TPS	Hasdeo Bango	KWTTP
Opening GFA	668.32	348.30*	2,333.70	109.90	3,561.97
Additional Capitalization	6.86	32.00	2.07	-	12.81
Closing GFA	675.18	380.30	2,335.77	109.90	3,574.78
Average Rate of Depreciation	-	5.33%	5.49%	-	5.17%
<b>Depreciation</b>	<b>48.75</b>	<b>19.43</b>	<b>128.15</b>	<b>2.65</b>	<b>184.38</b>

*\*Note – Opening GFA on additional capitalisation from FY 2010-11 onwards*

### 3.16 Return on Equity

#### CSPGCL's submission

CSPGCL has computed Return on Equity (RoE) as per Regulation 22 of the MYT Regulations, 2015. RoE has been computed on pre-tax basis at the base rate of 15.50% for existing Thermal and Hydel Power Plants on permissible equity for FY 2016-17. Since, no actual Income Tax has been paid during FY 2016-17, no grossing up with applicable Tax rate has been considered. CSPGCL submitted that in case any Income Tax liability for FY 2016-17 is raised by the Income Tax authorities during the final assessment, the same may be allowed in the future True-up Order.

CSPGCL submitted the station-wise RoE for FY 2016-17 as shown in the following Table:

**Table 3-23: Return on Equity for FY 2016-17 as submitted by CSPGCL (Rs. Crore)**

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTTP
Permissible Equity in Opening GFA	207.08	360.78	694.89	37.72	610.58
Equity addition during the year	2.06	9.60	0.62	0.00	3.84
Permissible Equity in Closing GFA	209.14	370.38	695.51	37.72	614.43
Rate of return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%
<b>Return on Equity</b>	<b>32.26</b>	<b>56.67</b>	<b>107.76</b>	<b>5.85</b>	<b>94.94</b>

## Commission's Views

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

*“22. RETURN ON EQUITY*

*22.1 Generation and Transmission: Return on Equity shall be computed in rupee terms on the equity base determined in accordance with Regulation 17. Return on equity shall be computed on pre-tax basis at the base rate of maximum 15.5 % 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.*

*...”*

The RoE for FY 2016-17 has been approved in the MYT Order dated April 30, 2016.

For existing stations, the closing equity approved in True-up for FY 2015-16 has been considered as the opening equity for FY 2016-17. RoE has been computed as per Regulation 22 of the MYT Regulations, 2015.

The grossing up of base rate of RoE with the applicable tax rate has not been considered. The base rate of RoE of 15.50% has been considered as specified in the MYT Regulations, 2015. As regards the prayer of CSPGCL to allow the Income Tax liability for FY 2016-17 on actual basis after final assessment by the Tax authorities, an appropriate view regarding the same shall be taken based on submissions of CSPGCL in this regard at the time of final Truing up. RoE approved for FY 2016-17 after provisional Truing up is shown in the following Table:

**Table 3-24: Return on Equity for FY 2016-17 as approved by the Commission (Rs. Crore)**

<b>Particulars</b>	<b>KTPS</b>	<b>HTPS</b>	<b>DSPM</b>	<b>Hasdeo Bango</b>	<b>KWTPP</b>
Opening Equity	207.08	360.78	694.89	37.72	610.58
Equity addition during the year	2.06	9.60	0.62	0.00	3.84
Closing Equity	209.14	370.38	695.51	37.72	614.43
Rate of return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%
<b>Return on Equity</b>	<b>32.26</b>	<b>56.67</b>	<b>107.76</b>	<b>5.85</b>	<b>94.94</b>

### **3.17 Interest and Finance Charges**

#### **CSPGCL's submission**

CSPGCL submitted that the Interest and Finance charges for FY 2016-17 have been computed as per Regulation 23 of the MYT Regulations, 2015. The repayment for the year has been deemed to be equal to the depreciation for the year and normative interest on loan has been calculated on the normative average loan during the year by applying the weighted average rate of interest of actual loan portfolio at the beginning of the year.

CSPGCL added that depreciation is deemed as repayment as per philosophy adopted in the MYT Regulations and the MYT Order, while the repayment of State Government Loan has been notionally considered as matured and no interest charges against the same is included.

CSPGCL submitted that the loan for KWTPP was obtained from M/s PFC and M/s REC on April 1, 2015 at rate of interest of 13% and 12.25%, respectively. Further, CSPGCL has opted for loan refinancing. The offer from M/s State Bank of India was received for refinancing of loan of KWTPP and DSPM at concessional rate. However, it involved upfront closure /commitment cost. As against this, PFC made a counter offer to refinance the same at the rates 10.30% and 10.25% for KWTPP and DSPM, respectively, without any front-end cost. As per Regulation 23.8, benefit of such restructuring is to be shared between beneficiaries and CSPGCL in the ratio 2:1. Accordingly, CSPGCL has calculated the effective rate of interest for DSPM and KWTPP after refinancing as 10.92% and 11.20%, respectively.

The Interest and Finance charges submitted by CSPGCL for FY 2016-17 is shown in the following Table:

**Table 3-25: Interest & Finance Charges as submitted by CGPGCL for FY 2016-17 (Rs. Crore)**

<b>Particulars</b>	<b>KTPS</b>	<b>HTPS</b>	<b>DSPM</b>	<b>Hasdeo Bango</b>	<b>KWTPP</b>
Opening Net Normative Loan	97.31	100.72	754.10	10.38	2,514.54
Repayment during the period	48.75	19.43	128.15	2.65	184.38
Debt Addition during the year	4.80	22.40	1.45	-	8.97
Closing Net Normative Loan	53.37	103.69	627.40	7.73	2,339.13
Weighted Average Interest Rate (%)	12.52%	12.18%	10.92%	11.12%	11.20%
Interest Expense for the Period	9.43	12.45	75.41	1.01	271.81
Financing and Other Charges	0.05	0.00	0.00	-	0.00
<b>Total Interest Expenses</b>	<b>9.49</b>	<b>12.46</b>	<b>75.41</b>	<b>1.01</b>	<b>271.81</b>

### **Commission's Views**

The Commission has computed the Interest and Finance charges for FY 2016-17 as per Regulation 23 of the MYT Regulations, 2015.

For existing stations, the closing net normative loan balance approved for FY 2015-16 after True-up has been considered as opening net normative loan balance for FY 2016-17. The debt addition has been considered equal to debt amount approved in this Order towards additional capitalisation. The depreciation has been considered as repayment during the year.

The actual weighted average interest rate as on April 1, 2016 has been re-computed as per Provisional Accounts for FY 2016-17 and documentary evidences submitted by CSPGCL. Accordingly, weighted average rate of interest has been considered for FY 2016-17.

As regards the re-financing of existing loans for KWTPP and DSPM, the Commission sought the details of offer submitted by State Bank of India and counter offer submitted by M/s. PFC and M/s. REC. CSPGCL submitted that in case the offer of SBI would have been accepted, then prepayment charges were 2.50% and 2.75% as per terms and conditions of existing lender, PFC and REC, respectively. At discounted rate over the balance loan term, the effective loading was about to 0.55%. Further, SBI offer was at monthly rest, while existing lender's offers were at quarterly

rest, which practically implies 0.1% additional discounting on PFC and REC rates. Hence, re-financing from PFC and REC was found to be beneficial and accordingly, the same was adopted. The Commission has gone through the offer of PFC and REC adopted by CSPGCL for re-financing of loan for KWTPP and DSPM. The Commission observes that the offer accepted by CSPGCL is more beneficial. The Commission accepted the revision of rate of interest for DSPM loan from 12.25% to 10.25% and for KWTPP loan from 12.99% to 10.30%. This led to reduction in interest rate of 2.00% for DSPM and 2.69% for KWTPP.

Further, as per Regulation 23.8 of the MYT Regulations, 2015, the savings of re-financing shall be shared between the beneficiaries, i.e., CSPDCL, and CSPGCL in the ratio of 2:1. The Commission accepts the methodology of sharing of savings proposed by CSPGCL. Accordingly, net savings have been computed separately and allowed in addition to Interest and finance charges. Further, the Commission notes that CSPGCL confirmed that no additional cost has been incurred by CSPGCL for re-financing of loan, hence, the same has not been considered.

In view of the above, the Interest and Finance charges approved by the Commission for FY 2016-17 after provisional truing up is shown in the following Table:

**Table 3-26: Interest & Finance Charges as approved by the Commission for FY 2016-17 (Rs. Crore)**

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP
Opening Net Normative Loan	97.31	100.72	754.10	10.38	2,514.54
Repayment during the period	48.75	19.43	128.15	2.65	184.38
Debt Addition during the year	4.80	22.40	1.45	-	8.97
Closing Net Normative Loan	53.37	103.69	627.40	7.73	2,339.13
Weighted Average Interest Rate (%)	12.52%	12.18%	10.25%	10.10%	10.30%
Interest Expense for the Period	9.43	12.45	70.80	0.91	249.96
Add: Financing and Other Charges	0.05	0.00	0.00	-	0.00
Add: Sharing of net savings for re-financing	-	-	4.61	-	21.76
<b>Total Interest Expenses</b>	<b>9.49</b>	<b>12.46</b>	<b>75.41</b>	<b>0.91</b>	<b>271.73</b>

### **3.18 Operation and Maintenance (O&M) expenses**

#### **CSPGCL's Submission**

CSPGCL submitted the O&M Expenses (excluding water charges) for existing thermal and hydel power plants in accordance with Regulation 38.5 of MYT Regulations, 2015.

Further, CSPGCL submitted that as per the methodology adopted in earlier Orders, O&M Expense in the support functions such as Head Office, CAU, etc., are allocated among the thermal power plants and Hasdeo Bango HEP, based on their installed capacities.

CSPGCL added that it has computed the normative O&M cost in the similar manner as approved in the MYT Order and previous True up Order. For the purpose of normalization of O&M expenses for FY 2016-17, CSPGCL has considered WPI variation and CPI variation as 3.67% and 4.12%, respectively. CSPGCL further submitted that the normative O&M Expenses for KWTPP, whose COD was later than April 1, 2010, have been computed as per the Regulation 38.5.1.1 of MYT Regulations, 2015, normalizing the same with actual weighted average rate of inflation.

CSPGCL submitted that it has not considered the productivity incentive as the part of employee expense for the regulatory purpose, as per the methodology settled in the previous Order. Further, leave encashment expenses have been settled against the provision made in the previous year. CSPGCL has only considered the actual payment of Interim relief as per methodology followed by previous Orders.

CSPGCL further submitted that as per Regulations, the MYT Order has not considered the Contribution to the Pension Trust as part of O&M expenses, CSPGCL has followed the same approach. Further, as per the methodology adopted in earlier Orders, the cost incurred on coal transport has been reduced from the O&M Expense and added to the fuel cost. Similarly, CSPGCL has not considered donations as part of A&G Expenses.

The O&M Expenses submitted by CSPGCL for FY 2016-17 is shown in the following Table:

**Table 3-27: O&M Expenses for FY 2016-17 as submitted by CSPGCL (Rs. Crore)**

Station	MYT Order	CSPGCL Petition	
		Actual	Normative
KTPS	234.23	198.78	227.06
HTPS	302.97	255.21	275.95
DSPM	155.81	107.01	140.77
HBPS	12.93	9.71	11.22
KWTPP	97.03	50.05	88.31
<b>Total</b>	<b>802.97</b>	<b>620.76</b>	<b>743.31</b>

### Commission's Views

As regards O&M Expenses, Regulation 38.5 of the MYT Regulations, 2015 specifies as under:

*“38.5 Operation and Maintenance expenses*

... ..

#### *Employee Cost*

- c) *The employee cost, excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, for the base year i.e. FY 2015-16, shall be derived on the basis of the normalized average of the actual employee expenses excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2015-16, subject to prudence check by the Commission.*
- 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 (excluding water charges) and repair and maintenance expenses, for the base year i.e. FY 2015-16, shall be derived on the basis of the normalized average of the actual administrative and general expenses (excluding water charges) and repair and maintenance expenses, respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2015-16, 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 2015-16. 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.***

***Provided that water charges shall be pass-through in tariff on reimbursement basis.” (emphasis added)***

In the MYT Order, the Commission determined the O&M Expenses for the Control Period from FY 2016-17 to FY 2020-21 in accordance with the above Regulations.

The above Regulations specify that at the time of truing up, the O&M Expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period. The Regulation does not require the base O&M expenses as approved in the MYT Order to be revised.

Accordingly, the Commission has computed the normative O&M expenses for FY 2016-17 by applying the actual inflation of FY 2016-17 on base O&M expenses for FY 2015-16, as approved in the MYT Order. The Commission has considered the actual inflation of CPI and WPI levels for FY 2016-17 over CPI and WPI levels of FY 2015-16. The Commission has considered escalation factor of 4.12% for employee expenses and 1.43% for R&M expenses and A&G Expenses. Further, as regards KWTPP, the normative O&M expenses has been determined in accordance with the norms specified in the MYT Regulations, 2015.

Accordingly, the normative O&M Expenses computed for FY 2016-17 are as shown in the following Table:



**Table 3-28: Normative O&M Expenses for FY 2016-17 as computed by the Commission (Rs. Crore)**

Particulars	FY 2015-16	FY 2016-17	
	Base Year Normative Expenses	Approved in MYT Order	Revised Normative Expenses
KTPS	229.77	233.39	222.70
HTPS	280.03	302.97	289.05
DSPM	144.61	155.81	148.60
KWTPP	-	97.03	88.31
HB	11.93	12.93	12.34

For the purpose of provisional truing up for FY 2016-17, the Commission approves the normative O&M Expenses. At this stage, the Commission has continued with its approach as per MYT Order for reduction in O&M expenses for KTPS in view of retirement schedule. The Commission may review the normative O&M expenses at the time of final Truing up. As regards CSPGCL prayer for non reduction in O&M expenses due to non retirement of unites each concerned, the final view shall be taken up at the time of final true up.

The Commission has undertaken sharing of gains and losses as per MYT Regulations, 2015, between normative expenses vis-à-vis provisional expenses as per Provisional Accounts.

As regards the sharing of gains and losses, the following provision has been inserted in Regulation 13.1 by the First Amendment to the MYT Regulations, 2015 on June 16, 2017:

*“Provided further that employee cost shall not be factored in for sharing of gains or losses on account of operations and maintenance expenses, ... ..”*

Accordingly, the Commission approves the Employee Expenses at actuals as per provisional Accounts for FY 2016-17, and no sharing of gains and losses have been considered for Employee Expenses. The sharing of gains and losses has been undertaken in subsequent Section of this Chapter.

**In this Order, the Commission has considered the actual O&M expenses based on provisional Accounts for FY 2016-17, for the purposes of sharing of gains and losses. The final approval of O&M Expenses shall be accorded at time of truing up based on audited accounts.**

Further, the Commission notes that CSPGCL submitted the impact of wage revision separately over and above the O&M expenses claimed. The Commission notes that the impact of wage revision is allowed on actual payout basis. The Commission sought the details of impact of wage revision for FY 2016-17. CSPGCL submitted the following details:

**Table 3-29: Details of Impact of Wage Revision as submitted by CSPGCL (Rs. Crore)**

Particulars	KTPS	HTPS (incl. HB)	DSPM	KWTTP
Actual Payment made against provision for FY 2015-16 (not considered in previous year True-up)	3.63	4.98	1.47	0.92
Payment made for FY 2016-17 (on Basic + Addl. Pay)	3.51	4.68	1.44	0.86
Payment made for FY 2016-17 (on DA + HRA @7.5%)	4.59	6.12	1.85	1.11
Total Actual IR paid during FY 2016-17	11.74	15.78	4.75	2.89
Allocation CAU	0.66	1.26	0.75	0.75
<b>Total Impact of Wage Revision</b>	<b>12.39</b>	<b>17.04</b>	<b>5.50</b>	<b>3.63</b>

The Commission, for the purpose of provisional truing up, has considered the impact of wage revision for FY 2016-17 as submitted by CSPGCL, over and above the approved O&M Expenses. The final view in this regard will be taken at the time of Final Truing up for FY 2016-17.

### **3.19 Interest on Working Capital**

#### **CSPGCL's Submission**

CSPGCL submitted that the Interest on Working Capital (IoWC) for FY 2016-17 has been computed in accordance with Regulation 25 of the MYT Regulations, 2015, considering the interest rate equal to the applicable Base Rate of State Bank of India as on April 1, 2016 plus 350 basis points, i.e., 12.80%

Accordingly, CSPGCL has claimed IoWC of Rs. 22.62 Crore for KTPS, Rs. 32.37 Crore for HTPS, Rs. 24.79 Crore for DSPM, Rs. 20.41 Crore for KWTTP, and Rs. 0.84 Crore for Hasdeo Bango.

### Commission's Views

The Commission has computed the IoWC for FY 2016-17 as per Regulation 25 of the MYT Regulations, 2015. The rate of interest has been considered as 12.80% as per the provisions of MYT Regulations, 2015. The revised normative O&M expenses have been considered for computation of Working Capital requirement. The actual revenue billed including past Revenue Gap/(Surplus) has been considered as receivables for computation of working capital requirement. Further, with the approach adopted in the past Orders, DSPM has been considered as a pithead station, and one-month cost of coal has been considered. Accordingly, the IoWC approved by the Commission after provisional Truing up for FY 2016-17 is shown in the following Table:

**Table 3-30: Approved IoWC for CSPGCL for FY 2016-17 (Rs. Crore)**

Station	MYT Order	CSPGCL Petition	Approved after Provisional True-up
KTPS	18.18	22.62	22.47
HTPS	27.91	32.37	32.84
DSPM	22.36	24.79	25.13
HBPS	0.56	0.84	0.86
KWTPP	17.58	20.41	20.41
<b>Total</b>	<b>86.59</b>	<b>101.03</b>	<b>102.14</b>

### 3.20 Pension and Gratuity Contribution

#### CSPGCL's Submission

CSPGCL submitted that as per MYT Order, CSPGCL's share of Pension and Gratuity Contribution for FY 2016-17 was determined as Rs. 130.83 Crore. CSPGCL further submitted that the plant-wise allocations considered in the Order have been maintained.

Also, CSPGCL submitted that the Commission in the MYT Order dated April 30, 2016, directed to make additional contribution to the Pension & Gratuity Fund in compliance of the Hon'ble APTEL's decision. Accordingly, CSPGCL has made the additional Contribution of Rs. 42.25 Crore towards the same.

#### Commission's Views

The actual pension fund contribution of Rs. 113.29 Crore, excluding contribution for Marwa TPP, has been approved for CSPGCL for FY 2016-17, for the purpose of the

provisional Trueing up. The amount has been allocated to the Generating Stations in the same proportion as allocated by CSPGCL.

### **3.21 Non-Tariff Income**

#### **CSPGCL's submission**

CSPGCL submitted the Non-Tariff Income as per Regulation 38.6 of MYT Regulations, 2015 for FY 2016-17 for its existing Stations. Delayed Payment Surcharge has not been taken into account while determining the Non-Tariff Income for FY 2016-17 as per well-settled principle in previous Orders. The Station specific income has been booked to the respective Station, and income appearing against HO & CAU has been allocated to Generating Stations on the basis of installed capacity.

In previous True-up Petition, CSPGCL submitted that lease rent received against Rail Corridor from SRCPL and income from Fixed Deposit receipts is not incidental to the business of CSPGCL. This income should not be considered as the part of Non-Tariff Income of CSPGCL. Further, CSPGCL submitted that in the Tariff Order dated March 31, 2017, the Commission held as under:

*“...As regards the income received from SRCPL, the Commission notes that at this stage the income received from SRCPL is not incidental since, the facility is not owned nor being used by any existing plants for which the ARR was approved for FY 2015-16. Hence, for the purpose of True-up for FY 2015-16, the Commission has not considered this income received from SRCPL...”*

Further, CSPGCL submitted that the facility is not being used by any of the existing plants covered in the true up and no commercial utilisation has been made by CSPGCL. Further, no new directives from Government of Chhattisgarh were received regarding the same. Further, CSPGCL has not claimed any expenses on this account in the current Petition and maintained the status quo.

Furthermore, the receipts from SRCPL were not used by CSPGCL for its existing business and have been kept as separate Fixed Deposit Receipts so that, in case of any Government Directives, the same may be complied without any difficulty. Thus, income from lease deed is not incidental to the business of the CSPGCL. Hence, CSPGCL requested the Commission that in view of no change in factual matrix and the status quo, the view taken by the Commission in the previous Order should be maintained.

### Commission's View

The Commission in MYT Order has approved the Non-Tariff income of Rs. 35.19 Crore for CSPGCL for FY 2016-17.

The Commission notes that Provisional Accounts for FY 2016-17 reflects the Non-Tariff Income of Rs. 31.53 Crore. This includes the amount of Rs. 2.60 Crore towards lease rent from SRCPL pertaining to common rail corridor. Further, CSPGCL submitted the details of Rs. 1.51 Crore towards the income of FDRs for SRCPL. The Commission notes the submission of CSPGCL regarding the modalities of lease rent agreement for Rail Corridor from SRCPL and maintains the status-quo as per True-up Order for FY 2015-16. Accordingly, the Commission has not considered the income of Rs. 4.11 Crore for provisional truing up for FY 2016-17.

Non-Tariff Income of Rs. 5.17 Crore allocated to Marwa TPP has not been considered for provisional truing up. Further, the Commission notes that provisional accounts include the amount of Rs. 13.74 Crore towards interest income on advances to contractor for KWTPP. However, CSPGCL has considered the same amount for reducing the capital asset instead of considering under Non-Tariff income. The Commission has also considered the same approach as discussed in earlier Section.

In view of the above, the Commission approves the Station-wise Non-Tariff income for the purpose of provisional Truing up for FY 2016-17, as shown in the following Table:

**Table 3-31: Approved Non-Tariff Income in True-up for FY 2016-17 (Rs. Crore)**

Station	MYT Order	CSPGCL Petition	Approved after Provisional Truing up
KTPS	7.61	1.17	1.17
HTPS and HBPS	14.90	3.20	3.20
DSPM	8.63	2.13	2.13
KWTPP	4.05	2.03	2.03

### 3.22 Prior Period Items

#### CSPGCL's Submission

CSPGCL has considered the prior period (income)/expenses on the basis of the principles and practices adopted by the Commission in the previous Order. CSPGCL has not considered other excess provision (for ED and Cess and coal cost

rectification), and provision / reversal of provision for interim relief and other charges for the Prior Period (income)/expenditure. Similarly, CSPGCL has not considered depreciation and interest on finance charges relating to previous years, as the same has been computed differently and was approved accordingly during the respective True-up. Further, CSPGCL submitted that no contingent liability / claim has been included in the current Petition and such liability / claims shall be submitted on their settlement, as the case may be. Except for the above exclusions, CSPGCL has considered remaining prior period (income)/expenditure. The prior period expenses against HO & CAU in Provisional Accounts of FY 2016-17 have been allocated to the existing thermal plants based on their installed capacity.

### **Commission's Views**

The Commission has approved the Prior Period Expenses/(Income) in line with the approach adopted in the previous Tariff Orders. The Commission has considered the treatment of prior period item in accordance with the treatment considered in respective year's True-up Orders. The Commission approves the Station-wise Prior Period (Income)/Expenses for the purpose of provisional Truing up for FY 2016-17 as shown in the following Table:

**Table 3-32: Approved Prior Period Expenses/(Income) in True-up for FY 2016-17 (Rs. Crore)**

<b>Station</b>	<b>CSPGCL Petition</b>	<b>Approved after Provisional Truing up</b>
KTPS	0.08	0.08
HTPS	-	-
DSPM	-	-
KWTPP	-	-

### **3.23 Statutory Charges**

#### **CSPGCL's Submission**

CSPGCL submitted that as per MYT Regulations, 2015, the Water Charges for FY 2016-17 are on reimbursement basis, and the same has been recovered accordingly. Further, CSPGCL has claimed the SLDC charges as pass through element separately. CSPGCL submitted that Rs. 112.98 Crore as Water Charges and SLDC Charges have been recovered and no deficit/(surplus) has been claimed for FY 2016-17.

Further, CSPGCL has reduced expenses of Rs. 0.28 Crore incurred towards Petition filing and publication expenses in FY 2016-17 from O&M expenses and has claimed them separately. CSPGCL submitted that during FY 2016-17, Rs. 310.46 Crore towards impact of Hon'ble APTEL Judgement and Rs. 203.84 Crore towards Revenue Gap for FY 2015-16 were allowed by Commission and the same has been recovered as per Commission's Order.

### **Commission's Views**

For the purpose of the provisional truing up, the Commission has considered Statutory Charges as submitted by CSPGCL and based on Provisional Accounts for FY 2016-17. The Commission has separately considered the amount of Rs. 0.28 Crore towards Petition filing and publication expenses. Further, the impact of Hon'ble APTEL Judgment of Rs. 514.30 Crore (Rs. 310.46 crore + Rs. 203.84 Crore) has also been separately considered as expenses.

The final view in this regard shall be taken at time of Final truing up for FY 2016-17.

### **3.24 Aggregate Revenue Requirement for CSPGCL for FY 2016-17**

The Summary of ARR for KTPS, HTPS, DSPM, HBPS and KWTPP for FY 2016-17 is shown in the following Table:

**Table 3-33: Approved ARR for HTPS, KTPS and DSPM, for FY 2016-17 (Rs. Crore)**

Particulars	KTPS			HTPS			DSPM			KWIPP			Hasdeo Bango		
	MYT Order	CSPGCL Petition	Approved for Provisional Truing up	MYT Order	CSPGCL Petition	Approved for Provisional Truing up	MYT Order	CSPGCL Petition	Approved for Provisional Truing up	MYT Order	CSPGCL Petition	Approved for Provisional Truing up	MYT Order	CSPGCL Petition	Approved for Provisional Truing up
Depreciation	49.43	48.75	48.75	18.95	19.43	19.43	128.50	128.15	128.15	189.68	184.38	184.38	2.65	2.65	2.65
Interest & Finance Charges	9.88	9.49	9.49	11.80	12.46	12.46	84.77	75.41	75.41	331.34	271.81	271.73	1.15	1.01	0.91
Return on Equity	29.65	32.26	32.26	56.11	56.67	56.67	107.87	107.76	107.76	90.96	94.94	94.94	5.85	5.85	5.85
O&M Expenses	234.23	198.78	198.78	302.97	255.21	255.21	155.81	107.01	107.01	97.03	50.05	50.05	12.93	9.71	9.71
Impact of Wage Revision	9.61	12.39	12.39	24.81	17.04	16.85	4.19	5.50	5.50	2.68	3.63	3.63	0.99	0.19	0.19
Additional R&M Expenses	0.42	0.05	0.05	1.47	0.20	0.20	-	-	-	-	-	-	-	-	-
Interest on Working Capital	18.18	22.62	22.47	27.90	32.37	32.84	23.36	24.79	25.13	17.58	20.41	20.41	0.56	0.84	0.86
Less: Non-Tariff Income	7.61	1.17	1.17	14.90	3.20	3.20	8.63	2.13	2.13	4.05	2.03	2.03	-	-	-
<b>Total Annual Capacity Charge</b>	<b>343.80</b>	<b>323.16</b>	<b>323.01</b>	<b>429.12</b>	<b>390.17</b>	<b>390.45</b>	<b>495.91</b>	<b>446.49</b>	<b>446.84</b>	<b>725.22</b>	<b>623.20</b>	<b>623.12</b>	<b>24.13</b>	<b>20.25</b>	<b>20.17</b>
Cost of Coal	340.50	493.18	493.18	622.59	802.13	802.13	432.04	550.82	550.82	340.44	413.41	413.41	-	-	-
Cost of Oil	15.01	12.27	12.27	19.02	15.75	15.75	6.01	3.90	3.90	7.24	7.37	7.37	-	-	-
<b>Total Energy Charges</b>	<b>355.51</b>	<b>505.45</b>	<b>505.45</b>	<b>641.61</b>	<b>817.87</b>	<b>817.87</b>	<b>438.05</b>	<b>554.72</b>	<b>554.72</b>	<b>347.68</b>	<b>420.78</b>	<b>420.78</b>	<b>-</b>	<b>-</b>	<b>-</b>
Pension and Gratuity Contribution	46.39	46.39	46.39	48.03	48.03	48.03	7.89	7.89	7.89	7.77	7.77	7.77	3.21	3.21	3.21
Net prior period (income)/expenses	0.00	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-
<b>Aggregate Revenue Requirement</b>	<b>745.70</b>	<b>875.08</b>	<b>874.93</b>	<b>1118.76</b>	<b>1256.08</b>	<b>1256.35</b>	<b>941.85</b>	<b>1009.10</b>	<b>10009.44</b>	<b>1080.67</b>	<b>1051.75</b>	<b>1051.67</b>	<b>27.34</b>	<b>23.46</b>	<b>23.38</b>



### 3.25 Revenue from Sale of Power

#### CSPGCL's Submission

CSPGCL submitted the revenue from sale of power for FY 2016-17 as Rs. 4473.41 Crore excluding the revenue of Rs. 112.98 Crore on account of recovery of Water Charges and SLDC Charges and Rs. 514.30 Crore as recovery of impact of Hon'ble APTEL's Judgment and Revenue Gap.

#### Commission's View

The Commission has considered the revenue from sale of power for FY 2016-17 based on the Provisional Accounts submitted by CSPGCL. The Water Charges and SLDC Charges have been considered as Rs. 112.82 Crore. The impact of Hon'ble APTEL Judgment has been considered separately as Rs. 514.30 Crore. After excluding these two items, the revenue from sale of power for FY 2016-17 has been considered as Rs. 4,485.77 Crore. The Commission has considered the revenue from DSM Charges of Rs. 12.37 Crore, which was not considered by CSPGCL, as the sharing of DSM Charges has been considered under Sharing of gains and losses.

### 3.26 Sharing of Gains and Losses for FY 2016-17

Regulation 11 of the MYT Regulations, 2015 specifies as under:

#### *"11. CONTROLLABLE AND UN-CONTROLLABLE FACTORS*

*11.1 For the purpose of these Regulations, the term "uncontrollable factors" shall comprise of the following factors, but not limited to, which were beyond the control of the applicant, and could not be mitigated by the applicant:*

*(a) Force Majeure events;*

*(b) Change in law*

... ..

*11.2 For the purpose of these Regulations, the term "Controllable factors" shall comprise of the following:*

...

*(b) Generation Performance parameters like SHR, Auxiliary consumption, etc;*

...

*(f) Variation in Wires Availability and Supply Availability”*

Further, Regulation 12 of the MYT Regulations, 2015 specifies as under:

*“12. MECHANISM FOR PASS THROUGH OF GAINS OR LOSSES ON ACCOUNT OF UNCONTROLLABLE FACTORS*

*The aggregate net gains / losses to the generating company or STU/transmission licensee or distribution licensee on account of uncontrollable items (as per the tariff order) over such period shall be passed on to beneficiaries/consumers through the next ARR or as may be specified in the Order of the Commission passed under these Regulations.”*

Regulation 13 of the MYT Regulations, 2015 specifies as under:

*“13. MECHANISM FOR SHARING OF GAINS OR LOSSES ON ACCOUNT OF CONTROLLABLE FACTORS*

*The mechanism for sharing of aggregate net gain on account of over achievement in reference to the target set in tariff order for efficiency linked controllable items other than energy losses computed in accordance to Regulation 71 shall be passed on to the beneficiary / consumer(s) and retained by the generating company or the licensee or SLDC, as the case may be, in the ratio of 50:50 or as may be specified in the Order of the Commission passed under these Regulations.*

*Provided that the mechanism for sharing of aggregate net gain on account of over achievement in reference to the target set in tariff order for energy losses computed in accordance to Regulation 71*

*shall be passed on to the consumer(s) and retained by the licensee, as the case may be, in the ratio of 2: 1 or as may be specified in the Order of the Commission passed under these Regulations.*

*13.2. The mechanism for sharing of aggregate net loss on account of 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 retained by the generating company or the licensee, as the case may be, in the ratio of 50:50 or as may be specified in the Order of the Commission passed under these Regulations.”*

### CSPGCL's Submission

CSPGCL submitted that Regulation 13 specifies the method for sharing of gains and losses. Further, in compliance with Regulations 32 and 35 of MYT Regulations, 2015, CSPGCL has segregated the Pension Fund Contribution from AFC and considered it as a separate line item. Further, CSPGCL submitted that it has excluded Employee Cost from O&M Cost for the purpose of sharing of Gains / Losses as per Amendment to the MYT Regulations, 2015 dated June 16, 2017. Except for the same, CSPGCL submitted that it has followed the methodology followed in previous Orders for Sharing of Gains / Losses. CSPGCL has also submitted that in line with previous Order, DSM charges has been shared in the 50:50 ratio.

### Commission's View

The sharing of gains and losses on account of controllable factors has been computed in accordance with the methodology submitted by CSPGCL. The contribution to Pension & Gratuity Fund and Employee Cost have been excluded from the calculations, and gains/losses have been shared in the ratio of 50:50 in accordance with the MYT Regulations, 2015. Further, sharing of gains and losses of DSM Charges has also been considered.

The sharing of gains and losses after Provisional True-up for FY 2016-17 for KTPS, HTPS, DSPM and KWTPP is as shown in the Table below:

**Table 3-34: Sharing of Gains and Losses for Provisional True-up for FY 2016-17 for KTPS, HTPS and DSPM**

Particulars	Units	FY 2016-17			
		KTPS	HTPS	DSPM	KWTPP
<b>Fixed Charges @ NPAF</b>					
Installed capacity	MW	440	840	500	500
NPAF	%	60.52%	81.00%	85.00%	81.00%
Actual PAF achieved (billed)	%	58.27%	80.63%	93.10%	76.50%
Normative aux. consumption	%	11.25%	9.70%	9.00%	5.25%
Actual aux cons	%	12.65%	9.76%	7.78%	5.00%
Normative aux. consumption	MU	283.82	592.42	335.07	195.46
Actual aux cons	MU	289.71	578.86	309.73	166.13
Normative Net Generation	MU	2239.06	5515.05	3387.93	3527.54
Actual net generation	MU	2000.85	5353.65	3672.68	3155.96
<b>Total generation available for Fuel Cost recovery</b>	<b>MU</b>	<b>2000.85</b>	<b>5353.65</b>	<b>3672.68</b>	<b>3155.96</b>

Particulars	Units	FY 2016-17			
		KTPS	HTPS	DSPM	KWTPP
<b>Fixed Cost (norm-wise)</b>					
Depreciation	Rs Cr	48.75	19.43	128.15	184.38
Interest on Loan and Finance charges	Rs Cr	9.49	12.46	75.41	271.73
Return on Equity	Rs Cr	32.26	56.67	107.76	94.94
Interest on Working Capital	Rs Cr	22.47	32.84	25.13	20.41
O & M Expenses	Rs Cr	222.70	289.05	148.60	88.31
Less - Non Tariff Income	Rs Cr	1.17	3.20	2.13	2.03
<b>Fixed Cost allowed on Normative Basis</b>	<b>Rs Cr</b>	<b>334.48</b>	<b>407.24</b>	<b>482.92</b>	<b>657.74</b>
Fixed cost expenditure excluding O&M	Rs Cr	111.78	118.19	334.32	569.43
Normative Fixed Cost (Cr. Rs/% of PAF) excluding O&M	Rs Cr./%PAF	1.85	1.46	3.93	7.03
Prorata Fixed cost allowable from Actual PAF	Rs Cr	107.63	117.66	366.19	537.79
<b>Fixed cost gain from normative cost</b>	<b>Rs Cr</b>	<b>(4.16)</b>	<b>(0.53)</b>	<b>31.86</b>	<b>(31.63)</b>
<b>Total Gain/(Loss)</b>	<b>Rs Cr</b>	<b>(4.50)</b>			
<b>R&amp;M and A&amp;G expenses</b>					
Normative R&M and A&G Cost allowed	Rs Crore	70.79	107.15	83.85	50.33
Normative R&M and A&G Cost (Cr. Rs/% of PAF)	Rs Cr./%PAF	1.17	1.32	0.99	0.62
Pro-rata R&M and A&G cost allowable from actual PAF	Rs Crore	68.16	106.66	91.84	47.54
Actual R&M and A&G expenditure	Rs Crore	65.66	81.19	46.88	18.63
<b>Difference of recovery and expenditure</b>	<b>Rs Cr</b>	<b>2.50</b>	<b>25.48</b>	<b>44.96</b>	<b>28.90</b>
<b>Total Gain/(Loss)</b>	<b>Rs Cr</b>	<b>101.84</b>			
<b>Secondary Fuel Cost</b>					
Normative SFC	Rs Cr	16.96	21.14	9.45	8.05
Normative SF Cost derived from NPLF	Rs/kwh	0.08	0.04	0.03	0.02
Secondary fuel cost recovery from actual generation	Rs Cr	15.16	20.52	10.24	7.21
Actual SFC incurred	Rs Cr	12.27	15.75	3.90	7.37
<b>Savings due to performance improvement</b>	<b>Rs Cr</b>	<b>2.89</b>	<b>4.78</b>	<b>6.34</b>	<b>(0.16)</b>
<b>Total Impact of Savings/Excess Expenditure due to SFC</b>	<b>Rs Cr</b>	<b>13.85</b>			

Particulars	Units	FY 2016-17			
		KTPS	HTPS	DSPM	KWTPP
<b>Coal Cost (primary fuel)</b>					
Normative Coal Cost	Rs Cr	530.09	818.50	528.32	441.10
Normative ECR (Coal)	Rs/kwh	2.37	1.48	1.56	1.25
Normative fuel cost on actual sent out	Rs Cr	473.70	794.55	572.73	394.64
Actual fuel cost	Rs Cr	493.18	802.13	550.82	413.41
<b>Coal Cost Surplus/(deficit)</b>	<b>Rs Cr</b>	<b>(19.48)</b>	<b>(7.58)</b>	<b>21.91</b>	<b>(18.78)</b>
<b>Total Impact of Savings/Excess Expenditure due to Coal</b>	<b>Rs Cr</b>	<b>(23.93)</b>			
<b>Total plant wise impact of gain/ loss</b>	<b>Rs Cr</b>	<b>(18.25)</b>	<b>22.14</b>	<b>105.08</b>	<b>(21.67)</b>
<b>Total Impact of Savings/Excess Expenditure</b>	Rs Cr	<b>87.30</b>			
<b>Gains/(Losses) for Hasdeo Bango of FY 2016-17</b>	<b>Rs Cr</b>	<b>0.49</b>			
<b>Plant-wise impact of DSM Charges</b>	<b>Rs Cr</b>	2.41	6.19	2.26	1.51
<b>Total Impact of DSM Charges</b>	<b>Rs Cr</b>	<b>12.37</b>			
<b>Net total Impact Savings/Excess Expenditure</b>	<b>Rs Cr</b>	<b>100.16</b>			
<b>Net applicable Gain/(Loss) to CSPGCL on 50:50 basis</b>	<b>Rs Cr</b>	<b>50.08</b>			

From the above table, it is seen that CSPGCL has earned a gain of Rs. 50.08 Crore. As per the provisions of the Regulations, 50% of this gain has to be retained by CSPGCL and remaining 50% will be passed on to the consumers of the State.

Further, the Commission clarifies that sharing of gains and losses has been considered after provisional truing up for FY 2016-17, based on the methodology submitted by CSPGCL. However, the final sharing of gains and losses shall be approved after final truing up for FY 2016-17. The Commission, at time of final truing up for FY 2016-17, may review the methodology for undertaking the sharing of gains and losses as per the provisions of MYT Regulations, 2015.

### **3.27 Revenue Gap/(Surplus) for CSPGCL for FY 2016-17**

#### **Commission's view**

In view of the above, the Revenue Gap/(Surplus) for CSPGCL for FY 2016-17 after provisional truing up has been approved as shown in the following Table:

**Table 3-35: Revenue Gap/(Surplus) after Provisional True-up for FY 2016-17 for CSPGCL (Rs. Crore)**

<b>Particulars</b>	<b>CSPGCL Petition</b>	<b>Approved after Provisional True-up</b>
ARR for KTPS	875.08	874.93
ARR for HTPS	1,256.08	1,256.35
ARR for DSPM TPS	1,009.10	1,009.44
ARR for KWTPP	1,051.75	1,051.67
ARR for Hasdeo Bango	23.46	23.38
<b>Total ARR for Generating Stations of CSPGCL</b>	<b>4,215.47</b>	<b>4,215.77</b>
Sharing of Gain/(Losses) for FY 2016-17	55.40	50.08
Water and SLDC Charges	112.98	112.82
Petition Filing Fee	0.28	0.28
Impact of APTEL Judgement and Revenue Gap	514.30	514.30
<b>Total ARR for FY 2016-17</b>	<b>4,898.32</b>	<b>4,893.26</b>
Revenue from Sale of Power	4,473.41	4,485.77
Revenue from recovery of Water and SLDC Charges	112.98	112.82
Recovery of Impact of APTEL Judgement and Revenue Gap	514.30	514.30
Total Revenue	5,100.69	5,112.90
<b>Revenue Gap/(Surplus) for FY 2016-17</b>	<b>(202.26)</b>	<b>(219.64)</b>

After applying the carrying cost for 2 years, i.e., from mid-point of FY 2016-17 to mid-point of FY 2018-19 on this Revenue Surplus of Rs. 219.64 Crore, the total amount which is required to be factored in the revenue requirement of CSPDCL for FY 2018-19 works out to Rs. 279.52 Crore.

## 4 PROVISIONAL TRUE-UP FOR CSPTCL FOR FY 2016-17

### 4.1 Background

The Commission notified the CSERC MYT Regulations, 2015 for the 3<sup>rd</sup> MYT Control Period from FY 2016-17 to FY 2020-21 on September 9, 2015. Subsequently, the Commission issued the MYT Order on April 30, 2016 approving the ARR of CSPTCL for the Control Period from FY 2016-17 to FY 2020-21 and Transmission tariff for FY 2016-17. CSPTCL submitted the Petition for provisional Truing up for FY 2016-17 based on the Provisional Accounts for FY 2016-17.

Regulation 10.3 of the CSERC MYT Regulations, 2015 specifies as under:

*“10.3. In case the audited accounts are not available, the provisional truing up shall be done on the basis of un-audited/ provisional account and shall be subject to further final truing up, as soon as the audited accounts is available.”*

In accordance with the above Regulation, the Commission has undertaken provisional Truing up for FY 2016-17 based on unaudited/provisional Accounts submitted by CSPTCL. The final Truing up for FY 2016-17 shall be done on the basis of Audited Accounts.

In this Chapter, the Commission has analysed all the elements of actual expenditure and revenue of CSPTCL for FY 2016-17 and undertaken the provisional truing-up of expenses and revenue in accordance with Regulation 10 of the MYT Regulations, 2015. The Commission has approved the sharing of gains and losses on account of controllable factors between CSPTCL and its beneficiaries, in accordance with Regulation 13 of the CSERC MYT Regulations, 2015.

### 4.2 Transmission System of CSPTCL

The physical status of transmission system of CSPTCL as on March 31, 2017, as submitted by CSPTCL, is shown in the Table below:

**Table 4.2-1: Physical Status of Transmission System of CSPTCL as on March 31, 2017**

Particulars	Units	As on March 31, 2017
<b>A. EHV Transmission Lines</b>		
400 kV	ckt. km.	1,915.52
220 kV	ckt. km.	3,478.51
132 kV	ckt. km.	5,753.38

Particulars	Units	As on March 31, 2017
+/-100 kV HVDC	ckt. km.	360.00
<b>B. EHV Substations</b>		
400 kV	No.	2
220 kV	No.	20
132 kV	No.	71
+/-100 kV HVDC	No.	1
<b>C. Transformation Capacity of EHV Substations</b>		
400/220 kV	MVA	1,575
220/132 kV	MVA	6,350
132/33kV	MVA	6,576
+/-100 kV HVDC	MVA	243

### 4.3 Transmission Losses

#### CSPTCL's Submission

CSPTCL submitted that based on the actual reading of the energy meters installed at the various points of the State's periphery, the actual Transmission Loss for FY 2016-17 was 2.81% as against the Loss of 3.22% approved in the MYT Order dated April 30, 2016. The computation of the Transmission Losses submitted by CSPTCL is shown in the Table below:

**Table 4-2: Transmission Losses for FY 2016-17 as submitted by CSPTCL**

Sr. No.	Particulars	FY 2016-17
1	State Generation Ex-Bus at 132 kV and above (MU)	16,712.97
2a	<i>Import from CTU Grid at CG Periphery at 132 kV and above (MU)</i>	<i>15,777.58</i>
2b	<i>Export to CTU Grid at CG Periphery at 132 kV and above (MU)</i>	<i>10,689.26</i>
2	Net Drawal from CTU Grid at State Periphery at 132 kV and above (MU)	5,088.33
3	IPPs/CPP Injection in CSPTCL System at 132 kV & above (MU)	1,481.31
4	Total Injection at State Grid of STU (MU) (1+2+3)	23,282.61



Sr. No.	Particulars	FY 2016-17
5	EHV Sales from Sub Station (MU)	2,387.85
6	Net Output to DISCOM (MU)	20,240.04
7	Total Output from CSPTCL System (MU) (5+6)	22,627.89
8	Transmission Loss (MU) (4-7)	654.72
9	Transmission Loss (%) (8/4*100)	2.81%

### Commission's View

The Commission in MYT Order dated April 30, 2016, approved the Transmission Losses as 3.22% for each year of Control Period. The Commission has gone through details of source-wise actual injection of energy, actual EHV sales and JMR readings. The Commission do not like to comment on the correctness of the Transmission losses submitted by the Petitioner. However, for the provisional truing-up the submission of the petitioner has been considered.

## 4.4 Operations and Maintenance (O&M) Expenses

### CSPTCL's Submission

CSPTCL submitted that the gross employee expenses (net of employee expenses on account of CSLDC) based on the provisional Accounts are Rs. 177.44 Crore against the employee expenses of Rs. 155.59 Crore (after excluding interim wage relief amount and Terminal Benefits) approved by the Commission in the MYT Order dated April 30, 2016 for FY 2016-17. CSPTCL submitted the details as shown in the following Table:

**Table 4-3: Gross Employee Expenses as submitted by CSPTCL for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	FY 2016-17
		Provisional
1	Gross Employee Expenses (CSPTCL+CSLDC) excluding Terminal Benefits*	184.90
2	Less: CSLDC Employee Expenses (including interim wage relief)	7.47
3	CSPTCL Gross Employee Expenses	177.44

\*includes 7.5% Interim Relief paid to the employees during FY 2016-17

Further, the provision of arrears of Rs. 20.41 Crore to be paid to employees on account of wage revision due from April 1, 2014 to March 31, 2017 has been made in the provisional Accounts for FY 2016-17. CSPTCL submitted that this amount is being paid from FY 2017-18 onwards and requested the Commission to consider the same as per actuals in future years.

The capitalisation of employee expenses has been considered as Rs. 21.54 Crore as per the provisional Accounts for FY 2016-17. CSPTCL requested the Commission to approve Employee Expenses of Rs. 155.90 Crore (177.44 – 21.54) for FY 2016-17 based on the provisional Accounts.

CSPTCL submitted the details of R&M expenses and A&G expenses as shown in the following Table:

**Table 4-4: Gross R&M expenses and A&G expenses submitted by CSPTCL for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	FY 2016-17
		Provisional
1	Gross A&G Expenses	49.39
2	<i>Less: CSLDC Expenses</i>	0.58
3	CSPTCL Gross A&G Expenses	48.81
4	Gross R&M Expenses	24.68
5	<i>Less: CSLDC Expenses</i>	0.68
6	CSPTCL Gross R&M Expenses	24.00

The capitalisation of A&G expenses has been considered as Rs. 2.00 Crore as per the provisional Accounts for FY 2016-17.

CSPTCL further submitted that under the head of ‘*Other Expenses*’ in Note 9.3 of the Provisional Accounts for FY 2016-17, expenditure of Rs. 15.89 Crore has been mentioned in respect of the outsourced employees against vacant posts in CSPTCL. These expenses are in respect of wages paid to the outsourced employees and have been considered as a separate line item. As they are not regular employees of CSPTCL, hence, their wages are part of A&G Expenses. This includes expenditure of Rs. 0.10 Crore booked under CSLDC. The balance of Rs. 15.79 Crore has been considered in CSPTCL. These wages are required to be paid by CSPTCL to outsourced employees against the vacant post of CSPTCL for day to day operation and maintenance of existing/new EHV substations/offices, etc. Since, the nature of

expenses are similar to employee expenses for regular employees, CSPTCL requested the Commission to consider the same at par with employee expenses only for the purpose of computation of gain and losses of O&M expenses.

The comparison of actual O&M expenses vis-a-vis O&M expenses approved by the Commission is shown in the following Table:

**Table 4-5: O&M Expenses as submitted by CSPTCL for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	FY 2016-17	
		MYT Order	Provisional
1	Gross Employee Expenses	155.59	177.44
2	Gross A&G Expenses	28.96	48.81
3	Gross R&M Expenses	29.68	24.00
4	Interim Wage Relief amount	11.75	0.00
<b>5</b>	<b>Gross O&amp;M Expenses (excluding CSLDC)</b>	<b>225.98</b>	<b>250.25</b>
6	Employee expenses capitalized	-	21.54
7	A&G expenses capitalized	-	2.00
<b>8</b>	<b>Net O&amp;M Expenses (excluding CSLDC)</b>	<b>225.98</b>	<b>226.71</b>

CSPTCL submitted that the actual O&M Expenses are slightly higher than that approved by the Commission in the MYT Order dated April 30, 2016 for FY 2016-17. CSPTCL requested the Commission to approve actual O&M expenses for FY 2016-17 based on the provisional Accounts as shown in the above Table.

#### **Computation of Normative O&M Expenses**

CSPTCL submitted that the MYT Regulations 2015 allows incentive/disincentive for better/under performance in operational norms so that such efforts are appropriately recognized and promoted, thereby, ensuring improved efficiency on a sustainable basis.

Regulation 13.1 of the MYT Regulations, 2015, as per amendment dated June 16, 2017 specifies as under:

*“Provided further that employee cost shall not be factored in for sharing of gains or losses on account of operation & maintenance expenses,”*

Accordingly, the employee expenses for FY 2016-17 have been considered based on actuals and have not been subjected to sharing of gains or losses. CSPTCL requested the Commission to approve Rs. 177.44 Crore as gross employee expenses and capitalisation of employee expenses as Rs. 21.54 Crore for FY 2016-17.

CSPTCL submitted that the normative A&G expenses and R&M expenses for FY 2016-17 have been computed as per the Regulations.

**Additional O&M Expenses**

CSPTCL submitted that the Commission has not separately notified any norms for new transmission lines or substations in the CSERC MYT Regulations 2015. In the absence of State specific norms, CSPTCL requested the Commission to allow Central Electricity Regulatory Commission (CERC) benchmarked tariff norms for such additional assets commissioned after March 31, 2016. CSPTCL submitted that in the MYT Order, the Commission has approved the normative O&M expenses for FY 2016-17 to FY 2020-21 by considering the increase in the base year, i.e., FY 2015-16 expenses, based on inflation-linked indices. FY 2015-16 normative O&M expenses were considered based on the average of normalized Net Present Value from FY 2010-11 to FY 2014-15 further escalated by relevant inflation rate. The actual O&M expenses of FY 2015-16 were not available while projecting normative O&M expenses for FY 2016-17 to FY 2020-21 at the time of the MYT Order.

CSPTCL submitted that as per Regulation 47.5 (g) of the CSERC MYT Regulations 2015, claim for additional O&M expenses on new transmission lines/substations commissioned after March 31, 2016 is permissible. CSPTCL requested the Commission to allow additional normative O&M expenses on new lines/sub-stations commissioned during FY 2015-16 (full year with inflation) and FY 2016-17 (for half year). CSPTCL submitted the addition of assets as shown in the Table below:

**Table 4-6: Addition in Transmission Lines and Bays as submitted by CSPTCL**

<b>Sr. No</b>	<b>Particulars</b>	<b>Addition in FY 2015-16</b>	<b>Addition in FY 2016-17</b>	<b>Total Addition</b>
	<b>Transmission Lines (ckt. Km)</b>			
1	Single Circuit Single Conductor	82.57	150.76	233.33
2	Double Circuit Single Conductor	169.75	32.5	202.25
<b>3</b>	<b>Total Transmission Lines</b>	<b>252.32</b>	<b>183.26</b>	<b>435.58</b>

Sr. No	Particulars	Addition in FY 2015-16	Addition in FY 2016-17	Total Addition
	<b>Transmission Bays (Nos.)</b>			
4	400 kV	-	-	-
5	220 kV	5	-	5
6	132 kV	34	27	61
7	+/- 100 kV HVDC	-	-	-
<b>8</b>	<b>Total No. of bays</b>	<b>39</b>	<b>27</b>	<b>66</b>

CSPTCL submitted the additional normative O&M Expenses for asset addition considering the applicable CERC norms as shown in the following Table:

**Table 4-7: Additional Normative O&M expenses for Bays as submitted by CSPTCL (Rs. Crore)**

Sr. No.	Particulars	Normative O&M of Bays in FY 2015-16	O&M Norms for Bays in FY 2015-16	Normative O&M expenses for assets capitalized in FY 2015-16	Normative O&M expenses for assets capitalized in FY 2016-17	Total Additional Normative O&M expenses for FY 2016-17
1	400 kV	0.00	0.00	0.00	0.00	0.00
2	220 kV	0.44	0.45	2.26	0.00	2.26
3	132 kV	0.31	0.32	10.98	4.34	15.32
4	+/- 100 kV HVDC	0.00	0.00	0.00	0.00	0.00
<b>5</b>	<b>Total No. of Substations</b>	<b>0.75</b>	<b>0.77</b>	<b>13.24</b>	<b>4.34</b>	<b>17.58</b>

**Table 4-8: Additional Normative O&M expenses for Lines as submitted by CSPTCL  
(Rs. Crore)**

Sr. No	Particulars	Normative O&M of Lines in FY 2015-16	O&M Norms for Lines in FY 2015-16	Normative O&M expenses for assets capitalized in FY 2015-16	Normative O&M expenses for assets capitalized in FY 2016-17	Total Additional Normative O&M expenses for FY 2016-17
1	Single Circuit Single Conductor	0.21	0.22	0.18	0.16	0.34
2	Double Circuit Single Conductor	0.31	0.32	0.55	0.05	0.60
<b>3</b>	<b>Total Lines</b>	<b>0.52</b>	<b>0.54</b>	<b>0.73</b>	<b>0.22</b>	<b>0.95</b>

The normative O&M expenses have been apportioned in the ratio of actual employee expenses, A&G expenses and R&M expenses to arrive at the normative A&G expenses and R&M expenses for the purposes of gain/loss calculation. Accordingly, the additional normative A&G expenses and R&M expenses are Rs. 3.83 Crore and Rs. 1.96 Crore, respectively, for FY 2016-17.

Further, CSPTCL has not considered Rs. 15.79 Crore towards wages paid to the outsourced employees against vacant posts as part of A&G expenses eligible for the purpose of computation of gain and loss of A&G expenses. The net A&G expenses and R&M expenses as per the provisional Accounts are Rs. 31.01 Crore and Rs. 24.00 Crore (net of capitalisation), respectively, for FY 2016-17. The same have been considered for sharing of gain/(loss) for FY 2016-17 as shown in the following Table:

**Table 4-9: Sharing of gain/(loss) for A&G expenses and R&M expenses for FY 2016-17 as submitted by CSPTCL (Rs. Crore)**

Sr. No	Particulars	Normative	Provisional	Gain/(Loss)
1	Net A&G and R&M expenses	29.50	31.01	(1.51)
2	Net R&M expenses	28.28	24.00	4.28
3	Total Gain/(Loss)			2.77
<b>4</b>	<b>CSPTCL share (1/2 of Total Gain/(Loss))</b>			<b>1.39</b>

The gain of Rs. 1.39 Crore on account of lower actual A&G expenses and R&M expenses as compared to the normative A&G expenses and R&M expenses have been considered as part of the Provisional true-up of ARR for FY 2016-17.

### **Commission's View**

As regards O&M Expenses, Regulation 47.5 of the MYT Regulations, 2015 specifies as under:

#### ***“47.5 Operation and Maintenance expenses***

##### ***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 transmission lines/ substations commissioned after March 31, 2016 shall be allowed by the Commission subject to prudence check at the time of true up exercise." (emphasis added)*

In the MYT Order, the Commission determined the O&M Expenses for the Control Period from FY 2016-17 to FY 2020-21 in accordance with the above Regulations.

The above Regulations specify that at the time of true up, the O&M Expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period. The Regulation does not require the base O&M expenses as approved in the MYT Order to be revised.

Accordingly, the Commission has computed the normative O&M expenses for FY 2016-17 by applying the actual inflation of FY 2016-17 on base O&M expenses for FY 2015-16, as approved in the MYT Order. The Commission has considered the actual inflation of CPI and WPI levels for FY 2016-17 over CPI and WPI levels of FY 2015-16. The Commission has considered escalation factor of 4.12% for employee expenses and 1.73% for R&M expenses and A&G Expenses. Accordingly, the normative O&M Expenses computed for FY 2016-17 is as shown in the following Table:

**Table 4-10: Normative O&M Expenses for FY 2016-17 as computed by the Commission (Rs. Crore)**

Particulars	FY 2015-16	FY 2016-17	
	Base Year Normative Expenses	Approved in MYT Order	Revised Normative Expenses
Employee Expenses	142.68	155.59	148.56
A&G Expenses	27.12	28.96	28.12
R&M Expenses	27.80	29.68	28.82
<b>Grand total</b>	<b>197.60</b>	<b>214.23</b>	<b>205.50</b>



Further, as per the Regulation 47.5 (g) of the MYT Regulations 2015, the Commission shall consider the additional O&M expenses on account of new transmission lines/sub-stations commissioned after March 31, 2016. In order to compute the additional O&M expenses on account of new transmission lines/sub-stations commissioned after March 31, 2016, CSPTCL has considered the norms specified under Regulation 29 of CERC (Terms and Conditions of Tariff) Regulations, 2014. The Commission is of the view that the nature of the assets for which the CERC norms have been computed are different from the additional assets deployed by CSPTCL. Hence, the Commission has not considered the CERC norms for allowance of additional O&M expenses on account of new transmission lines/substations. Instead, the Commission has benchmarked the approved GFA with the base O&M expenses allowed for FY 2015-16 and computed the additional O&M in the same proportion for corresponding increase in GFA.

The additional normative A&G and R&M Expenses approved by the Commission on account of new transmission lines and sub-stations is computed as shown in the following Table:

**Table 4-11: Computation of Additional A&G and R&M expenses for FY 2016-17**

Particulars	Legend/Formula	Amount (Rs. Crore)
Average of Opening and Closing GFA for FY 2015-16	A	3,501.95
Average of Opening and Closing GFA for FY 2016-17	B	3,770.16
Increase in GFA (%)	$C=(B-A)/A \times 100$	7.66%
Normative A&G Expenses approved for FY 2016-17	D	28.12
Normative R&M Expenses approved for FY 2016-17	E	28.85
Additional A&G Expenses on account of increase in GFA for FY 2016-17	$F=D \times C$	2.15
Additional R&M Expenses on account of increase in GFA for FY 2016-17	$G = E \times C$	2.21

For the purpose of the provisional truing up for FY 2016-17, the Commission approves the normative A&G and R&M Expenses including additional A&G and R&M expenses on account of new transmission lines/sub-stations. The Commission has undertaken sharing of gains and losses of normative expenses vis-à-vis actual expenses as per CSERC MYT Regulations, 2015.

The Commission has provisionally considered the A&G and R&M expenses as per provisional accounts for sharing of gains and losses. Further, the Commission rejects CSPTCL's approach of not considering Rs. 15.79 Crore towards wages paid to the outsourced employees as part of A&G expenses for the purpose of computation of gain and loss of A&G expenses. Expenses incurred by CSPTCL (or any other Licensee) towards outsourcing is always considered under A&G expenses, and cannot be notionally considered under employee expenses, for the purpose of computing the sharing of gains/losses.

As regards the sharing of gains and losses, the following provision has been inserted in Regulation 13.1 by the First Amendment to the CSERC MYT Regulations, 2015 on June 16, 2017:

*“Provided further that employee cost shall not be factored in for sharing of gains or losses on account of operations and maintenance expenses, ... ..”*

Accordingly, the Commission approves the Employee Expenses at actuals as per provisional Accounts for FY 2016-17, and no sharing of gains and losses have been considered for Employee Expenses.

The sharing of gains and losses in O&M expenses, computed after provisional truing up for FY 2016-17 is shown in the following Table:

**Table 4-12: Sharing of Gains and Losses in O&M expenses as provisionally approved by the Commission (Rs. Crore)**

Particulars	Revised normative O&M expenses, including additional expenses for new assets	Actual based on provisional accounts	Gains/ (Losses)	Sharing of Gains/(Losses) at 50:50	Net Entitlement of O&M Expenses
Employee Expenses	159.94	155.90	-	-	155.90
A&G Expenses	30.27	46.63	(16.36)	(8.18)	38.45
R&M Expenses	31.03	23.88	7.15	3.57	27.46
Total O&M expenses	221.23	226.41	(9.21)	(4.61)	221.80

**In this Order, the Commission approves the O&M expenses based on provisional Accounts for FY 2016-17. The final approval of O&M Expenses shall be accorded at time of truing up based on audited accounts.**

#### 4.5 Contribution to Pension and Gratuity Fund

##### CSPTCL's Submission

CSPTCL submitted that the Commission in the MYT Order dated April 30, 2016 has allowed Contribution to Pension and Gratuity (P&G) fund of Rs. 49.16 Crore for FY 2016-17. CSPTCL has considered the actual contribution to pension and gratuity of Rs. 49.16 Crore net of CSLDC expenses, as per provisional Accounts.

##### Commission's View

The Commission provisionally approves the Contribution to Pension and Gratuity Fund as per provisional Accounts as submitted by CSPTCL as shown in the following Table:

**Table 4-13: Contribution to P&G Fund as approved by the Commission (Rs. Crore)**

Sr. No.	Particulars	MYT Order	CSPTCL's Submission	Approved for provisional Truing up
1	Contribution to Pension and Gratuity Fund	49.16	49.16	49.16

#### 4.6 Gross Fixed Assets and Means of Finance

CSPTCL submitted that the Commission in the MYT Order had approved the methodology for determination of capital structure of GFA into Consumer Contribution, debt and equity. CSPTCL submitted that the capital structure for FY 2016-17 has been determined based on the following:

- Opening Capital Work in Progress (CWIP) for FY 2016-17 has been considered equal to the closing CWIP for FY 2015-16 as per the true-up of ARR for FY 2015-16.
- Closing CWIP of Rs. 571.12 Crore has been considered as per the provisional Accounts for FY 2016-17.
- Actual loan addition has been considered as Nil as per the provisional Accounts for FY 2016-17
- Actual equity addition has been considered as Rs. 236.93 Crore as per the

provisional Accounts for FY 2016-17

- GFA addition of Rs. 230.29 Crore (net of GFA addition for CSLDC) has been considered as per the provisional Accounts for FY 2016-17
- Assets generated on account of Consumer Contribution have been considered as Nil by considering the value as Rs.1 only as per Accounting Standards.
- The normative debt: equity ratio has been considered as 70:30 for additional capitalisation during the year as per the CSERC MYT Regulations, 2015.

CSPTCL submitted the Capital Structure for FY 2016-17 as shown in the following Table:

**Table 4-14: Capital Structure submitted by CSPTCL for FY 2016-17 (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>FY 2015-16</b>	<b>FY 2016-17</b>
<b>A</b>	<b>Gross Fixed Assets (GFA)</b>		
1	Opening GFA	3348.88	3655.02
2	Opening CWIP	564.63	564.47
3	Opening Capex	3913.51	4219.50
4	Capitalisation during the Year	306.14	230.29
5	Closing GFA	3655.02	3,885.31
6	Closing CWIP	564.47	571.12
7	Closing Capex	4219.50	4,456.43
<b>B</b>	<b>Grants and Consumer Contribution</b>		
1	Opening Grant and Contribution	101.56	101.56
2	Consumer Contribution/Grants during the Year	-	-
3	Closing Consumer Contribution	101.56	101.56
4	Consumer Contribution in Opening GFA	46.06	46.06
5	Consumer Contribution in Closing GFA	46.06	46.06
<b>C</b>	<b>Loan Borrowed</b>		
1	Opening Borrowed Loan	1,969.43	2,144.62
2	Loan Borrowed during the Year	175.19	0.00
3	Closing Borrowed Loan	2,144.62	2,144.62
4	Borrowed Loan in Opening GFA	2,077.83	2,322.74
5	Borrowed Loan in Closing GFA	2,322.74	2,483.95

<b>Sr. No.</b>	<b>Particulars</b>	<b>FY 2015-16</b>	<b>FY 2016-17</b>
<b>D</b>	<b>Equity</b>		
1	Opening Gross Equity	1,842.52	1973.32
2	Equity addition during the Year	130.80	236.93
3	Closing Gross Equity	1973.32	2,210.25
4	Gross Equity in Opening GFA	1,224.99	1,286.22
5	Gross Equity in Closing GFA	1,286.22	1,355.31
6	Average Gross Equity during the year	1,255.61	1,320.76
<b>E</b>	<b>Permissible Equity</b>		
1	Permissible Equity in Opening GFA	847.87	909.10
2	Permissible Equity in Closing GFA	909.10	978.19
3	Average Gross Permissible Equity during the year	878.48	943.64
<b>F</b>	<b>Normative Loan</b>		
1	Opening Normative Loan	377.12	377.12
2	Closing Normative Loan	377.12	377.12
3	Average Normative Loan	377.12	377.12

CSPTCL submitted the means of finance for GFA addition during FY 2016-17 at normative debt: equity ratio of 70:30. Accordingly, CSPTCL submitted the debt amount of Rs. 161.20 Crore and Equity amount of Rs. 69.09 Crore for FY 2016-17. CSPTCL requested the Commission to approve the capital structure and means of finance including GFA addition for FY 2016-17 based on the provisional Accounts as per the calculation provided in the above Table.

#### **Commission's View**

The Commission has approved the closing GFA for FY 2015-16 as Rs. 3655.02 Crore after True-up in the Order dated March 31, 2017. The Commission has accordingly considered the same amount as Opening GFA for FY 2016-17. The Commission notes that provisional Accounts for FY 2016-17 indicate the capitalisation of Rs. 231.02 Crore during the year. Out of this, the amount of Rs. 0.74 Crore is pertaining to CSLDC. The Commission has considered the capitalisation of Rs. 230.29 Crore (net of Rs. 0.74 Crore GFA addition for CSLDC) for FY 2016-17 as submitted by CSPTCL based on provisional Accounts.

As regards the funding of capitalisation, the Commission has not considered any grants for FY 2016-17. Further, normative Debt: Equity ratio of 70:30 has been considered as per Regulation 17 of the MYT Regulations, 2015.

The Commission provisionally approves the GFA addition and its funding for FY 2016-17 as shown in the following Table:

**Table 4-15: GFA Addition and Means of Finance approved by Commission for FY 2016-17 (Rs. Crore)**

Sr. No	Particulars	CSPTCL Petition	Approved after provisional True-up
1	GFA Addition in FY 2016-17	230.29	230.29
	<b>Means of Finance</b>		
2	Consumer Contribution	-	-
3	Equity	69.09	69.09
4	Debt	161.20	161.20
5	<b>Total Capitalisation</b>	<b>230.29</b>	<b>230.29</b>

#### 4.7 Depreciation

##### CSPTCL's Submission

CSPTCL submitted that it has computed depreciation of Rs. 175.12 Crore in accordance with Regulation 24 of the CSERC MYT Regulations, 2015. CSPTCL requested the Commission to approve the depreciation of Rs. 175.12 Crore for provisional true-up of ARR for FY 2016-17.

##### Commission's View

The Commission has approved the depreciation for FY 2016-17 as per the approach adopted in the past Orders. The closing GFA for FY 2015-16 as approved in the true up for FY 2015-16, has been considered as the opening GFA for FY 2016-17. The GFA addition for FY 2016-17 has been considered as approved by the Commission earlier in this Chapter. The closing value of Consumer Contribution for FY 2015-16 as approved in the true up for FY 2015-16, has been considered as the opening value of Consumer Contribution for FY 2016-17, and the Consumer Contribution in GFA addition for FY 2016-17 has been considered as Nil as approved by the Commission in earlier sub-section. The weighted average depreciation rate of 5.25%, computed on the basis of depreciation rates specified in the MYT Regulations, 2015, has been considered. The Commission notes that in True-up Order for FY 2015-16, the

depreciation on fully depreciated assets up to FY 2015-16 was computed as Rs. 19.79 Crore. CSPTCL submitted the details of depreciation on fully depreciated assets during FY 2016-17, which works out to Rs. 0.04 Crore. Accordingly, in the present Order, the Commission has considered the depreciation on fully depreciated assets up to FY 2016-17 as Rs. 19.83 Crore. The depreciation computed by the Commission for FY 2016-17 is shown in the Table below:

**Table 4-16: Depreciation approved by the Commission for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	MYT Order	CSPTCL Petition	Approved after Provisional True-up
1	Opening GFA excluding CSLDC	3,666.31	3,655.02	3,655.02
2	Add: Capitalization during the year	433.71	230.29	230.29
3	GFA at the end of the year excluding CSLDC	4,100.02	3,885.31	3,885.31
4	Average GFA for the year	3,883.16	3,770.17	3,770.17
5	Depreciation Rate	5.25%	5.25%	5.25%
6	Depreciation @ applicable rates as per Regulations	203.87	198.05	198.05
7	Opening Consumer Contribution	46.06	46.06	46.06
8	Addition: Consumer Contribution during the year	0.00	0.00	0.00
9	Closing Consumer Contribution	46.06	46.06	46.06
10	Average Consumer Contribution	46.06	46.06	46.06
11	Less: Depreciation on Consumer Contribution on live assets	2.42	2.42	2.42
12	Less: Depreciation on fully depreciated assets	19.79	20.51	19.83
<b>13</b>	<b>Net Depreciation</b>	<b>181.66</b>	<b>175.12</b>	<b>175.80</b>

#### 4.8 Interest on Loan

##### CSPTCL's Submission

CSPTCL has submitted that it has calculated interest on loan as per Regulation 23 of CSERC MYT Regulations, 2015. CSPTCL has submitted the actual loan details as per the provisional Accounts for FY 2016-17. CSPTCL has considered the approved closing normative loan balance for FY 2015-16 as per the true-up Order dated March 31, 2017 as the opening normative loan balance for FY 2016-17. The debt component of 70% of the GFA addition during FY 2016-17 has been considered as the normative

loan addition during the year. The allowable depreciation for the year has been considered as the normative repayment for the year. The actual weighted average interest rate of 10.95% has been considered for computation of the interest on loan for FY 2016-17. CSPTCL requested the Commission to approve Interest on Loan of Rs. 193.37 Crore for provisional true-up of ARR for FY 2016-17 as against the amount of Rs. 224.71 Crore approved in the MYT Order.

### **Commission's View**

The Commission has approved interest on loan capital for FY 2016-17 as per Regulation 23 of the CSERC MYT Regulations, 2015.

The Commission has considered the closing net normative loan balance for FY 2015-16 as approved after True-up, as the opening net normative loan balance for FY 2016-17. The addition of normative loan has been considered based on actual capitalisation, as considered in earlier Section of this Order. The repayment has been considered equal to net depreciation approved by the Commission for FY 2016-17. For computation of weighted average rate of interest, the Commission has considered the actual loan details and applicable rate of interest as per the provisional accounts. The Commission has computed the weighted average rate of interest of 10.95%, as per Regulation 23.5 of CSERC MYT Regulations, 2015 based on actual loan portfolio at the beginning of the year. The interest on loan approved in provisional true up for FY 2016-17 is shown in the Table below:

**Table 4-17: Interest on Loan for FY 2016-17 approved by Commission (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSPTCL Petition</b>	<b>Approved after Provisional True-up</b>
1	Total Opening Net Loan	1,782.12	1,772.71	1,772.71
2	Repayment during the period	181.03	175.12	175.80
3	Additional Capitalization of Borrowed Loan during the year	303.60	161.20	161.20
4	Total Closing Net Loan	1,904.69	1,758.80	1,758.12
5	Average Loan during the year	1,843.40	1,765.75	1,765.41
6	Weighted Average Interest Rate	12.20%	10.95%	10.95%
<b>7</b>	<b>Interest Expenses</b>	<b>224.71</b>	<b>193.37</b>	<b>193.33</b>



## **4.9 Return on Equity (RoE) and Income Tax**

### **CSPTCL's Submission**

CSPTCL submitted it has computed Return on Equity (ROE) as per Regulation 22 of the CSERC MYT Regulations, 2015 using the base rate of Return on Equity of 15.50% (without grossing up by MAT rate of 20.9605%). The Income Tax of Rs. 21.17 Crore has been separately claimed based on actual Tax paid during the year as per provisional Accounts. CSPTCL has considered the closing permissible equity balance of FY 2015-16 (as approved in true-up Order dated March 31, 2017) as the opening permissible equity balance for FY 2016-17. The equity addition during FY 2016-17 has been considered as 30% of the actual capitalisation during the year. CSPTCL requested the Commission to approve ROE of Rs. 146.26 Crore for provisional true-up for FY 2016-17. It also requested the Commission to consider the similar approach for CSPTCL for computation of ROE by grossing up return on equity with MAT rate of 20.96%, if adopted for CSPGCL and CSPDCL.

### **Commission's View**

Regulation 22 of the MYT Regulations, 2015 specifies that Return on Equity (ROE) shall be computed by grossing up the base rate with the prevailing MAT rate of the base year for the projection purposes. However, at the time of truing up, actual Tax rate applicable shall be considered. The Commission notes that CSPTCL has paid actual Income Tax of Rs. 21.17 Crore based on the provisional Accounts. CSPTCL has requested for separate approval of actual Income Tax paid and claimed ROE at base rate.

For the purpose of the provisional Truing up, the Commission has provisionally approved ROE at rate of 15.50% as per Regulation 22 of the CSERC MYT Regulations, 2015 and allowed the Income Tax separately.

For computation of ROE, the Commission has considered the closing equity as approved for FY 2015-16 after True-up, as opening equity for FY 2016-17. The equity addition has been considered based on the actual capitalisation as approved in earlier Section of this Order. The Commission provisionally approves the ROE for FY 2016-17 as shown in the following Table:

**Table 4-18: Return on Equity for FY 2016-17 approved by Commission (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSPTCL Petition</b>	<b>Approved after Provisional True-up</b>
1	Permissible Equity in Opening GFA	911.36	909.10	909.10
2	Addition of Permissible Equity during the year	130.11	69.09	69.09
3	Permissible Equity in Closing GFA	1,041.47	978.19	978.19
4	Average Gross Permissible Equity during the year	976.42	943.64	943.64
5	Rate of Return on Equity	15.50%	15.50%	15.50%
<b>6</b>	<b>Return on Equity</b>	<b>151.34</b>	<b>146.26</b>	<b>146.26</b>

CSPTCL was asked to submit the detailed computation of Income Tax and related documentary evidence for actual Income Tax paid for FY 2016-17. Based on the scrutiny of the actual Income Tax paid, the Commission provisionally approves the Income Tax of Rs. 21.17 Crore for provisional Truing up for FY 2016-17.

#### **4.10 Interest on Working Capital (IoWC)**

##### **CSPTCL's Submission**

CSPTCL submitted that it has considered one month of O&M Expenses, maintenance spares at 40% of R&M expenses and receivables equivalent to one month of fixed cost for computing the working capital requirement for FY 2016-17. CSPTCL has considered the interest rate of 12.80% (i.e., SBI Base Rate on April 1, 2016 plus 350 basis points) for computing IoWC for FY 2016-17. CSPTCL requested the Commission to approve IoWC of Rs. 12.23 Crore for FY 2016-17.

##### **Commission's View**

The Commission has computed IoWC in accordance with Regulation 25 of the MYT Regulations, 2015. For computation of working capital requirement as per the formula specified in the CSERC MYT Regulations, 2015, the Commission has considered the revised normative value of O&M expenses for FY 2016-17 as approved in this Order in earlier Section. Further, the receivables have been considered based on the actual revenue billed by CSPTCL including past revenue gaps during FY 2016-17. The interest rate of 12.80% has been considered as per Regulation 25.4 of the MYT

Regulations, 2015. The normative IoWC approved by the Commission in the provisional true-up for FY 2016-17, is shown in the Table below:

**Table 4-19: Interest on Working Capital approved by Commission for FY 2016-17 (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSPTCL Petition</b>	<b>Approved after Provisional True-up</b>
1	O&M expenses for One Month	17.85	18.89	18.44
2	Maintenance Spares @ 40% of R&M Expenses	11.87	9.60	12.41
3	Receivables @ 1 Month of Fixed Cost	68.62	67.07	76.12
4	Total Working Capital requirement	98.34	95.57	106.96
5	Less: Security Deposit from Transmission Users	-	-	-
6	Net Working Capital Requirement	98.34	95.57	106.96
7	Rate of Interest on WC	13.20%	12.80%	12.80%
<b>8</b>	<b>Net Interest on Working Capital</b>	<b>12.98</b>	<b>12.23</b>	<b>13.69</b>

#### **4.11 Prior Period Expenses/(Income)/other debits**

##### **CSPTCL's Submission**

CSPTCL submitted the net prior period expenses of Rs. 0.04 Crore for FY 2016-17 as per the provisional accounts.

##### **Commission's View**

The Commission sought the year-wise details of each head of prior period (income)/expenses from CSPTCL. The prior period (income)/expense for each head have been allowed based on the treatment of expenses approved by the Commission in the truing up for the respective year.

The prior period income includes the amount pertaining to Other Income for FY 2014-15. Such income was allowed by the Commission at actuals in its previous Order as submitted by CSPTCL after scrutinising the audited accounts for that year, and hence, the prior period income has been considered in full.

The Prior period expense includes the employee cost of Rs. 0.13 Crore for FY 2015-16. The Commission has approved the sharing of gain for FY 2015-16 after true-up. Hence the Commission has considered only 50% of the prior period employee expenses. Thus, the net prior period (income)/expense approved for provisional True-up for FY 2016-17 is shown in the Table below:

**Table 4-20: Prior Period (Income)/Expense approved by Commission for FY 2016-17 (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>CSPTCL Petition</b>	<b>Approved after provisional True-up</b>
<b>1</b>	<b>Prior Period (Income)</b>		
1.1	Other Income related to previous year	0.08	0.08
<b>1.2</b>	<b>Sub-total</b>	<b>0.08</b>	<b>0.08</b>
<b>2</b>	<b>Prior Period Expense</b>		
2.1	Employee Costs	0.13	0.06
<b>2.2</b>	<b>Sub-total</b>	<b>0.13</b>	<b>0.06</b>
<b>3</b>	<b>Net Prior Period (Income)/Expense</b>	<b>0.04</b>	<b>(0.02)</b>

#### **4.12 Non-Tariff Income**

##### **CSPTCL's Submission**

CSPTCL submitted Non-Tariff income of Rs. 23.63 Crore for FY 2016-17 based on provisional Accounts after excluding the Non-Tariff Income of Rs. 1.18 Crore for CSLDC.

##### **Commission's View**

For the purpose of provisional trueing up for FY 2016-17, the Commission has considered the Non-Tariff Income for Transmission Business as per Segmental notes of provisional Accounts submitted by CSPTCL. Accordingly, the Commission considers Non-Tariff income of Rs. 23.69 Crore for Transmission and Rs. 1.11 Crore for CSLDC for FY 2016-17.

The Non-Tariff Income provisionally approved for FY 2016-17 is shown in the Table below:

**Table 4-21: Non-Tariff Income approved by the Commission for FY 2016-17 (Rs. Crore)**

Sr. No	Particulars	MYT Order	CSPTCL Petition	Approved after Provisional True-up
1	Non-Tariff Income	22.35	23.63	23.69

#### **4.13 Incentive/Penalty on Transmission System Availability Factor (TSAF)**

##### **CSPTCL's Submission**

CSPTCL submitted that Target Availability of the transmission system has to be specified as per Regulation 51 of the CSERC MYT Regulations 2015, for incentive/penalty payable/levied to a Transmission Licensee. In the MYT Order, the Commission has approved the annual Target Availability factor for incentive/penalty as 99% for FY 2016-17 and stipulated the modalities for computation of incentive/penalty on account of actual Transmission Availability factor.

CSPTCL submitted that it has achieved Transmission System Availability Factor of 99.93% for FY 2016-17 as against the target of 99%. Accordingly, CSPTCL has claimed the incentive of Rs. 3.05 Crore for FY 2016-17 for provisional truing up.

##### **Commission's View**

As regards Incentive/Penalty calculation related to the Transmission System Availability Factor, the Commission in the MYT Order has stipulated as under:

##### ***"10.3.11 Incentive/Penalty Calculation***

*A. As per Clause 51 of the MYT Regulations, 2015, target availability of transmission system has to be specified for the control period for incentive/penalty payable/levied to a transmission licensee.*

*B. Annual target availability factor for incentive/penalty consideration shall be 99% for entire MYT Control Period from FY 2016-17 to FY 2020-21:*

*Provided further that no incentive/penalty shall be payable for availability beyond 99.75%:*

*C. The transmission licensee shall be entitled to incentive/penalty on achieving the annual availability beyond/lower than the target availability in accordance with the following formula:*

*Incentive/Penalty = Annual Fixed Charges for that year x (Annual availability achieved – Target availability) / Target availability*

*D. Incentive/Penalty shall be shared equally (50:50) between the transmission licensee and beneficiaries.”*

The Commission, in the present Order, has computed the Incentive/Penalty in accordance with the above said principle set by the Commission.

The Commission notes that the actual Transmission System Availability Factor duly certified by CSLDC for FY 2016-17 is 99.93%, which is higher than the Target Transmission System Availability Factor. Hence, CSPTCL is entitled for Incentive.

Accordingly, the Commission provisionally approves the Incentive on account of Transmission System Availability Factor for FY 2016-17 as shown in the Table below:

**Table 4-22: Incentive for Higher Transmission System Availability submitted by CSPTCL for FY 2016-17 (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>CSPTCL Petition</b>	<b>Approved after Provisional True-up</b>
1	Annual Transmission System Availability Factor (%)	99.93%	99.93%
2	Annual Transmission System Target Availability Factor (%)	99.00%	99.00%
4	Net ARR	804.91	800.54
5	Incentive/(Penalty)	6.10	6.06
6	Sharing of gain/(loss) (50%)	3.05	3.03

#### **4.14 Aggregate Revenue Requirement**

Based on the above, the ARR approved for provisional truing-up for FY 2016-17 is shown in the Table below:

**Table 4-23: Aggregate Revenue Requirement (ARR) for FY 2016-17 approved by the Commission (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSPTCL Petition</b>	<b>Approved after Provisional True-up</b>
1	Employee Expenses	155.59	177.44.	177.44
2	A&G Expenses	28.96	48.63	48.63
3	R&M Expenses	29.68	23.88	23.88
4	Terminal Benefits	49.16	49.16	49.16
5	Interim Wage Relief	11.75	-	-
6	Depreciation	181.66	175.12	175.80
7	Interest on Loan	224.71	193.37	193.33
8	Interest on Working capital	12.98	12.42	13.69
9	Prior Period (Income)/Expenses	-	0.04	(0.02)
10	Return on Equity	151.34	146.26	146.26
11	Gain/(Loss) on sharing O&M efficiency	-	1.53	(4.61)
12	Incentive on Transmission Availability	-	3.05	3.03
13	Income Tax	-	21.17	21.17
14	Less: Non-Tariff Income	22.35	23.63	23.69
<b>15</b>	<b>Aggregate Revenue Requirement (ARR)</b>	<b>823.49</b>	<b>804.91</b>	<b>799.93</b>

#### **4.15 Revenue from Transmission Charges**

##### **CSPTCL's Submission**

CSPTCL submitted that the revenue from Transmission Charges for FY 2016-17 based on the provisional Accounts is Rs. 913.39 Crore. CSPTCL submitted the break-up of revenue from operations for CSPTCL is as shown in the following Table:

**Table 4-24: Revenue Break-up for FY 2016-17 submitted by CSPTCL (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>FY 2016-17</b>
1	AFC for FY 2016-17 as approved in MYT Order	823.49
2	Gap/(Surplus) of FY 2014-15 with carrying cost upto FY 2016-17 as approved in MYT Order dated 30.04.2016	(0.36)
3	Impact due to compliance of APTEL Judgment in Appeal No. 308/2013	90.27
4	Total Annual Transmission Charges to be billed for FY 2016-17	913.39

CSPTCL considered the revenue of Rs. 823.49 Crore towards Annual Fixed Cost approved in MYT Order for FY 2016-17 for the purpose of provisional truing up.

#### **Commission's View**

The Commission notes that CSPTCL has considered the revenue of Rs. 823.49 Crore based on provisional Accounts. The Commission notes that CSPTCL has not considered the revenue towards the past gaps approved in the MYT Order. The past gaps have also not been considered in the Net ARR. However, for the purpose of the provisional truing up, the Commission has considered the past gaps approved in the MYT Order in the ARR as well as in the revenue.

Further, the Commission sought the consumer-wise break-up of actual revenue billed in FY 2016-17 from CSPTCL. CSPTCL submitted the following break-up for revenue billed during FY 2016-17:

**Table 4-25: Revenue billed during FY 2016-17 by CSPTCL (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>FY 2016-17</b>
1	Revenue from CSPDCL	836.52
2	MTOA Charges/Revenue from Others	57.20
3	STOA- Revenue from CSPDCL	6.55
4	STOA- Revenue from Others	13.12
<b>5</b>	<b>Grand Total</b>	<b>913.39</b>

The Commission notes that CSPTCL has billed total revenue of Rs. 843.06 Crore to CSPDCL during FY 2016-17. The same amount has been considered in power purchase expenses of CSPDCL in FY 2016-17, for the purpose of the provisional Truing up.



Accordingly, for the purpose of the provisional truing up, the Commission has considered the revenue of Rs. 913.39 Crore based on provisional Accounts for FY 2016-17.

#### 4.16 Revenue Gap/(Surplus) for FY 2016-17

CSPTCL submitted the standalone Revenue Gap/(surplus) for FY 2016-17 as shown in the following Table:

**Table 4-26: Revenue Gap/(Surplus) submitted by CSPTCL (Rs. Crore)**

Sr. No.	Particulars	FY 2016-17
		Provisional True-up
1	Aggregate Revenue Requirement	804.88
2	Less: Transmission Income allowed as AFC for FY 2016-17	823.49
3	Standalone Revenue Gap/(Surplus)	(18.61)

CSPTCL further submitted that the surplus of FY 2014-15 along with carrying cost has been adjusted against the revenue recovery allowed in FY 2016-17. Similarly, the Revenue Gap of Rs. 90.27 Crore, towards the impact of Hon'ble APTEL Judgement in Appeal No. 308 of 2013, has been adjusted against the revenue recovery allowed during FY 2016-17. Hence, there is no gap or surplus carried forward for FY 2016-17.

Thus, CSPTCL requested the Commission to approve stand-alone Revenue Surplus of Rs. 18.61 Crore along with the carrying cost for FY 2016-17 and FY 2017-18, which will be adjusted in the ARR of CSDPCL for FY 2018-19.

#### Commission's View

The Commission has computed the Revenue Gap/(Surplus) after provisional true-up for FY 2016-17 for CSPTCL as shown in the Table below:

**Table 4-27: Revenue Gap/(Surplus) approved by Commission (Rs. Crore)**

Sr. No.	Particulars	Approved after Provisional True-up
1	Aggregate Revenue Requirement	799.93
2	Add: Past Revenue Gaps approved in MYT Order	89.91
3	Net ARR	889.84
2	Less: Revenue from Transmission Charges	913.39
3	<b>Revenue Gap/(Surplus)</b>	<b>(23.55)</b>

The Commission hereby approves the Revenue Surplus of Rs. 23.55 Crore after provisional truing up for FY 2016-17. After applying the carrying cost for two years, i.e., from mid-point of FY 2016-17 to mid-point of FY 2018-19 on this Revenue Surplus, the total amount which is required to be factored in the revenue requirement of CSPDCL for FY 2018-19 works out to Rs. 29.98 crore.

#### 4.17 Proposed STOA Charges for FY 2018-19

The Commission had considered maximum demand of 4500 MW during FY 2015-16 for arriving at the short-term open access charges for FY 2016-17. The actual unrestricted maximum demand recorded during FY 2017-18 was 4318 MW in September 2017 and after considering the past trends, CSPTCL is considering approximately 4500 MW unrestricted maximum demand to be met in FY 2017-18 for arriving at short-term open access charges for FY 2018-19. Actual demand observed in FY 2017-18 shall be intimated to the Commission at the end of the financial year. The STOA Charges proposed by CSPTCL for FY 2018-19 are shown in the following Table:

**Table 4-28: Proposed STOA Charges for FY 2018-19**

Sr. No	Particulars	FY 2018-19
1	ARR approved in Tariff Order dated 30.04.2016 (Rs. Crore)	993.46
2	Less: Surplus with holding cost till FY 2018-19 (Rs. Crore)	25.07
3	Total ARR for FY 2018-19 (Rs. Crore)	968.39
4	Maximum Demand Projected in MW	4500.00
5	Energy Input in MU considering 85% Load Factor	33507.00
<b>6</b>	<b>STOA Charges in Paisa/kWh</b>	<b>28.90</b>

#### Commission's View

Regulations 45.1 and 45.2 of the CSERC MYT Regulations, 2015 specify as under:

*“45.1 Annual Transmission charges or each year of the control period: The Annual Transmission Charges for each financial year of the control period shall provide for the recovery of the Aggregate Revenue Requirement of the Transmission licensee/STU for the respective financial year of the Control period, reduced by the amount of Non-Tariff Income and from other business, as approved by the Commission:*

45.2. The annual Transmission Charges of the Transmission licensee shall be determined by the Commission on the basis of an application for determination of Aggregate Revenue Requirement made by the transmission licensee in accordance with chapter-2 of these Regulations.”

As per the CSERC MYT Regulations, 2015, the annual transmission charges (fixed cost) shall be recovered from the users of CSPTCL’s system on a monthly basis as per the methodology specified in the CSERC Open Access Regulations. According to the CSERC (Connectivity and Intra-State Open Access) Regulations, 2011, the basis of sharing monthly transmission charge shall be maximum demand in MW served by the CSPTCL’s system in the previous financial year.

The maximum demand in the State in FY 2017-18 was 4318 MW and is expected to increase to 4500 MW by FY 2018-19. The energy input to be handled by CSPTCL’s system for FY 2018-19 considering the load factor of 70% on maximum demand met is estimated as 27594 MU. Accordingly, the Transmission Charges for Short-term Open Access (STOA) for FY 2018-19 have been determined as shown in the Table below:

**Table 4-29: Approved Transmission Charges for FY 2018-19 (Rs. Crore)**

<b>SR. NO</b>	<b>PARTICULARS</b>	<b>FY 2018-19</b>
1	ARR approved in MYT Order dated April 30, 2016 (Rs. Crore)	993.46
2	Less: Surplus with holding cost till FY 2018-19 (Rs. Crore)	29.98
3	Total ARR for FY 2018-19 (Rs. Crore)	963.48
4	Maximum Demand Projected in MW	4500.00
5	Energy Input in MU considering 70% Load Factor	27594.00
<b>6</b>	<b>STOA Charges in Paisa/kWh</b>	<b>34.92</b>

## 5 PROVISIONAL TRUE-UP FOR CSLDC FOR FY 2016-17

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### 5.1 Background

The Commission issued the MYT Order for the Control Period from FY 2016-17 to FY 2020-21 on April 30, 2016.

Regulation 5.8 (b) of CSERC MYT Regulations, 2015 specifies as under:

*“After first year of the control period and onwards, the yearly petition shall comprise of:*

- i. Generation, Transmission and SLDC business – Truing up for preceding year(s).  
The STU/Transmission licensee shall also file proposal for determination of transmission charges for the short term open access customers along with the true-up petition.*

*The SLDC along with the petition for truing-up shall also submit the details of year-wise capital expenditure including additional capital expenditure, sources of financing, operation and maintenance expenditure, etc incurred, duly audited and certified by the auditors. The fees and charges recovered for a year shall be trued-up and considered for determination of fees and charges for the next year, by the commission after prudence check.*

*Where after the truing up, the fee and charges recovered by SLDC if exceeds/falls short of the amount approved by the commission under these regulations, the excess amount so recovered or short fall to be recovered, as the case may be shall be adjusted while determining the fee and charges for the next year or as decided by the Commission.”*

Regulation 10.3 of CSERC MYT Regulations, 2015 however specifies as under:

*“10.3 In case the audited accounts are not available, the provisional truing up shall be done on the basis of un-audited/provisional account and shall be subject to further final truing up, as soon as the audited accounts is available.”*

In accordance with the above Regulations, CSLDC filed the present Petition for the Provisional True-up for FY 2016-17. The Provisional True-up for FY 2016-17 for CSLDC has been carried out on the basis of CSERC MYT Regulations, 2015 and available Provisional Accounts. The final Truing up for FY 2016-17 shall be done on the basis of Audited Accounts.

## 5.2 Annual Charges for SLDC

Regulation 74.1 of CSERC MYT Regulations, 2015 specifies the components of Annual Charges for SLDC as under:

- (a) Return on Equity;
- (b) Interest on loan capital;
- (c) Depreciation;
- (d) Operation and Maintenance Expenses;
- (e) Interest on Working Capital and;
- (f) Contribution to Pension Fund.

## 5.3 Operation and Maintenance (O&M) expenses

### CSLDC's Submission

CSLDC submitted that O&M expenses comprise Employee expenses, A&G expenses and R&M expenses. Separate accounts are not being prepared between CSPTCL and CSLDC and the asset transfer scheme between CSLDC and CSPTCL has not been yet notified. CSLDC has considered the actual O&M expenses for FY 2016-17 based on Provisional Accounts, as shown in the Table below:

**Table 5-1: O&M Expenses for FY 2016-17 as submitted by CSLDC (Rs. Crore)**

Sr. No	Particulars	FY 2016-17
		Provisional
1	Gross Employee Expenses including interim wage relief amount	7.47
2	Gross A&G Expenses	0.48
3	Gross R&M Expenses	0.68
4	Outsourcing payments against vacant position in SLDC	0.10
<b>5</b>	<b>Total O&amp;M Expenses</b>	<b>8.73</b>

CSPTCL further submitted that an additional expenditure of Rs. 0.10 Crore on account of payments towards work outsourced to operators against the vacant employee positions in CSLDC has been incurred. This payment is on account of

salaries paid to the operators for work outsourced and has been treated as a separate line item here.

The interim wage relief amount as per data maintained by CSLDC is Rs. 0.25 Crore, which has been considered as part of the employee expenses for FY 2016-17. Further, provision of arrears of Rs. 20.41 Crore, to be paid to employees of CSPTCL and CSLDC on account of wage revision due from April 1, 2014 to March 31, 2017, has been made in provisional accounts for the FY 2016-17. CSLDC submitted that this amount is being paid from FY 2017-18 onwards and requested the Commission to kindly consider the same as per actuals in future years.

Further, CSLDC submitted the reasons for the increase in employee expenses as under:

- (a) The increase in number of employees on account of creation of the Backup SLDC at Khedamara, Bhilai, Chhattisgarh
- (b) The arrears payable due to wage revision w.e.f. 01.04.2014.

CSLDC requested the Commission to approve Rs. 7.47 Crore as employee expenses for FY 2016-17 including the interim wage relief amount actually paid to the employees based on the combined Provisional Accounts.

#### **Sharing of gain and losses on account of O&M Expenses**

CSLDC submitted that as per the CSERC MYT Regulations, 2015 and the subsequent amendment, the Employee expenses for FY 2016-17 have been considered based on actuals and have not been subjected to sharing of gains or losses. CSLDC requested the Commission to approve Rs. 7.47 Crore as employee expenses (including interim wage relief amount) for FY 2016-17. A&G expenses and R&M expenses have been subjected to sharing of gains/losses as per Regulation 47.5 of the CSERC MYT Regulations, 2015.

The A&G expenses and R&M expenses for the base year, i.e., FY 2015-16, have been derived on the basis of the normalized average of the actual net A&G expenses and R&M expenses, respectively, available in the Accounts for the previous five (5) years immediately preceding the base year FY 2015-16. Any other expense of non-recurring nature has been excluded while determining normalized average for the previous five (5) years. The normalization has been done by applying last five-year average increase in Wholesale Price Index (WPI) on year to year basis. The average increase

in WPI for the five years preceding the base year, i.e., from FY 2010-11 to FY 2014-15, is 6.77%.

The actual increase in WPI for FY 2015-16 is -2.49% and for FY 2016-17 it is 3.67%. The same have been considered for projecting the A&G expenses and R&M expenses for FY 2015-16 and FY 2016-17, respectively. The average of the net present value of the A&G expenses and R&M expenses from FY 2010-11 to FY 2014-15 normalised to FY 2014-15 has then been escalated by actual increase in WPI for FY 2015-16, i.e., -2.49% to arrive at the normative A&G expenses and R&M expenses for FY 2015-16. The same have been escalated by increase in WPI for FY 2016-17, i.e., 3.67% to arrive at the normative A&G expenses and R&M expenses for FY 2016-17.

CSLDC computed the normative A&G Expenses of Rs. 1.02 Crore and R&M Expenses of Rs. 1.50 Crore for FY 2016-17.

The actual A&G expenses and R&M expenses are Rs. 0.58 Crore (including expense of Rs. 0.10 Crore on account of outsourcing payments against vacant employee positions) and Rs. 0.68 Crore, respectively, for FY 2016-17. CSLDC submitted that the payment of Rs. 0.10 Crore is on account of wages paid to the operators for work outsourced to them. Since, nature of expenses are similar to employee expenses for regular employees, hence, CSLDC requested the Commission to consider same at par with employee expenses only for the purpose of computation of gain and losses of O&M expenses. The sharing of gain/(loss) for A&G expenses and R&M expenses for FY 2016-17 as submitted by CSLDC is shown in the following Table:

**Table 1-2: Sharing of gain/ (loss) on A&G expenses and R&M expenses for FY 2016-17 (Rs. Crore)**

Sr. No	Particulars	Normative Expense	Provisional True-up	Gain/ (Loss)
1	A&G expenses	1.02	0.48	0.54
2	R&M expenses	1.50	0.68	0.82
3	Total Gain/(Loss)			1.36
4	CSLDC share (1/2 of Total Gain/(Loss))			0.68

#### **Commission's View**

As regards O&M Expenses, Regulation 47.5 of the MYT Regulations, 2015 specifies as under:

## ***“47.5 Operation and Maintenance expenses***

### ***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 transmission lines/ substations commissioned after March 31, 2016 shall be allowed by the Commission subject to prudence check at the time of truing up exercise." (emphasis added)*

In the MYT Order, the Commission determined the O&M Expenses for the Control Period from FY 2016-17 to FY 2020-21 in accordance with the above Regulations.

The above Regulations specify that at the time of truing up, the O&M Expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period. The Regulation does not require the base O&M expenses as approved in the MYT Order to be revised.

Accordingly, the Commission has computed the normative O&M expenses for FY 2016-17 by applying the actual inflation of FY 2016-17 on base O&M expenses for FY 2015-16, as approved in the MYT Order. The Commission has considered the actual inflation of CPI and WPI levels for FY 2016-17 over CPI and WPI levels of FY 2015-16. The Commission has considered escalation factor of 4.12% for employee expenses and 1.73% for R&M expenses and A&G Expenses. Accordingly, the normative O&M Expenses computed for FY 2016-17 is shown in the following Table:

**Table 5-3: Normative O&M Expenses for FY 2016-17 as computed by the Commission (Rs. Crore)**

Particulars	FY 2015-16	FY 2016-17	
	Base Year Normative Expenses	Approved in MYT Order	Revised Normative Expenses
Employee Expenses	5.67	6.19	5.90
A&G Expenses	0.99	1.16	1.01
R&M Expenses	1.44	1.69	1.47
<b>Grand total</b>	<b>8.10</b>	<b>9.04</b>	<b>8.38</b>

For the purpose of provisional truing up for FY 2016-17, the Commission approves

the normative O&M Expenses. The Commission has undertaken sharing of gains and losses of normative expenses vis-à-vis actual expenses as per CSERC MYT Regulations, 2015.

The Commission has provisionally considered the O&M expenses as per provisional accounts for sharing of gains and losses. Further, the Commission rejects CSLDC's approach of not considering Rs. 0.10 Crore towards wages paid to the outsourced employees as part of A&G expenses for the purpose of computation of gain and loss of A&G expenses. Expenses incurred by CSLDC (or any Licensee) towards outsourcing is always considered under A&G expenses, and cannot be notionally considered under employee expenses, for the purpose of computing the sharing of gains/losses.

As regards the sharing of gains and losses, the following provision has been inserted in Regulation 13.1 by the First Amendment to the CSERC MYT Regulations, 2015 on June 16, 2017:

*“Provided further that employee cost shall not be factored in for sharing of gains or losses on account of operations and maintenance expenses, ... ..”*

Accordingly, the Commission approves the Employee Expenses at actuals as per Provisional Accounts for FY 2016-17, and no sharing of gains and losses has been considered for Employee Expenses.

The sharing of gains and losses in A&G and R&M expenses, computed after provisional truing up for FY 2016-17 is shown in the following Table:

**Table 5-4: Sharing of Gains and Losses in A&G and R&M expenses as provisionally approved by the Commission (Rs. Crore)**

<b>Particulars</b>	<b>Revised normative O&amp;M expenses</b>	<b>Actual based on Provisional Accounts</b>	<b>Gains/ (Losses)</b>	<b>Sharing of Gains/ (Losses) at 50:50</b>	<b>Net Entitlement of O&amp;M Expenses</b>
Employee Expenses	5.90	7.47	-	-	7.47
A&G Expenses	1.01	0.58	0.43	0.21	0.79
R&M Expenses	1.47	0.68	0.79	0.39	1.07
<b>Total O&amp;M expenses</b>	<b>8.38</b>	<b>8.73</b>	<b>1.21</b>	<b>0.61</b>	<b>9.33</b>

**In this Order, the Commission approves the O&M expenses based on provisional Accounts for FY 2016-17. The final approval of O&M Expenses shall be accorded at time of truing up based on audited accounts.**

#### **5.4 Contribution to Pension and Gratuity Fund**

##### **CSLDC's Submission**

CSLDC submitted that the Commission in MYT Order dated April 30, 2016 allowed Contribution to Pension and Gratuity (P&G) fund of Rs. 1.21 Crore for FY 2016-17. CSLDC has considered the same amount as actual contribution to pension and gratuity of Rs. 1.21 Crore for FY 2016-17 and requested the Commission to approve the same.

##### **Commission's View**

The Commission provisionally approves the Contribution to Pension and Gratuity Fund as submitted by CSLDC as shown in the following Table:

**Table 5-5: Contribution to P&G Fund as approved by the Commission (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSLDC's Submission</b>	<b>Approved for provisional Truing up</b>
1	Contribution to Pension and Gratuity Fund	1.21	1.21	1.21

#### **5.5 Gross fixed Assets and Means of Finance**

CSLDC has considered the closing GFA of Rs. 14.39 Crore as approved in the true-up Order for FY 2015-16 as the opening GFA for FY 2016-17. It has considered GFA addition of Rs. 74 Lakh based on the actual capitalisation in FY 2016-17.

As per Regulation 17 of the CSERC MYT Regulations, 2015, the normative debt:equity ratio of 70:30 has been considered for funding of the additional capitalisation for the year. It is noted that the additional capitalisation has not been funded by any grants and hence, the ratio of 70:30 has been considered for normative funding of the additional capitalisation of Rs. 0.74 Crore for provisional true-up of ARR for FY 2016-17.

##### **Commission's View**

The Commission has approved the closing GFA for FY 2015-16 as Rs. 14.39 Crore after True-up in the Order dated March 31, 2017. The Commission has accordingly

considered the same amount as Opening GFA for FY 2016-17. The Commission notes that provisional Accounts for FY 2016-17 indicate the capitalisation of Rs. 231.02 Crore during the year. Out of this, the amount of Rs. 0.74 Crore is pertaining to CSLDC. The Commission has considered the capitalisation of Rs. 0.74 Crore for FY 2016-17 as submitted by CSLDC, based on reconciliation with the provisional Accounts.

As regards the funding of capitalisation, the Commission has not considered any grants for FY 2016-17. Further, normative Debt:Equity ratio of 70:30 has been considered as per Regulation 17 of the CSERC MYT Regulations, 2015.

The Commission provisionally approves the GFA and its funding for FY 2016-17 as shown in the following Table:

**Table 5-6: Gross Fixed Assets addition and its Funding for FY 2016-17 for CSLDC (Rs. Crore)**

Sr. No	Particulars	CSLDC Petition	Approved after provisional True-up
1	GFA Addition in FY 2016-17	0.74	0.74
	<b>Means of Finance</b>		
2	Consumer Contribution	-	-
3	Equity	0.22	0.22
4	Debt	0.52	0.52
5	<b>Total Capitalisation</b>	<b>0.74</b>	<b>0.74</b>

## 5.6 Depreciation

### CSLDC's Submission

CSLDC submitted that its asset base comprises SCADA system, computer terminals, equipment, building, etc. The asset base has been identified from the accounts of CSPTCL by the Asset Segregation Committee and the same has been considered in its computations. As the asset class-wise segregation of the CSLDC's asset base is not available, the weighted average depreciation rate considered for CSPTCL for FY 2016-17 has been considered for CSLDC. The closing GFA of Rs. 14.39 Crore as approved in the true-up Order for FY 2015-16 is considered as the opening GFA for FY 2016-17. Regulation 24.5 of CSERC MYT Regulations, 2015 specifies that till CSLDC is part of CSPTCL, the depreciation shall be calculated as applicable for CSPTCL. Since, CSLDC is not operating as a separate Company, the depreciation as applicable to CSPTCL has been considered.

CSLDC requested the Commission to approve depreciation of Rs. 0.78 Crore for FY 2016-17 after provisional Trueing up.

### Commission's View

The Commission has approved the depreciation for FY 2016-17 as per the approach adopted in the past Orders. The closing GFA for FY 2015-16 as approved in the true up for FY 2015-16, has been considered as the opening GFA for FY 2016-17. The GFA addition for FY 2016-17 has been considered as approved by the Commission earlier in this Chapter. The Consumer Contribution in GFA addition for FY 2016-17 has been considered as Nil as approved by the Commission in earlier sub-section. The weighted average depreciation rate of 5.25%, computed on the basis of deprecation rates specified in the CSERC MYT Regulations, 2015, has been considered. The depreciation computed by the Commission for FY 2016-17 is shown in the Table below:

**Table 5-7: Depreciation for FY 2016-17 for CSLDC as approved by the Commission (Rs. Crore)**

Sr. No.	Particulars	MYT Order	CSLDC Petition	Approved after Provisional True-up
1	Opening GFA	16.58	14.39	14.39
2	Add: Additional capitalization during the year	2.65	0.74	0.74
3	GFA at the end of the year	19.23	15.13	15.13
4	Average GFA for the year	17.91	14.76	14.76
5	Depreciation Rate	5.25%	5.25%	5.25%
<b>6</b>	<b>Depreciation</b>	<b>0.94</b>	<b>0.78</b>	<b>0.78</b>

## 5.7 Interest on Loan

### CSLDC's Submission

CSLDC submitted that it has calculated Interest and Finance Charges as per Regulation 23 of the CSERC MYT Regulations, 2015. CSLDC is not operating as a separate Company and therefore, the actual loan as applicable to CSPTCL has been considered. CSLDC has considered the approved closing normative loan balance for FY 2015-16 as per the true-up Order, as the opening normative loan balance for FY 2016-17. The debt component of 70% of the GFA addition during FY 2016-17 has been considered as the normative loan addition during the year. The allowable

depreciation for the year has been considered as the normative repayment for the year. The actual weighted average interest rate of 10.95% for CSPTCL has been considered for computation of the interest on loan for FY 2016-17.

CSLDC requested the Commission to approve the Interest and Finance Charges of Rs. 0.46 Crore for FY 2016-17.

### **Commission's View**

The Commission has approved interest on loan capital for FY 2016-17 as per Regulation 23 of the CSERC MYT Regulations, 2015.

The Commission has considered the closing net normative loan balance for FY 2015-16 as approved after True-up, as the opening net normative loan balance for FY 2016-17. The addition of normative loan has been considered based on actual capitalisation, as considered in earlier Section of this Order. The repayment has been considered equal to net depreciation approved by the Commission for FY 2016-17.

For computation of weighted average rate of interest, the Commission has considered the actual loan details and applicable rate of interest for CSPTCL as per the Provisional Accounts, in absence of segregation of actual loan for CSLDC. The Commission has computed the weighted average rate of interest of 10.95%, as per Regulation 23.5 of CSERC MYT Regulations, 2015 based on actual loan portfolio at the beginning of the year.

The interest on loan approved in provisional true up for FY 2016-17 is shown in the Table below:

**Table 5-8: Interest on Loan for FY 2016-17 for CSLDC approved by Commission (Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSLDC Petition</b>	<b>Approved after Provisional True-up</b>
1	Total Opening Net Loan	5.72	4.34	4.34
2	Repayment during the period	0.94	0.78	0.78
3	Additional Capitalization of Borrowed Loan during the year	1.86	0.52	0.52
4	Total Closing Net Loan	6.63	4.08	4.08
5	Average Loan during the year	6.18	4.21	4.21

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSLDC Petition</b>	<b>Approved after Provisional True-up</b>
6	Weighted Average Interest Rate	12.20%	10.95%	10.95%
7	<b>Interest Expense for the Period</b>	<b>0.75</b>	<b>0.46</b>	<b>0.46</b>

## **5.8 Return on Equity (RoE) and Income Tax**

### **CSLDC's Submission**

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

The closing equity balance of FY 2015-16 as approved in the true-up Order has been considered as the opening equity balance for true-up of FY 2016-17. Equity addition during FY 2016-17 has been considered as 30% of the capitalisation during the year. CSLDC has computed RoE as per Regulation 22 of the CSERC MYT Regulations, 2015 using base rate of RoE of 15.50% (without grossing up by MAT rate). Since, CSLDC has not paid any Income Tax during FY 2016-17, no Tax has been considered for the year.

CSLDC requested the Commission to approve RoE of Rs. 0.74 Crore for FY 2016-17 after provisional Truing up.

### **Commission's View**

Regulation 22 of the CSERC MYT Regulations, 2015 specifies that RoE shall be computed by grossing up the base rate with the prevailing MAT rate of the base year for projection purposes. However, at the time of truing up, actual Tax rate applicable shall be considered. The Commission notes that CSLDC has not paid any Income Tax separately, hence, no Income Tax has been considered separately for CSLDC.

For the purpose of the provisional Truing up, the Commission has provisionally approved RoE at rate of 15.50% as per Regulation 22 of the CSERC MYT Regulations, 2015. For computation of RoE, the Commission has considered the closing equity as approved for FY 2015-16 after True-up, as opening equity for FY 2016-17. The equity addition has been considered based on the actual capitalisation as approved in earlier Section of this Order. The Commission provisionally approves the RoE for FY 2016-17 as shown in the following Table:

**Table 1-5-9: Return on Equity for FY 2016-17 for CSLDC as approved by Commission  
(Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSLDC Petition</b>	<b>Approved after Provisional True-up</b>
1	Permissible Equity in Opening GFA	5.37	4.68	4.68
2	Addition of permissible equity during the year	0.80	0.22	0.22
3	Permissible Equity in Closing GFA	6.17	4.90	4.90
4	Average Gross Permissible Equity during the year	5.77	4.79	4.79
5	Rate of Return on Equity	15.50%	15.50%	15.50%
<b>6</b>	<b>Return on Equity</b>	<b>0.89</b>	<b>0.74</b>	<b>0.74</b>

## **5.9 Interest on Working Capital (IoWC)**

### **CSLDC's Submission**

CSLDC has considered one month of O&M Expenses, maintenance spares at 40% of R&M expenses and receivables equivalent to one month of actual system operation charges and market operation charges for computing the working capital requirement for FY 2016-17. CSLDC has considered the interest rate of 12.80% (SBI Base Rate of 9.30% as on April 1, 2016 plus 350 basis points) for computing the IoWC. CSLDC requested the Commission to approve IoWC of Rs. 0.25 Crore for FY 2016-17.

### **Commission's View**

The Commission has computed IoWC in accordance with Regulation 25 of the CSERC MYT Regulations, 2015. For computation of working capital requirement as per the formula specified in the CSERC MYT Regulations, 2015, the Commission has considered the revised normative value of O&M expenses for FY 2016-17 as approved in earlier Section of this Order. Further, the receivables have been considered based on the actual revenue of CSLDC during FY 2016-17. The interest rate of 12.80% has been considered as per Regulation 25.4 of the MYT Regulations, 2015. The normative IoWC approved by the Commission in the provisional true-up for FY 2016-17 is shown in the Table below:



**Table 5-10: IoWC approved for FY 2016-17 for CSLDC by the Commission (Rs. Crore)**

Sr. No.	Particulars	MYT Order	CSLDC Petition	Approved after Provisional True-up
1	O&M for One Month	0.78	0.73	0.70
2	Maintenance Spares @ 40% of R&M Expenses	0.67	0.27	0.60
3	Receivables @ 1 Month of Fixed Cost	1.03	0.97	1.05
<b>4</b>	<b>Total Working Capital Requirement</b>	<b>2.48</b>	<b>1.97</b>	<b>2.35</b>
5	Less: Security Deposit from Transmission Users	-	-	-
<b>6</b>	<b>Net Working Capital Requirement</b>	<b>2.48</b>	<b>1.97</b>	<b>2.35</b>
7	Rate of Interest on Working Capital	13.20%	12.80%	12.80%
<b>8</b>	<b>Net Interest on Working Capital</b>	<b>0.33</b>	<b>0.25</b>	<b>0.30</b>

### 5.10 Non-Tariff Income

#### CSLDC's Submission

CSLDC submitted the actual Non-Tariff income (NTI) of Rs. 1.18 Crore for FY 2016-17. CSLDC requested the Commission to approve NTI of Rs. 1.18 Crore for the provisional true-up of ARR for FY 2016-17.

#### Commission's View

For the purpose of provisional truing up for FY 2016-17, the Commission has considered the Non-Tariff Income for CSLDC as per Segmental notes of provisional Accounts submitted by CSPTCL and CSLDC. Accordingly, the Commission considers Non-Tariff income of Rs. 1.12 Crore for CSLDC for FY 2016-17. The Non-Tariff Income provisionally approved for FY 2016-17 is shown in the Table below:

**Table 5-11: Non-Tariff Income approved by the Commission for FY 2016-17 (Rs. Crore)**

Sr. No	Particulars	MYT Order	CSLDC Petition	Approved after Provisional True-up
1	Non-Tariff Income	1.05	1.18	1.12

### 5.11 Aggregate Revenue Requirement (CSLDC Annual Charges)

Based on the above, the ARR approved for CSLDC for provisional true-up for FY 2016-17 is shown in the Table below:

**Table 5-12: ARR for FY 2016-17 for CSLDC approved by the Commission (Rs. Crore)**

Sr. No.	Particulars	MYT Order	CSLDC Petition	Approved after Provisional true-up
1	Employee Expenses	6.19	7.47	7.47
2	A&G Expenses	1.16	0.58	0.58
3	R&M Expenses	1.69	0.68	0.68
4	Provision for Interim Wage Relief Impact	0.31	-	-
5	Sharing of Gain/(Loss) for O&M Efficiency	0.00	0.68	0.61
6	Contribution to Pension & Gratuity Fund	1.21	1.21	1.21
7	Depreciation	0.94	0.78	0.78
8	Interest on Loan	0.75	0.46	0.46
9	Interest on Working Capital	0.33	0.25	0.30
10	Return on Equity	0.89	0.74	0.74
<b>11</b>	<b>Gross Aggregate Revenue Requirement</b>	<b>13.48</b>	<b>12.85</b>	<b>12.82</b>
12	Less: Non-Tariff Income	1.05	1.18	1.12
<b>13</b>	<b>Net Aggregate Revenue Requirement</b>	<b>12.41</b>	<b>11.67</b>	<b>11.70</b>

### 5.12 Revenue from CSLDC Charges

#### CSLDC's Submission

CSLDC submitted the revenue from CSLDC charges as Rs. 12.41 Crore for FY 2016-17. These SOC/MOC charges are actually realised against the bill to the LTOA/MTOA customers during FY 2016-17 after set-off of the NTI receipts. CSLDC requested the Commission to approve Revenue from SLDC Charges of Rs.12.41 Crore for FY 2016-17.

#### Commission's View

CSLDC has considered the revenue from CSLDC Charges as Rs. 12.41 Crore. However, the same has been mentioned as Rs. 12.64 Crore in Note 8.1 of the Provisional Accounts. CSLDC submitted that the revenue shown in the Provisional

Accounts includes some NTI, and the reconciliation with accounts is going on. In view of the above, the Commission for the purpose of provisional truing up has considered the revenue of Rs. 12.64 Crore for FY 2016-17. The revenue based on Audited Accounts shall be considered at the time of final truing up.

### 5.13 Revenue Gap/(Surplus) for CSLDC

The Commission is not considering the previous gap of Rs. 0.54 Crore, as it is not clear from the provisional accounts submitted by CSLDC, whether it is included in the revenue or not. The same will be accrued at the time of final-true-up. In view of the above, the Commission has computed the Revenue Gap/(Surplus) for CSLDC for FY 2016-17 after provisional Truing up as shown in the following Table:

**Table 5-13: Revenue Gap/(Surplus) for FY 2016-17 for CSLDC as approved by the Commission (Rs. Crore)**

Sr. No	Particulars	CSLDC Petition	Approved after Provisional Truing up
1	Aggregate Revenue Requirement	11.67	11.70
2	Less: Revenue from SLDC Charges	12.41	12.64
3	<b>Standalone Revenue Gap/(Surplus)</b>	<b>(0.74)</b>	<b>(0.94)</b>

Hence, the Commission has approved the net Surplus of Rs. 0.94 Crore in the provisional true-up for FY 2016-17 as against the net surplus of Rs. 0.74 Crore claimed by CSLDC.

After applying the carrying cost for two years, i.e., from mid-point of FY 2016-17 to mid-point of FY 2018-19 on this Revenue Surplus, the total amount that is required to be factored in the revenue requirement of CSPDCL for FY 2018-19 works out to Rs. 1.26 crore.

### 5.14 Interlocutory Application No. \_\_ of 2018

#### Background

CSLDC filed Review Petition No. 22 of 2017 (M) before the Commission. Meanwhile, CSLDC submitted the new Tariff Petition for FY 2018-19. As the matter under Review Petition was also related to tariff, the Commission was of view that the matter to be heard and decided with the new Tariff Petition for FY 2018-19 and accordingly, the Commission in its Order dated December 14, 2017 directed as under:

*“Vide order sheet dated 08.12.2017, the Petitioner was directed to submit the gist of the Petition within a week’s time. Since, SLDC has filed tariff Petition for the year FY 2018-19 on 12.12.2017, the matter may be heard with objection/suggestion on new tariff petition.”*

In view of the above, CSLDC filed an Interlocutory Application with the following prayers:

“

- (a) To review Para 5.3, 5.4 and 5.5 passed in Tariff Order for FY 2017-18 and make appropriate changes by removing revenue surplus for FY 2013-14 of Rs. 1.92 Crore;*
- (b) To review Para 5.6 passed in Tariff Order for FY 2017-18 and strike down the order of payment/adjustment of carrying cost of Rs. 35 lakh;*
- (c) To consider the effect of removing revenue surplus for FY 2013-14 of Rs. 1.92 Crore while carrying out the provisional True-up of ARR for FY 2016-17;*
- (d) To kindly consider all prior submissions made on the subject matter in Review Petition No. 22 of 2017 (M) while carrying out proceedings of the Petition;*
- (e) Pass any other order as this Hon’ble Commission may deem fit in the interest of justice”*

The Commission has analysed the submissions made by CSLDC. The Commission’s views on the issues raised by CSLDC are discussed below:

### **Issue No. 1 – Accounting of Revenue Surplus of Rs. 1.92 Crore**

#### **CSLDC’s Submission**

CSLDC submitted that it has duly adjusted surplus amount of Rs. 1.92 Crore after setting-off the Non-Tariff Income (NTI) receipts and adjusted the refund of the excess receipts in compliance of Tariff Order for FY 2015-16. The same has also been submitted before the Commission vide Para 5.32 of the Petition No. 67 of 2016 (T), in the matter of filing of the Petition for approval of CSLDC’s provisional truing up for FY 2015-16. CSLDC also submitted the copies of bills wherein it has adjusted and passed on surplus through the SOC/MOC charges bills in six equal instalments of Rs. 32 lakh each from October 2015 to February 2016.

CSLDC further submitted that the Commission has considered the revenue of Rs. 14.28 Crore against Rs. 12.26 Crore submitted by CSLDC, after taking into account revenue surplus of Rs. 1.92 Crore for FY 2013-14 that has been passed through to CSPDCL in FY 2015-16. The Commission has erred in acknowledging the fact that

said surplus has already been accounted for billing to CSPDCL in FY 2015-16. CSLDC added that the Commission has changed the approach from previous Orders, where in the impact of surplus used to be considered by simply reducing the billing for prospective tariff year and then actual revenue is considered while undertaking True-up.

### **Commission's View**

The Commission notes the submission of CSLDC. The Commission has undertaken the truing up for FY 2015-16 for CSLDC in the Tariff Order for FY 2017-18. While undertaking the Truing up for FY 2015-16, the Commission observed that CSLDC has passed through Revenue Surplus for FY 2013-14 of Rs. 1.92 Crore during FY 2015-16 through bills of SOC/MOC Charges. Hence, the revenue reflected in the Audited Accounts of Rs. 12.26 Crore is only after the adjustment of Revenue Surplus of Rs. 1.92 Crore.

Further, the Commission has approved Net ARR of Rs. 11.72 Crore for FY 2015-16 after truing up. This Net ARR, which is the standalone ARR, did not include any expenses entry towards past Revenue Gap/(Surplus). In view of this, while undertaking the truing up for FY 2015-16, the Commission has correctly considered the standalone revenue of Rs. 14.18 Crore, which is without any adjustment of past Revenue Surplus of Rs. 1.92 Crore. Accordingly, the Commission has approved Revenue Surplus of Rs. 2.45 Crore after truing up for FY 2015-16.

The Commission is of the view that the approach adopted in the Tariff Order for FY 2017-18 is correct and does not contain any error. The Standalone ARR and standalone Revenue have been considered for undertaking the truing up for FY 2015-16. Hence, the Commission denies the contentions of CSLDC and rejects the prayers of CSLDC.

### **Issue No. 2 – Carrying cost for DSM Charges**

#### **CSLDC's Submission**

CSLDC submitted that the Commission in the Tariff Order for FY 2017-18 directed CSLDC to make payment of carrying cost for FY 2015-16 and FY 2016-17 to CSPGCL in relation to non-issuance of revised Deviation Charges bills for CSPGCL. Further, the Commission stated that the carrying cost liability of Rs. 35 Lakh shall be adjusted by CSPGCL while paying the bills raised by CSLDC towards SOC and MOC Charges for CSPGCL for the months of April 2017 and May 2017.

CSPDCL submitted that the entire power transaction is taking place between CSPDCL and CSPGCL. CSLDC was only required to prepare Statement of Charges for deviations including additional charges for deviation on power transaction between CSPGCL and CSPDCL on monthly basis. CSLDC was not involved in any financial transactions except for levying appropriate fees and charges for system and grid operations.

CSLDC submitted that it has experienced various difficulties in the application of the Commission's Order in Petition No. 67 of 2016 (T), for the following reasons:

- (a) There were two inadvertent errors in the CERC (DSM and related matters) Regulations, 2014.
- (b) First error in Part A of Annexure II favoured Generators, however, second error in Part C of Annexure II was against Generators. However, only the first error was addressed and the second error still remains unresolved at the Commission's end.
- (c) CSLDC filed an appeal before Hon'ble APTEL and thereafter to Hon'ble Supreme Court, where in Hon'ble Supreme Court has kept law points open for discussion. Substantial questions of law are present, which have not been discussed before Hon'ble APTEL and the Commission.
- (d) CSLDC is not involved in any financial transaction and has acted strictly as per CERC (DSM and other matters) Regulations, 2014. CERC also did not penalise CSLDC, as it strictly adhered to the Regulation in case of Monnet Ispat and Energy Ltd. vs. CSLDC, Petition No. 563/MP/2014.
- (e) CSPDCL promised to take Open Access so DSM bill was issued but till date CSPDCL has not availed Open Access, so DSM bill revision is not possible as DSM charges are to be levied on Open Access consumers.
- (f) There is no Regulation specifying that interest liability on DSM charges shall be adjusted with MOC/SOC Charges.

In view of the above, CSLDC requested the Commission to review Para 5.6 of Tariff Order for FY 2017-18 and cancel the order of payment/adjustment of carrying cost of Rs. 35 lakh.

#### **Commission's View**

The Commission in para 5.6 of Tariff Order for FY 2017-18 has addressed this issue in detail and after taking cognizance of submissions made by the Parties. The

Commission has given the detailed reason for levy of carrying cost on CSLDC as under:

***“CSLDC being a system operator has to act according to the provisions of the EA 2003 and comply with the Orders of the Commission and the Hon’ble APTEL. Even though there was no stay on the operation of the Order of the Commission dated May 7, 2015, CSLDC did not comply with the Order. It is noted that even after the Judgment rendered by the Hon’ble APTEL, CSLDC has chosen not to comply with the Judgment. The Commission is mandated to ensure compliance of its Orders and the Order passed by superior Courts. Based on the submission of CSPGCL, the Commission has decided to proceed with the truing up of DSM bills. For the period October to December 2014, the liability occurs on CSPDCL to pay CSPGCL 50% of total amount, i.e., 50% of Rs. 2.90 Crore.***

*It can be understood that there could have been an issue of interpretation of CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014 by CSLDC. However, once the Order was issued by the Commission on May 7, 2015, the issue was clarified and CSLDC was bound to comply with the Orders of the Commission and issue the correct Deviation Charges bills for CSPGCL. Due to non-compliance of the Order of the Commission, a liability of carrying cost has arisen on CSPDCL. It does not appear proper that the burden of this carrying cost, due to non-compliance of CSLDC be passed onto consumers of the State. The Order of the Commission in Petition No. 6 of 2015 (D) was passed on May 7, 2015, and if Order would have been implemented timely by CSLDC, the carrying cost for further year would not have arisen. Taking a judicious view and understanding the fact that there would have been an issue of interpretation by CSLDC and Order of the Commission was passed in FY 2015-16, the carrying cost for first quarter of FY 2015-16, i.e., April to June 2015 needs to be borne by CSPDCL. The carrying cost for remaining part of FY 2015-16 and for FY 2016-17, which has arisen due to non-compliance of CSLDC needs to be borne by CSLDC.*

*The carrying cost liability on CSLDC is Rs. 35 Lakh. Such amount shall be adjusted by CSPGCL while paying the bills raised by CSLDC towards the SOC and MOC charges for CSPGCL for the months of April and May 2017. However, CSPGCL would claim the amount from CSPDCL towards CSLDC charges as raised in the monthly bills of April and May 2017.” (emphasis added)*

On the above issue, the Commission would like to highlight the facts as under:

Regarding the interpretation of the CERC (DSM and other matters) Regulations, 2014 and resolving the dispute regarding methodology for computation of charges and additional charges for deviating from the scheduled injection and drawal of power, a

Petition was filed before the Commission by M/s. Arasmeta Captive Power Company Ltd. in Petition No. 6 of 2015(D). The Commission issued the Order in this regard on May 7, 2015. Against this Order of the Commission, CSLDC filed an Appeal before the Hon'ble APTEL, even though it was not aggrieved Party. It is noted that CSLDC in the said Appeal before the Hon'ble APTEL submitted that this Commission has no jurisdiction regarding the interpretation of CERC Regulations.

The Hon'ble APTEL vide Judgment dated December 5, 2016 upheld the decision of the Commission. Aggrieved by the Hon'ble APTEL Judgment, CSLDC filed an Appeal before Hon'ble Supreme Court. It is noted that Hon'ble Supreme Court did not stay the Judgment of Hon'ble APTEL. Despite this, CSLDC chose not to comply with the Order of the Commission and Hon'ble APTEL. Moreover, Hon'ble Supreme Court has subsequently quashed the appeal of CSLDC.

It is pertinent to note that the Commission is mandated to ensure compliance of its Orders and the Order passed by superior Courts. The Commission has decided to proceed with truing of DSM Bills in the Tariff Order for FY 2017-18, while undertaking the truing up for FY 2015-16. DSM bills were pertaining to FY 2014-15. The Commission noted that for such exercise, DSM bills were sought from CSLDC and CSPGCL. However, CSLDC had shown loath approach and chose not to submit the bills to the Commission. With no option left, the Commission proceeded to true up the DSM bills based on the submission of CSPGCL.

Further, a new fact has come to light before the Commission during this Review Petition. CSLDC has made the reference of similar Case of Monnet Ispat and Energy Ltd. vs CSLDC, Petition No. 563/MP/2014, before CERC. The Commission notes that during the proceedings before this Commission, CSLDC had never disclosed the fact that similar Petition was going on before CERC, and that CSLDC was party to the same. CSLDC chose to suppress the facts. It is very interesting to note that CSLDC in the same Petition before CERC, made the submission that CERC has no jurisdiction on the same. This reflects the conflicting stand of CSLDC before Hon'ble APTEL and CERC. CSLDC had attempted to mislead the Hon'ble APTEL regarding this matter. Further, it is also noted that CSLDC did not inform the Commission regarding the Order of CERC in the Monnet Ispat Petition, which was issued before the finalisation of truing of DSM bills by the Commission in tariff order for FY 2017-18. However, CSLDC is now making the submission on the same. From the proceedings and submissions of CSLDC, it is observed that CSLDC has taken conflicting stands before the Hon'ble APTEL, CERC and this Commission. It has



suppressed the facts and misled during the proceedings. It also appears that CSLDC have no faith in the judicial system and has not complied with the Order of the Commission and Hon'ble APTEL.

The Order of the Commission in Petition No. 6 of 2015 (D) was passed on May 7, 2015, and if Order would have been implemented in a timely manner by CSLDC, the carrying cost for further years would not have arisen. Hon'ble APTEL in its Judgment in O.P. No. 1 of 2011 has settled the principles and directed to allow the carrying cost on the past Revenue Gaps. Hence, delay in the process has an effect of additional burden of carrying cost on consumers. The delay by CSLDC in implementation of Order of the Commission led to the burden of additional carrying cost and the same should not be borne by the consumers of the State. The Commission while computing the carrying cost in FY 2017-18 has taken very considerate view wherein the carrying cost for first quarter of FY 2015-16, i.e., April to June 2015, was levied on CSPDCL and for remaining part of FY 2015-16 and for FY 2016-17, was levied on CSLDC. The Commission notes that CSLDC has cited that CERC in its Order on Monnet Petition had not levied any interest in similar case. It is pertinent to mention that the approach adopted by CERC need not be adopted by this Commission, while deciding the similar matter, considering the facts and grounds of the case. Further, the Commission has not levied any interest cost on CSLDC. If the interest cost is levied, it would be more than the amount approved. The Commission has considered the carrying cost only for the period of FY 2015-16 and for FY 2016-17, which has arisen due to non-compliance of CSLDC.

The Commission is of the view that it has already taken the appropriate decision in this matter, considering the facts and grounds of the case. No further review on the same is required. The Commission does not find any ground for review of this matter and rejects the prayer of CSLDC in this matter.

## **6 PROVISIONAL TRUE-UP FOR CSPDCL FOR FY 2016-17**

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### **6.1 Background**

CSPDCL, in accordance with MYT Regulations, 2015, filed a Petition for provisional Truing up for FY 2016-17, based on provisional annual accounts for FY 2016-17.

Regulation 10.3 of the CSERC MYT Regulations, 2015 specifies as under:

*“10.3. In case the audited accounts are not available, the provisional truing up shall be done on the basis of un-audited/ provisional account and shall be subject to further final truing up, as soon as the audited accounts is available.”*

In accordance with the above Regulation, the Commission has undertaken provisional Truing up for FY 2016-17 based on unaudited/provisional Accounts submitted by CSPDCL. The final Truing up for FY 2016-17 based on Audited Accounts shall be undertaken in the next Tariff Petition, provided that CSPDCL files the True-up Petition for FY 2016-17 based on audited accounts.

In this Chapter, the Commission has analysed all the elements of actual expenditure and revenue of CSPDCL for FY 2016-17 and undertaken the provisional truing-up of expenses and revenue in accordance with Regulation 10 of the MYT Regulations, 2015. The Commission has approved the sharing of gains and losses on account of controllable factors between CSPDCL and consumers, in accordance with Regulation 13 of the CSERC MYT Regulations, 2015.

### **6.2 Energy Sales**

#### **CSPDCL’s Submission**

CSPDCL submitted that it had 47,40,542 Nos. of consumers at LV level and 2,613 Nos. at HV and EHV level during FY 2016-17. The Commission in MYT Order had merged HV and EHV categories into supply at HV voltage level effective from April 1, 2016. CSPDCL submitted that the connected load is 5,180.33 MW and 2,694.35 MW at LV and EHV&HV level, respectively, during FY 2016-17. The provisional category-wise sale of power for FY 2016-17 have been recorded at 19,162.57 MU.

#### **Commission’s View**

The category-wise energy sales submitted by CSPDCL for FY 2016-17 have been scrutinized with the actual billing data submitted by CSPDCL. The Commission sought actual category-wise sales in kWh as well as kVAh for all HV categories.

Also, the details of slab-wise consumption within domestic categories was sought for FY 2016-17.

After analysing the submission of CSPDCL, it is observed that Agriculture Metered Category has recorded a load factor of 43%, which is very high considering the nature of usage of this sector. Similarly, it has been observed that 68% of the billing to agriculture consumers was done on the basis of assessment, which also includes defective meters. The Commission sought the justification for billing based on assessment for such a huge quantum, to which CSPDCL has not responded.

As regards the sales and average energy charges for agricultural category during FY 2016-17, CSPDCL submitted the following details:

**Table 6-1: Sales and Energy Charge for Agriculture Consumers for FY 2016-17 as submitted by CSPDCL**

<b>Consumer Category</b>	<b>Nos. of Consumer (Nos.)</b>	<b>Units Sold (MU)</b>	<b>Energy Charge Billed (Rs. Crore)</b>	<b>Average Energy Charge (Rs. /kWh)</b>
A-Metered KJJY	268744	2,534.71	1,029.57	4.06
B-Flat rate KJJY	101956	1,151.16	242.33	2.11
General/Other Pump Consumer	14595	67.82	27.98	4.13
<b>Total</b>	<b>385295</b>	<b>3,753.69</b>	<b>1,299.88</b>	<b>3.46</b>

From the above Table, it is observed that the Average Energy Charge realized is Rs.3.46/kWh against approved Energy Charge of Rs.4.10/kWh for LV-3 Agriculture Metered category. This difference of 64 Paise/kWh translates into a lower realisation of Rs. 240.24 Crore. In other words, had CSPDCL billed Agriculture-Metered category at Rs.4.10/kWh as approved for FY 2016-17 in the MYT Order, the energy charge realization would have been Rs. 1539.01 Crore against the actual energy charge realization of Rs. 1299.88 Crore. The Commission has hence, considered this amount of Rs. 240.24 Crore as additional revenue.

Further, Clause 11.1 of the MYT Regulations, 2015 specifies sales mix and quantum of sales as an uncontrollable item. The consumer category-wise sales for FY 2016-17 estimated in MYT Order, actuals submitted by CSPDCL and approved in the provisional true up are shown in the Table below:

**Table 6-2: Energy Sales approved by the Commission for FY 2016-17 (MU)**

<b>Consumer Category</b>	<b>MYT Order</b>	<b>CSPDCL Petition</b>	<b>Approved after Provisional True-up</b>
<b>LV Categories (A)</b>	<b>11,226.64</b>	<b>10,797.03</b>	<b>10,797.02</b>
Domestic Including BPL Consumers	5,336.04	4,722.00	4,722.00
Non-Domestic (Normal Tariff)	891.93	828.27	828.27
Non-Domestic (Demand Based)	33.74	33.97	33.97
Agriculture Metered	3,579.83	3,753.69	3,753.69
Agriculture allied	16.87	17.54	17.54
LT Industry	489.91	518.04	518.04
Public Utilities	287.36	316.23	316.23
IT Industry	-	-	-
Temporary	590.96	607.29	607.29
<b>HV Categories (B)</b>	<b>8,604.71</b>	<b>8,365.49</b>	<b>8,365.49</b>
Railway Traction	899.74	902.80	902.80
Mines (Coal & Others)	552.40	625.20	625.20
Other Industry & General Purpose Non-Industrial	2,514.32	2,207.77	2,207.77
Steel Industries	4,222.39	4,102.53	4,102.53
Low load factor Industries	72.55	105.04	105.04
PWW, Irrigation & Agriculture allied activities	66.88	113.26	113.26
Residential Purpose	239.92	183.68	183.68
Start-up Power Tariff	35.35	119.42	119.42
Industries related to manufacturing of equipment for power generation from RE sources	1.16	2.05	2.05
IT Industries	-	-	-
Temporary	-	3.74	3.74
<b>Grand Total (A+B)</b>	<b>19,831.35</b>	<b>19,162.52</b>	<b>19,162.51</b>

### 6.3 Distribution Loss and Energy Balance

#### CSPDCL's Submission

CSPDCL submitted that the Energy losses for 33 kV and below system has been computed based on Regulation 71.1 and 71.2 of the MYT Regulations, 2015 as shown below:

*71.1 "The energy loss for 33 kV and below voltage level, shall be evaluated taking into consideration the clause 4.2.5 and 8.4.3 of the State Grid Code 2011. The difference between the energy injected at 33 kV voltage level and the sum of energy sold to all consumers (retail and open access), at voltage level 33 kV and below shall be the energy loss for the 33 kV and below system. The same shall be considered for gain/loss at the time of true up.*

*71.2. Energy sold shall be the sum of the metered sales and assessed unmetered sales, if any, based on prudence check by the Commission."*

In view of the above said provisions, CSPDCL submitted the Distribution Loss and Energy Balance for FY 2016-17 as shown in the following Table:

**Table 6-3: Energy Balance for FY 2016-17 as submitted by CSPDCL (MU)**

Sr. No	Particulars	Formula	Provisional True-up
1	LV Sales	A	10,797.02
2	HV Sales	B	5,710.72
3	Total Below EHV Level	C=A+B	16,507.74
4	Distribution Loss below 33 kV (in %)	D	20.92%
5	Distribution Loss below 33 kV (in MU)	E	4,367.36
6	Gross Energy requirement at 33 kV Level	F=C+E	20,875.10
7	<i>Less:</i> Direct Input to distribution at 33 kV Level	G	257.15
8	Net Energy Input required at Distribution Periphery at 33 kV Level	H=F-G	20,617.95
9	Sales to EHV consumers	I	2,654.77
10	Net energy requirement at Distribution periphery	J=H+I	23,272.72
<b>11</b>	<b>Distribution loss including EHV Sales</b>	<b>K</b>	<b>18.56%</b>

### **Incentive for over-achievement of distribution loss**

CSPDCL submitted that MYT Regulations 2015 mandates the monitoring of energy losses of 33 kV and below system, where it is specified that:

*“71.3. Energy Loss trajectory for 33 KV and below system for State utility for each year of the control period shall be as under*

*FY 2016-17 - 22.0%*

*FY 2017-18 - 21.0%*

*FY 2018-19 - 20.0%*

*FY 2019-20 - 19.0%*

*FY 2020-21 - 18.0%*

*For other distribution licensees, the trajectory shall be given in the respective tariff order.*

However, in the 1st Amendment to the MYT Regulations notified on 16 June, 2017, the following proviso was added in Clause 71.3:

*Provided that if the State utility enters into any agreement with Government of India and/or Chhattisgarh Government and energy loss trajectory committed in this agreement is contrary to that as specified in this Regulations, the energy loss trajectory agreed under the agreement shall prevail over the energy loss specified in this Regulations. ”*

CSPDCL submitted that it has signed a tri-partite Memorandum of Understanding (MoU) on January 25, 2016 with Ministry of Power, Government of India and Government of Chhattisgarh under UDAY, to achieve financial turnaround. Under settled principles, MoU cannot be recognized or accepted as an Agreement. Hence, terms and conditions/undertakings of UDAY stands away from the scope of First Amendment to the MYT Regulations 2015. Accordingly, targets specified under UDAY have not been considered for computation of incentives/penalties for distribution losses.

CSPDCL added that under the terms of UDAY:

- (a) AT&C loss targets for a particular year are not fixed but are flexible in nature.
- (b) AT&C loss targets mentioned are for complete distribution system (HV and LV) and separate targets are not specified for 33 kV and below system.
- (c) There is no separate mention or commitment of any trajectory specifically for Distribution Losses for 33 kV and below network.

CSPDCL submitted that even the AT&C losses trajectory stipulated in the UDAY MoU is on ‘best effort’ basis and is dependent on counter obligations/commitments from Government of India (GoI) and Government of Chhattisgarh (GoCG) in terms of funding and other support. CSPDCL has no control over the actions of GoI and CoCG in this regard, and there is no legal binding on the Parties towards the commitments agreed on. In view of this, it is not prudent to link the trajectory of Energy Loss for 33 kV and below system with such MoUs.

CSPDCL further submitted that these commitments were based on certain time-bound capital investments under various heads. However, a substantial portion of capital expenditure proposed by CSPDCL has been disallowed by the Commission. The Commission in Order dated November 28, 2017 in the Petition No. 06 of 2017 (M), has held as under:

*“.....However, the Commission will give a fresh opportunity to the petitioner to explain the technical and commercial significance of the full scope of the proposal under this head with associated economic benefit and to justify the estimated cost as well as other factors involved in the schemes and measures.”*

In absence of requisite investment, it is practically difficult to meet the AT&C Losses stipulated in the UDAY MoU.

CSPDCL submitted that it has over-achieved the loss levels (33 kV and below system) as compared to target specified in the MYT Regulations, 2015. Hence, CSPDCL is eligible to share a part of the financial gain derived from achieving higher loss reduction in accordance with Regulation 13.1 of the MYT Regulations, 2015. Accordingly, CSPDCL has claimed the incentive for over-achievement of Distribution Loss for FY 2016-17, as shown in the following Table:

**Table 6-4: Incentive for over-achievement of Distribution Loss for FY 2016-17**

<b>Particulars</b>	<b>Provisional True-up</b>
Distribution Losses (%) below 33 kV Level	20.92%
Targeted Distribution Losses	22.00%
<b>Over-achievement</b>	<b>1.08%</b>
Total Power Purchase Cost (Rs. crore)	9,846.92
Average Power Purchase Cost at Distribution Periphery (Incl. EHV) (Rs/kWh)	4.18
Over-achievement amount (Rs. crore)	106.21
<b>Over-achievement to be retained by CSPDCL (Rs. crore)</b>	<b>35.40</b>

### Commission's View

The Commission has considered the Energy Balance based on the actual inter-State transmission losses, normative intra-State transmission losses, actual energy sales, and actual quantum of power procured during FY 2016-17.

Further, the Commission sought details of actual Circle-wise Distribution loss for FY 2016-17. It is observed that five (5) circles, viz., Bilaspur, Janjgir, Korba, Ambikapur, and Baikunthpur have distribution loss more than 30%, however, these circles contribute only 20% of energy sales. Further, it is observed that eight (8) circles out of 18 circles are having distribution loss lower than the average distribution loss of 20.92%, and these circles contribute 58% of energy sales.

The approved Distribution Loss and Energy Balance after provisional true-up for FY 2016-17 is shown in the Table below:

**Table 6-5: Approved Energy Balance and Distribution loss for FY 2016-17**

Particulars	Legend	MYT Order	CSPDCL Petition	Approved after Provisional true-up
<b>Energy Requirement</b>				
LV Sales (MU)	A	11,227	10,797	10,797
HV Sales (MU)	B	5,871	5,711	5,830
Total Sales below EHV Level (MU)	C=A+B	17,098	16,508	16,627
Energy delivered at 33 kV	D	20,447	20,618	20,618
Energy injected by CPP, IPP at 33 kV	E	1,474	257	257
Total Energy injected at 33 kV	F=D+E	21,921	20,875	20,875
Energy loss below 33 kV (MU)	G=(F-C)	4,823	4,367	4,248
<b>Energy Loss below 33 kV (%)</b>	<b>H=G/F</b>	<b>22.00%</b>	<b>20.92%</b>	<b>20.35%</b>
Sales to EHV consumers (MU)	I	2,733	2,655	2,535
Total Energy Sales including EHV Sales (MU)	J=C+I	19,831	19,163	19,162
Energy injected for Retail Sale inclusive of EHV sales (MU)	K=F+I	24,654	25,530	23,410
<b>Energy Loss including EHV Sales (%)</b>	<b>L=(K-J)/K</b>	<b>19.56%</b>	<b>18.56%</b>	<b>18.15%</b>

As per the First Amendment to the MYT Regulations, 2015 notified on June 16, 2017, the following proviso was added in Regulation 71.3:



*“Provided that if the State utility enters into any agreement with Government of India and/or Chhattisgarh Government and energy loss trajectory committed in this agreement is contrary to that as specified in this Regulations, the energy loss trajectory agreed under the agreement shall prevail over the energy loss specified in this Regulations.”*

CSPDCL has submitted that the tripartite MoU signed between the GoI, GoCG, and CSPDCL should not be considered as an Agreement and hence, cannot supersede the Distribution loss targets specified in MYT Regulations, 2015.

The arrangements made through UDAY scheme are intended to turn-around the financial health of the Distribution companies, which were sitting over huge debt and the burden of which is ultimately borne by end consumers. The Commission is of the view that the MoU is an Agreement, wherein the Parties have negotiated the key terms of a proposed relationship to enter into a written agreement, with the intention of recording their Agreement in a more formal way in the future. In this case, CSPDCL entered voluntarily into the MoU and has already reaped the benefit in the past, wherein an amount of Rs.870.12 Crore equal to 50% of the total debt of CSPDCL as on 30<sup>th</sup> September 2015, has already been converted into Grant by GoCG during FY 2015-16. It shows that the Parties have formally finalised all the respective obligations/commitments as prescribed in the MoU. In such cases, even if no formal Agreement is ever signed, and the Parties have called it as MoU, the Parties are bound by the arrangement made under it.

It can be said that the enforceability and binding nature of such MoU depends on the intention of the Parties as seen from the terms of the Agreement.

In *Jyoti Brothers v/s Shree Durga Mining Co.* [AIR 1956 Cal. 280], the Calcutta High Court laid down that –

*‘.....a contract to enter into a contract is not considered to be a valid contract in law at all. However, the same is not conclusive. The court will rely upon the degree of importance of such understanding to the parties and to the fact that whether any of them has acted in reliance on such Understanding.’*

Similarly, in the case of *M/s. Nanak Builders and Investors Pvt. Ltd. v/s Vinod Kumar Alag* [AIR 1991 Del 315], the Delhi High Court held that –

*‘.... where the essential substantial terms have been agreed upon and reduced into writing, and the agreement so entered into does not mention that another formal agreement will be executed, the Court*

*would not consider the agreement as an incomplete agreement. It was further stated by the Court that the mere heading or title of the document would not decide its legality. The legality will depend on the nature and contents of the agreement.'*

In the present MoU under UDAY, there is no reference that another formal Agreement will be executed, hence, the above Judgment is squarely applicable in the present case, and the MoU amounts to a complete Agreement between the Parties.

Further, in Appeal No. 89 of 2012 in the matter of Raigarh Ispat Udyog Sangh vs. Jindal Steel and Power Limited (JSPL), the Hon'ble APTEL in para 22 has held that JSPL is required to supply power to Distribution Licensee from its own captive generating plant in accordance with the MoU on the basis of which Distribution Licence was sought by JSPL.

From the above legal position of MoU, it is very clear that in the present case, the content of the MoU entered between CSPDCL, GoI and GoCG clearly demarcates the obligations/commitment for the respective Parties and the Parties have acted as per the MoU. Hence, the Commission in this Order and for subsequent years would consider Distribution Loss targets stipulated in the tripartite MoU under UDAY scheme.

The distribution loss target, inclusive of EHV sales, stipulated under the UDAY scheme for FY 2016-17 works out to 19.22%. The actual distribution loss including EHV sales achieved by CSPDCL during FY 2016-17 works out to 18.15%.

The MYT Regulations, 2015 provide for gain/loss to be allowed at the time of true-up based on the difference between the actual and target Distribution Losses. However, after scrutinising LT R-15 submitted by CSPDCL for FY 2016-17, the Commission observes that the percentage of burnt/defective meters is in the range of 4-5% and the assessed cases are in the range of 26-30% of the total bills raised by CSPDCL. Particularly, for agricultural category where CSPDCL has shown a 5% increase in the consumption, the percentage of burnt/defective meters is in the range of 6-13% and the assessed cases are in the range of 56-68% of the total bills raised by CSPDCL. Hence, the reasons given by the Commission in its earlier Order dated June 12, 2014 for not allowing gains on account of Distribution Losses hold true for FY 2016-17 also, and hence, the Commission has decided that no incentive should be given to CSPDCL against its claim of overachievement of Distribution Loss target.

## 6.4 Power Purchase Cost

### CSPDCL's Submission

CSPDCL has purchased the power from CSPGCL generating stations, Central Generating Stations (CGS) and other sources such as Captive Power Plants, Bio-mass units, CPPs/IPPs, Solar and other RE sources, CSPTrdCL and other short-term sources to meet the energy requirement of the State during FY 2016-17. CSPDCL submitted the power purchase cost of Rs. 9,846.92 Crore for FY 2016-17 based on provisional annual accounts.

Further, CSPDCL submitted that the power purchase cost as recorded by the commercial department is Rs. 10,269.62 Crore, which is higher than the cost recorded in the provisional accounts. CSPDCL has not considered the difference of Rs. 422.70 crore in the net power purchase cost, and has restricted its claim for the purpose of provisional true-up in line with the provisional accounts. Any deviation, whether positive or negative, post the reconciliation of power purchase cost and subsequent audit of the accounts will be submitted along with detailed justification at the time of final True-up of the FY 2016-17.

Further, CSPDCL utilised banked power of 194.02 MU during FY 2016-17. It has also returned 2,322.04 MU of banked power during FY 2016-17 and the same has been claimed at Nil cost. Under the regulatory principles, banking of power involves a cashless transaction, where interchange of units has to be accomplished. This is in line with the Judgment of the Hon'ble APTEL dated July 1, 2014 in Appeal No. 220 of 2013, wherein it has held that:

*“In the present case, the electricity is actually available to distribution licensee during financial year when it requires the electricity. The said electricity has been accounted for and has been supplied to the consumers but the same ought not to be taken for calculating the total quantum of electricity available with the distribution licensee during the year only for the purposes of calculation of APPC. **We may further observe that there can be no notional cost attributed to such banked energy and the cost, if any, has to be included in the total power purchase cost of the distribution licensee when the corresponding electricity is supplied to the third party. In our view, the State Commission has correctly taken the price of the banked energy as available with the distribution licensee/HPSEBL at a zero cost. The banking is a continuous transaction. The principle of banking of energy is that the electricity received by the distribution licensee is to be returned. When the banked energy is rolled over, its return is only postponed. It is not that electricity is not to be received. The quantum***

*of electricity to be returned would only increase in the subsequent years in future to compensate for the roll over and thereby increase the APPC substantially.”*

CSPDCL requested the Commission to approve power purchase expenses (including transmission charges) of Rs. 9,846.92 Crore for FY 2016-17 as per provisional accounts against Rs. 8,005.64 Crore approved by the Commission in the MYT Order.

### **Commission’s View**

The Commission sought the details of quantum of injection/drawal under DSM and corresponding DSM Charges paid/(received) at inter-State level as well as intra-State level and also details of short term power purchased/(sold) during FY 2016-17.

Further, it is observed that the effective rate of net energy procured under UI/DSM is around Rs. 10/kWh. CSPDCL clarified that it has not received any energy at effective rate of around Rs. 10/kWh, and the UI account carries 244.77 MU of under-drawal for an amount of Rs. 19.60 Crore at average rate of 80 paise per unit. The over-drawal quantum is 336.72 MU for an amount of Rs. 111.42 Crore at average rate of Rs. 3.31/kWh. The effective rate of Rs. 9.98/kWh is a result of mathematical netting of drawal and injection, which cannot be considered as rate payable. The Commission has scrutinised the details submitted by CSPDCL and accepts the submission of CSPDCL in this regard.

The Commission sought the various details of power purchase expenses for prudence check. However, in response to this, CSPDCL submitted that due to introduction of new accounting standards, audited accounts for FY 2016-17 are under preparation, which have to undergo a further stage of statutory audit thereafter. CSPDCL submitted that under such circumstances, it is difficult to provide the details and hence, asked for additional time from the Commission.

In the absence of relevant data that has not been submitted by CSPDCL, it is not possible to undertake the prudence check of the following:

- (a) Power purchase expenses including break-up of Delayed Payment Surcharge payable/paid to CSPGCL, CSPTCL and CGS, as well as details of Other charges
- (b) Monthly transmission charges paid to CSPTCL
- (c) Reconciliation of payment made by CSPDCL to CSPGCL for thermal and hydro generation, with revenue booked by CSPGCL.

- (d) Reconciliation of payment made by CSPDCL to CSPTCL with revenue booked by CSPTCL.

The Commission directs CSPDCL to submit the above said details along with necessary reconciliation, at the time of Final Truing up for FY 2016-17.

Further, the Commission notes that the power purchase cost of Rs. 422 Crore is yet to be reconciled between the bills available with Commercial Department and cost reflected in provisional accounts. CSPDCL submitted that it is still in the process of reconciliation of power purchase in the annual accounts, and has hence, not proposed the amount of Rs. 422 Crore for provisional truing up. The Commission accepts the submission of CSPDCL and has accordingly not considered the amount of Rs. 422 Crore in power purchase cost for provisional truing up. Any deviation, whether positive or negative, post the reconciliation of power purchase cost and subsequent audit of the accounts shall be considered at the time of final Truing up, subject to prudence check.

Further, the Commission directs CSPDCL to submit the Banking Agreements for all the banking transactions entered into during the Year, and the reconciliation of each transaction with regard to the respective Banking Agreement, clearly showing the energy units received under forward banking and the units returned under return banking. These details should be submitted along with the Petition for final true-up for FY 2016-17 and each subsequent true-up Petition.

CSPDCL also clarified that the head 'Others' under CSPGCL amounting to Rs. 655.59 crore, includes the CSPGCL Revenue Gap of Rs. 203.84 crore and Rs. 310.46 crore, which were billed separately by CSPGCL based on approved on account of CSPGCL true-up amounts.

The Commission scrutinized the available material placed on record including the provisional accounts for FY 2016-17, and the actual source-wise power purchase cost for FY 2016-17 as submitted by CSPDCL. The Commission has not considered any Delayed Payment Surcharge in its computation, based on available data. However, the actual inter-State and intra-State Transmission Charges, UI and SLDC charges have been verified from the provisional accounts for FY 2016-17 and allowed accordingly. The revenue of Rs. 1037.19 Crore against the sale of 2789 MU has not been considered in the Power Purchase expenses, as it is a revenue item, and has been considered separately under revenue. The approved source-wise power purchase expenses after provisional true-up for FY 2016-17 are shown in the Table below:

**Table 6-6: Approved Power Purchase Cost for FY 2016-17**

Source	MYT Order			CSPDCL's Petition			Approved after Provisional true-up		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)
<b>CGS</b>	<b>8807.62</b>	<b>2570.13</b>	<b>2.92</b>	<b>7,851.49</b>	<b>2,487.89</b>	<b>3.17</b>	<b>7,851.49</b>	<b>2,487.89</b>	<b>3.17</b>
<i>NTPC sub-total</i>	<i>8173.08</i>	<i>2346.01</i>	<i>2.87</i>	<i>7,036.59</i>	<i>2,172.86</i>	<i>3.09</i>	<i>7,036.59</i>	<i>2,172.86</i>	<i>3.09</i>
<i>NTPC-SAIL (NSPCL)</i>	<i>311.41</i>	<i>133.42</i>	<i>4.28</i>	<i>253.82</i>	<i>112.10</i>	<i>4.42</i>	<i>253.82</i>	<i>112.10</i>	<i>4.42</i>
<i>NPCIL</i>	<i>309.25</i>	<i>88.62</i>	<i>2.87</i>	<i>349.97</i>	<i>103.03</i>	<i>2.94</i>	<i>349.97</i>	<i>103.03</i>	<i>2.94</i>
<i>Others (NVVN, Hirakud, Subhansiri)</i>	<i>13.88</i>	<i>2.08</i>	<i>1.50</i>	<i>211.11</i>	<i>60.06</i>	<i>2.84</i>	<i>211.11</i>	<i>60.06</i>	<i>2.84</i>
<i>Other Charges</i>				-	39.85	-	-	39.85	
<b>CSPGCL</b>	<b>18309.6</b>	<b>5178.23</b>	<b>2.83</b>	<b>16,767.93</b>	<b>6,062.28</b>	<b>3.62</b>	<b>16,767.93</b>	<b>6,062.28</b>	<b>3.31</b>
<i>Total CSPGCL Thermal &amp; Hydro</i>	<i>18212.68</i>	<i>5132.72</i>	<i>2.82</i>	<i>16,727.30</i>	<i>5,390.96</i>	<i>3.22</i>	<i>16,727.30</i>	<i>5,390.96</i>	<i>3.22</i>
<i>KTPS-East</i>				<i>1,986.73</i>	<i>860.61</i>	<i>4.33</i>	<i>1,986.73</i>	<i>860.61</i>	<i>4.33</i>
<i>DSPM – TPS</i>				<i>3,658.08</i>	<i>1,157.99</i>	<i>3.17</i>	<i>3,658.08</i>	<i>1,157.99</i>	<i>3.17</i>
<i>Hasdeo TPS</i>				<i>5,328.78</i>	<i>1,238.92</i>	<i>2.32</i>	<i>5,328.78</i>	<i>1,238.92</i>	<i>2.32</i>
<i>KTPS-West</i>				<i>3,165.95</i>	<i>1,126.09</i>	<i>3.56</i>	<i>3,165.95</i>	<i>1,126.09</i>	<i>3.56</i>
<i>Marwa</i>				<i>2,441.14</i>	<i>978.38</i>	<i>4.01</i>	<i>2,441.14</i>	<i>978.38</i>	<i>4.01</i>
<i>HPS Bango</i>				<i>146.62</i>	<i>28.97</i>	<i>1.98</i>	<i>146.62</i>	<i>28.97</i>	<i>1.98</i>
<i>Total CSPGCL Renewables</i>	<i>96.92</i>	<i>45.51</i>	<i>4.70</i>	<i>40.63</i>	<i>15.73</i>	<i>3.87</i>	<i>40.63</i>	<i>15.73</i>	<i>3.87</i>
<i>HPS Korba Mini Hydrel</i>				<i>8.13</i>	<i>3.17</i>	<i>3.89</i>	<i>8.13</i>	<i>3.17</i>	<i>3.89</i>
<i>Gangarel</i>				<i>23.50</i>	<i>8.77</i>	<i>3.73</i>	<i>23.50</i>	<i>8.77</i>	<i>3.73</i>
<i>Sikasar</i>				<i>4.18</i>	<i>1.14</i>	<i>2.72</i>	<i>4.18</i>	<i>1.14</i>	<i>2.72</i>
<i>Co-gen Kawardha</i>				<i>4.82</i>	<i>2.66</i>	<i>5.52</i>	<i>4.82</i>	<i>2.66</i>	<i>5.52</i>
<i>Other Charges (Surcharge, Others etc.)</i>				-	655.59	-	-	655.59	

Source	MYT Order			CSPDCL's Petition			Approved after Provisional true-up		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)
<b>IEX/PXIL/Traders</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>345.32</b>	<b>83.51</b>	<b>2.42</b>	<b>345.32</b>	<b>83.51</b>	<b>2.42</b>
<b>Unscheduled Interchange</b>	<b>0</b>	<b>0</b>	<b>59.31</b>	<b>91.95</b>	<b>91.74</b>	<b>9.98</b>	<b>91.95</b>	<b>91.74</b>	<b>9.98</b>
<i>Over-Drawal</i>				336.72	111.42	3.31	336.72	111.42	3.31
<i>Under-Drawal</i>				(244.77)	(19.69)	0.80	(244.77)	(19.69)	0.80
<b>Renewables</b>	<b>1471.17</b>	<b>818.36</b>	<b>5.56</b>	<b>1,208.58</b>	<b>744.68</b>	<b>6.16</b>	<b>1,208.58</b>	<b>744.68</b>	<b>6.16</b>
<i>Biomass</i>	898.74	494.31	5.50	911.31	541.02	5.94	911.31	541.02	5.94
<i>Hydel</i>	320.15	160.07	5.00	6.61	3.16	4.78	6.61	3.16	4.78
<i>Solar</i>	252.28	163.98	6.50	290.66	200.50	6.90	290.66	200.50	6.90
<b>Concessional Power - through CSPTrdCL</b>	<b>2154.96</b>	<b>410.39</b>	<b>1.90</b>	<b>1,561.66</b>	<b>300.52</b>	<b>1.92</b>	<b>1,561.66</b>	<b>300.52</b>	<b>1.92</b>
<b>CPPs/IPPs/Short Term</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,461.35</b>	<b>386.74</b>	<b>2.65</b>	<b>1,461.35</b>	<b>386.74</b>	<b>2.65</b>
<b>Banking Net</b>		<b>0</b>	<b>0</b>	<b>194.02</b>	-	-	<b>194.02</b>	-	-
<i>Power Export under Swap</i>				2,322.04	-	-	2,322.04	-	-
<i>Power Import under Swap</i>				194.02	-	-	194.02	-	-
<b>Other Sources</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16.03</b>	<b>10.25</b>	<b>6.39</b>	<b>16.03</b>	<b>10.25</b>	<b>6.39</b>
<b>Gross Power Purchase</b>	<b>30,743.35</b>	<b>8,977.11</b>	<b>2.92</b>	<b>29,498.33</b>	<b>10,167.60</b>	<b>36.31</b>	<b>29,498.33</b>	<b>10,167.60</b>	<b>3.27</b>
<i>Less: Rebate</i>				-	17.31	-	-	17.31	
<i>Less: GBI Claim received during the FY</i>				-	6.42	-	-	6.42	
<i>Less: Revenue from Sale of Surplus Power</i>				2,789.00	1,037.19	-	2,789.00	*	-
<i>Less: Power purchase cost pending for reconciliation</i>				-	422.70	-	-	422.70	

Source	MYT Order			CSPDCL's Petition			Approved after Provisional true-up		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Rs/kWh)
<b>Transmission Charges</b>				-	<b>1,162.93</b>	-	-	<b>1,072.49</b>	
Inter-State Transmission Charges					256.85			256.85	
Intra-State Transmission Charges					835.41			835.41	
Transmission - Other Charges					65.15			65.15	
SLDC Charges					5.52			5.52	

**Note:** \* Revenue of Rs. 1037.19 Crore from the sale of surplus energy has been considered separately under revenue from Sale of power.



## 6.5 O&M Expenses

### CSPDCL's Submission

CSPDCL submitted the actual O&M expenses of Rs. 1,164.31 Crore as against the normative O&M expenses of Rs. 1,066.26 Crore approved by the Commission for FY 2016-17 in the MYT Order.

CSPDCL submitted that the actual employee expenses including interim wage relief for FY 2016-17 is Rs. 820.92 Crore based on provisional accounts. CSPDCL also submitted the sum of Repair & Maintenance (R&M) and Administrative & General (A&G) expenses for FY 2016-17 as Rs. 343.38 Crore, based on the available provisional accounts.

For computation of sharing of gains/(losses), CSPDCL has not considered any gain and loss on account of employee costs in line with the first amendment to the MYT Regulations, 2015. CSPDCL has escalated the approved normative O&M expenses in the MYT Order as per the Regulations based on the applicable CPI and WPI indices.

CSPDCL further submitted that a substantial portion of A&G expenses is governed by Change in Law, which is binding on CSPDCL. Hence, under settled principles, such expenses should not be treated as controllable expenses, as elaborated below:

- (a) Minimum wages to be paid to contractual staff are decided by District Collector of the concerned area and the same has to be adopted by CSPDCL also. Further, such wages have undergone considerable increase over the last few years (more than the average WPI) and thus need to be delinked from norms, as the same are required to be paid strictly in accordance with the provisions of the Minimum Wages Act, 1948. As CSPDCL has no control over the same, CSPDCL requested the Commission to consider the same as uncontrollable for the purpose of computation of gain and losses.
- (b) Electricity charges of offices and establishments are to be paid as per the prevailing tariff only. Recent years have witnessed tariff increase more than the average WPI increase. Since this expense is also independent of average WPI inflation, CSPDCL requested the Commission to consider the same as uncontrollable for the purpose of computation of gain and losses.

Based on above submission, CSPDCL has computed an efficiency loss of Rs. 91.92 Crore. As O&M losses are controllable, CSPDCL requested the Commission to

approve Rs. 45.96 Crore as sharing of loss in O&M expenses for FY 2016-17 as per the MYT Regulations, 2015.

### **Commission's View**

In the MYT Order, the O&M expenses for FY 2016-17 was approved as Rs. 1012.26 Crore, and Rs. 54.01 Crore of interim wage relief was approved separately. Further, the contribution to Pension and Gratuity fund for FY 2016-17 was approved separately as Rs. 298.80 Crore.

Regulation 57.4 of the MYT Regulations, 2015 specifies as under:

“

- (a) *Operation and Maintenance (O&M) Expenses for the distribution licensee shall include:*
  - I. *Employee Cost;*
  - II. *Administrative and general Expenses*
  - III. *Repairs and Maintenance Expenses*
- (b) *The Commission shall stipulate a separate trajectory for each of the components of O&M expenses viz. employee cost, R&M expense and A&G expense for the control period.*
- (c) *The employee cost, excluding pension fund contribution and impact of pay revision arrears for the base year i.e. FY 2015-16 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 years immediately preceding the base year FY 2015-16, subject to prudence check by the Commission. Any other expense of non-recurring nature shall also be excluded while determining normalized average for the previous five years.*
- (d) *The normalization shall be done by applying last five years 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 2014-15, shall then be used to project base year value for FY 2015-16. The base year value so arrived, shall be escalated by the above inflation rate to estimate the employee expenses (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 true-up as per accounts, subject to prudence check and any other factor considered appropriate by the Commission.”*

The actual O&M expenses comprising Employee expenses, R&M expenses, and A&G expenses for FY 2016-17 claimed by CSPDCL is Rs. 1,164.37 Crore.

The Employee Expenses has to be passed through at actuals as per the first amendment to MYT Regulations, 2015, and has been considered accordingly.

CSPDCL was asked to justify the substantial increase of 51% of actual R&M expenses for FY 2016-17 at Rs. 190.10 Crore, as compared to the approved R&M expenses. In response, CSPDCL submitted that approved R&M is based on actual R&M for FY 2010-11 to FY 2014-15 along with the appropriate inflation as per the provisions of MYT Regulations, 2015. CSPDCL further submitted that opening assets itself have grown by 69% from FY 2013-14 to FY 2016-17, i.e., from Rs. 3058.65 Crore to Rs. 5159.00 Crore. While there is requirement of R&M expenses toward new assets also, the Regulations have no provisions to link R&M commensurate to increase in asset base.

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation, revises the base year of macroeconomic indicators from 2004-05 to 2011-12 as a regular exercise, to capture structural changes in the economy. The summary of the average WPI considered for revised normative A&G expenses and R&M expenses are as shown below:

**Table 6-7: Computation of Inflation rate (%)**

<b>Particulars</b>	<b>FY 2012-13</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>	<b>FY 2016-17</b>
WPI	6.90%	5.20%	1.26%	-3.65%	1.73%

The normative A&G expenses and R&M expenses as approved in the MYT Order have been revised as per the above inflation rate taking WPI escalation of 1.73% for FY 2016-17, after considering the new WPI. The O&M expenses considered for provisional True-up for FY 2016-17 are shown in the table below:

**Table 6-8: O&M Expenses for CSPDCL for FY 2016-17 as approved by the Commission  
(Rs. Crore)**

<b>Sr. No.</b>	<b>Particulars</b>	<b>MYT Order</b>	<b>CSPDCL Petition</b>	<b>Approved after Provisional true-up</b>
1	Net Employee Expenses (incl. Interim Relief)	750.78	820.92	820.92
2	Net A&G Expenses	135.52	153.34	129.13
3	Net R&M Expenses	125.95	190.10	120.01
4	<b>Total O&amp;M Expenses</b>	<b>1,012.25</b>	<b>1,164.37</b>	<b>1,070.06</b>

Regulation 57.4 (c) and (d) of the MYT Regulations, 2015 specify as under:

*“(c) The employee cost, excluding pension fund contribution and impact of pay revision arrears for the base year i.e. FY 2015-16, 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 2015-16, subject to prudence check by the Commission. Any other expense of non-recurring 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 2014-15, shall then be used to project base-year value for FY 2015-16. 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.”*

However, the Commission has issued the 1<sup>st</sup> amendment to the MYT Regulations, 2015 wherein it is specified that:

*“In clause 13.1 of the principal regulations, the following proviso shall be inserted, namely: -*

*Provided further that employee cost shall not be factored in for sharing of gains or losses on account of Operation and Maintenance expenses.”*

In line with above amendment, the Commission has not considered any gain and loss on account of employee costs.

Further, Regulation 57.4 (e) and (f) of CSERC MYT Regulations, 2015 regarding A&G Expenses and R&M Expenses specify as under:

*“(e) The administrative and general expenses and repair and maintenance expenses, for the base year i.e. FY 2015-16, 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 2015-16, 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 2014-15, shall then be used to project base year value for FY 2015-16. 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.”***

As per the above provisions in the Regulation regarding sharing of gains/(losses) of O&M expenses, the Commission has computed the gains/losses on the basis of revised normative A&G expenses and R&M expenses, in accordance with the MYT Regulations, 2015.

It is important to note that all the expenses booked under O&M expenses, except Employee Expenses, are ‘Controllable factors’ as per Clause 11.2 of the MYT Regulations, 2015 read with first amendment. No exceptions are permitted under the Controllable factors for part of such controllable factors. Hence, the sharing of A&G expenses and R&M expenses is done on the basis of actual expenses as per the provisional accounts submitted by CSPDCL.

The Commission has undertaken the sharing of gains or losses for R&M expenses and A&G Expenses for FY 2016-17 as shown in the following Table:

**Table 6-9: Sharing of Gain/(Loss) for CSPDCL for FY 2016-17 (Rs. Crore)**

Particulars	Revised Normative	Actual Expenses	Efficiency Gain/(loss)	Entitlement of Gain/(Loss)	
				CSPDCL	Consumers
Employee Expenses	820.92	820.92	-	-	-
A&G Expenses	129.13	151.62	(22.49)	(11.24)	(11.24)
R&M Expenses	120.01	190.10	(70.09)	(35.04)	(35.04)
<b>Total</b>	<b>1070.06</b>	<b>1162.65</b>	<b>(92.58)</b>	<b>(46.29)</b>	<b>(46.29)</b>

Hence, the net allowable O&M expenses for FY 2016-17, after sharing of efficiency losses, works out to Rs. 1116.35 Crore.

As regards the contribution to Pension and Gratuity fund for FY 2016-17, the amount is reported as approved in the MYT Order at Rs. 298.80 Crore. The Commission approves the actual contribution to Pension and Gratuity as Rs. 298.80 Crore for the provisional truing up for FY 2016-17.

## **6.6 Correction in Capital Structure**

### **CSPDCL’s submission**

CSPDCL has proposed corrections in capital structure on the basis of Commission’s treatment to consumer contribution, deposit work and grants, while computing the normative debt:equity, stating that the Commission has lowered the base for permissible equity and consequently Return on Equity for current as well as future years.

CSPDCL submitted that the Commission in the MYT Order dated July 12, 2013 had adopted a methodology for determination of capital structure of Gross Fixed Assets.

In this, the Commission identified the consumer contribution in GFA (based on its past period workings and the available data) and applied the ratio of live assets (GFA minus fully depreciated assets) to total assets to identify the amount of consumer contribution in live assets. The average depreciation rate on the estimated amount of Grant and consumer contribution in live assets has been considered to compute depreciation. Accordingly, such amount of depreciation on live assets has been reduced. Similar approach was followed by the Commission while computing the interest and finance charges for respective years.

CSPDCL submitted that the Commission has followed this approach till the final true-up for FY 2010-11. However, from FY 2011-12 onwards, the Commission has deviated from its own methodology, which has resulted in lowering of the permissible equity base and wrong determination of other related parameters of capital structure. Hence, corrections are necessary in light of the principle of law that no estoppel lies on operation of statute.

Further, CSPDCL submitted that in the Tariff Order dated June 12, 2014 in the true-up for FY 2011-12 and FY 2012-13, the Commission has considered the actual value of consumer contribution as per the annual accounts. The actual consumer contribution is subtracted from the addition in GFA and the remaining amount is divided in Debt and Equity in the ratio of 70: 30. Similar modified approach has been followed in the true-up of FY 2013-14, FY 2014-15 and FY 2015-16 also. On account of this deviation from the approved capital structure, the rightful claim of permissible equity of 30% of Gross Fixed Assets as per the provisions of the applicable Regulations, i.e., MYT Regulations, 2010 and MYT Regulations, 2012 has been denied to CSPDCL. Consequently, it has resulted in an understated equity base for the third MYT Control Period.

CSPDCL added the specific provision for not considering consumer contribution, deposit work and grant obtained for the execution of the project as part of the capital structure for the purpose of computation of normative debt:equity, has been introduced for the first time in the third MYT Control Period only. However, the Commission has effected the treatment from the second year of first Control Period itself. CSPDCL submitted that the Commission has deviated from its own MYT Regulations for the computation of permissible equity from FY 2011-12 to FY 2015-16 and hence, necessary corrections have been proposed.

The net addition in Gross Fixed Assets has been considered after excluding RGGVY assets capitalized in FY 2013-14 and FY 2014-15 and eventually transferred to GoCG

in FY 2015-16. The grant addition has been considered as per the actual addition as per the audited accounts. However, as the assets created in RGGVY have not been considered, the corresponding grant addition and subsequently deletion has been excluded from the capital structure.

CSPDCL submitted that only the loan towards the already capitalized assets (and not the CWIP portion) has been considered for repayment of grant of Rs. 870.12 Crore, which has been received under UDAY MoU. Therefore, it is not liable to impact the permissible equity already considered and approved. Further, the assets equivalent to Rs 870.12 Crore now being funded through grant instead of loan are not eligible for depreciation and are hence, treated as fully depreciated assets for the purpose of computation of depreciation.

Accordingly, the grant, loan and equity addition due to capitalization during the year (in line with the provisions of approved capital structure) are shown in the Table below:

**Table 6-10: Funding of Capitalized Assets considered in capital structure from FY 2011-12 to FY 2015-16 (Rs. crore)**

<b>Particulars</b>	<b>FY 12</b>	<b>FY 13</b>	<b>FY 14</b>	<b>FY 15</b>	<b>FY 16</b>
Total Capitalization	407.97	430.38	1106.55	549.80	444.00
Contribution of Grant in Capitalized Assets	150.60	191.89	237.95	176.48	233.24
Contribution of Loan in Capitalized Assets	109.20	218.45	271.56	302.17	115.97
Contribution of Equity in Capitalized Assets	148.17	20.04	597.03	71.16	94.79

Accordingly, the impact of correction in capital structure claimed by CSPDCL is shown in the Table below:

**Table 6-11: Impact of correction in capital structure from FY 2011-12 to FY 2015-16 (Rs. crore)**

<b>Particulars</b>	<b>FY 12</b>	<b>FY 13</b>	<b>FY 14</b>	<b>FY 15</b>	<b>FY 16</b>
<b>As per the proposed corrections in capital structure</b>					
Interest on Loan	49.81	52.54	67.47	87.81	66.97
Depreciation	67.68	81.36	109.45	143.27	135.34
RoE	116.92	136.42	177.70	217.45	241.31
<b>Total</b>	<b>234.41</b>	<b>270.31</b>	<b>354.63</b>	<b>448.54</b>	<b>443.61</b>



Particulars	FY 12	FY 13	FY 14	FY 15	FY 16
<b>Already approved in the True-ups undertaken by the Commission</b>					
Interest on Loan	49.92	52.12	78.28	102.79	66.45
Depreciation	67.84	81.65	110.46	120.83	149.1
RoE	113.73	125.74	154.66	187.02	192.92
<b>Total</b>	<b>231.49</b>	<b>259.51</b>	<b>343.40</b>	<b>410.64</b>	<b>408.47</b>
<b>Difference Now additionally claimed</b>					
Interest on Loan	-0.11	0.42	-10.81	-14.98	0.52
Depreciation	-0.16	-0.29	-1.01	22.44	-13.76
RoE	3.19	10.68	23.04	30.43	48.39
<b>Total</b>	<b>2.92</b>	<b>10.80</b>	<b>11.23</b>	<b>37.90</b>	<b>35.14</b>
<b>Additional claim along with carrying cost</b>					
Opening Claim	0.00	3.11	15.16	29.13	73.52
During the year	2.92	10.80	11.23	37.90	35.14
<b>Closing Claim</b>	<b>2.92</b>	<b>13.91</b>	<b>26.39</b>	<b>67.03</b>	<b>108.66</b>
Interest Rate	13.00%	14.75%	13.20%	13.50%	13.50%
Carrying Cost	0.19	1.26	2.74	6.49	12.30
<b>Claim with Carrying Cost</b>	<b>3.11</b>	<b>15.16</b>	<b>29.13</b>	<b>73.52</b>	<b>120.96</b>

Accordingly, the impact of correction in capital structure along with the carrying cost from FY 2011-12 to FY 2015-16 has been submitted as Rs. 120.96 Crore. CSPDCL requested the Commission to consider the same in the provisional true-up for FY 2016-17.

### **Capital Structure for FY 2016-17**

CSPDCL submitted that the capital structure for FY 2016-17 has been determined based on the following:

- (a) The actual loan addition of Rs. 286.52 Crore has been considered as per the available provisional accounts for FY 2016-17.
- (b) No grant has been received towards repayment of loans under UDAY in FY 2016-17.
- (c) Addition in consumer contribution/grants has been considered Rs. 359.97 Crore as per the provisional accounts for FY 2016-17.

- (d) Normative equity addition has been considered based on capital restructuring methodology as approved by the Commission in the Tariff Order dated July 12, 2013.
- (e) GFA addition of Rs. 662.93 Crore has been considered as per the available provisional accounts for FY 2016-17.
- (f) Opening values of various parameters have been considered equal to the closing values of FY 2015-16.

CSPDCL submitted the revised Capital Structure for FY 2016-17 as under:

**Table 6-12: Capital Structure for FY 2016-17 as submitted by CSPDCL (Rs. Crore)**

Particulars	Legend	FY 2016-17
<b>Gross Fixed Assets (GFA)</b>		
Opening GFA	A	5,159.00
Opening CWIP	B	2,273.74
Opening CAPEX	C=A+B	7,432.74
Capitalization during the year	D	662.93
Closing GFA	E=D+A	5,821.94
Closing CWIP	F	2,975.33
Closing CAPEX	G=F+E	8,797.26
<b>Grants and Consumer Contribution</b>		
Opening Grant and Contribution	H	2,768.05
Consumer contribution/grants during the year	I	359.97
Closing Consumer Contribution	J=H+I	3,128.01
Consumer Contribution in Opening GFA	K=H*A/C	1,921.28
Consumer Contribution in Closing GFA	L=J*E/G	2,070.09
<b>Loan Borrowed</b>		
Opening Borrowed Loan	M	2,193.87
Loan Borrowed during the year	N	286.52
Closing Borrowed Loan	O=M+N	2,480.39
Borrowed Loan in Opening GFA	P=M*A/C	1,522.75
Borrowed Loan in Closing GFA	Q=MAX (O*E/G, P)	1,641.49
<b>Equity</b>		
Opening Gross Equity	R=C-H-M	2,470.83
Equity Addition During the Year	T=S-R	718.03
Closing Gross Equity	S=G-J-O	3,188.86
Gross Equity in Opening GFA	U=A-K-P	1,714.98

<b>Particulars</b>	<b>Legend</b>	<b>FY 2016-17</b>
Gross Equity in Closing GFA	$V=C-L-Q$	2,110.36
Average Gross Equity During the year	$W=Avg(U, V)$	1,912.67
<b>Funding of Capitalized Assets</b>		
Total Capitalization		662.93
Contribution of Grant in Capitalized Assets		148.81
Contribution of Loan in Capitalized Assets		118.75
Contribution of Equity in Capitalized Assets		395.38

### **Commission's View**

The Commission notes that CSPDCL has raised the issue of revision of capital structure in the present Petition, when earlier Orders have achieved finality and there is no appeal filed or pending on this issue against earlier Orders. The Commission sought justification from CSPDCL in this regard. CSPDCL submitted that during the preparation of present Petition, it has discovered that the Return on Equity allowed by the Commission since 2011 is understated. This has two-tier effect on the Licensee's revenue, i.e., one-time loss of revenue during past years and understatement of equity structure leading to recurring effect on Return on Equity for future years. CSPDCL further submitted that its claim relied upon the principles considered by the Commission in the Tariff Order dated July 12, 2013 with regard to consideration of old claims/reliefs.

As regards the justification for claiming carrying cost in view of the fact that CSPDCL is claiming such relief for the first time, CSPDCL submitted that while error/mistake in capital structure is sought to be rectified for the first time in the present Petition, the correction is being sought from FY 2011-12 onwards when the error appeared for the first time and has been perpetuated to present years. The correction will eventually impact the trued-up Revenue Gap/Surplus of the relevant years. CSPDCL cited the Judgment of Hon'ble APTEL dated October 9, 2015 in Appeal No. 308 of 2013. CSPDCL submitted that the carrying cost claimed is nothing but the time value of money, which otherwise would have been available with CSPDCL, had the error/mistake in capital structure not been made in the first place.

The Commission in its Tariff Order dated June 12, 2014 has considered the actual value of consumer contribution as per the annual accounts. The actual consumer contribution has been subtracted from the addition in GFA and the remaining amount is divided in Debt and Equity in the ratio of 70:30. It is important to note that consumer contribution and grants forms part of public money, which is received by

the Utility in different forms and cannot be considered as its own infused equity. This computation made by the Commission above is based on the financially prudent principles and the Commission while issuing the said Tariff Order has rightly reduced the consumer contribution and grants from the GFA, before considering funding by equity and loans for the balance amount from FY 2011-12 onwards. This is clearly seen from Table 175 (Pages 221 and 222) of the Tariff Order dated July 2013, as reproduced below:

**“Table 13: Capital Structuring for CSPDCL (Rs. Crore)**

<i>Particulars</i>	<i>Legend</i>	<i>01.04.05</i>		<i>01.04.10</i>			<i>01.04.13</i>		
Opening GFA	1	597.07		2,032.14			2,846.84		
Permissible Equity	2	206.18		636.70			881.10		
% of Equity in GFA	3=2/1	34.53%		31.33%			30.95%		
<b>CAPEX and GFA</b>									
<i>Particulars</i>	<i>Legend</i>	<i>FY2008-09</i>	<i>FY 2009-10</i>	<i>FY 2010-11</i>	<i>FY 2011-12</i>	<i>FY 2012-13</i>	<i>FY 2013-14</i>	<i>FY 2014-15</i>	<i>FY 2015-16</i>
Opening GFA	A	1,752.15	1,814.90	2,032.14	2,222.89	2,519.07	2,846.84	3,067.84	3,317.84
Opening CWIP	B	1,102.70	1,165.39	1,229.71	1,506.58	1,595.86	1,927.44	2,021.44	2,128.44
Opening Capex	c=a+b	2,854.85	2,980.29	3,261.85	3,729.46	4,114.93	4,774.28	5,089.28	5,446.28
Capitalisation during the Year	D	62.75	217.25	190.74	296.18	327.77	221.00	250.00	311.00
Closing GFA	e=d+a	1,814.90	2,032.14	2,222.89	2,519.07	2,846.84	3,067.84	3,317.84	3,628.84
Closing CWIP	F	1,165.39	1,229.71	1,506.58	1,595.86	1,927.44	2,021.44	2,128.44	2,261.44
Closing Capex	g=f+e	2,980.29	3,261.85	3,729.46	4,114.93	4,774.28	5,089.28	5,446.28	5,890.28
<b>Grants and Consumer Contribution</b>									
<i>Particulars</i>	<i>Legend</i>	<i>FY2008-09</i>	<i>FY 2009-10</i>	<i>FY 2010-11</i>	<i>FY 2011-12</i>	<i>FY 2012-13</i>	<i>FY 2013-14</i>	<i>FY 2014-15</i>	<i>FY 2015-16</i>
Opening Grant and Contribution	H	1,350.94	1,425.98	1,469.26	1,562.91	1,679.12	2,465.51	2,465.51	2,465.51
Consumer Contribution/Grants during the Year	I	75.04	43.28	93.65	116.21	383.55	-	-	-
Closing Consumer Contribution	j=h+i	1,425.98	1,469.26	1,562.91	1,679.12	2,062.68	2,465.51	2,465.51	2,465.51
Consumer Contribution in Opening GFA	k=h*a/c	829.14	868.38	915.36	931.55	1,027.92	1,470.15	1,486.22	1,501.97
Consumer Contribution in Closing GFA	l=j*e/g	868.38	915.36	931.55	1,027.92	1,229.95	1,486.22	1,501.97	1,518.93
<b>Loan Borrowed</b>									
<i>Particulars</i>	<i>Legend</i>	<i>FY2008-09</i>	<i>FY 2009-10</i>	<i>FY 2010-11</i>	<i>FY 2011-12</i>	<i>FY 2012-13</i>	<i>FY 2013-14</i>	<i>FY 2014-15</i>	<i>FY 2015-16</i>
Opening Borrowed Loan	M	565.97	565.97	655.62	848.34	976.85	740.37	992.37	1,277.97
Loan Borrowed during the Year	n	-	89.65	192.72	128.51	166.35	252.00	285.60	355.20
Closing Borrowed Loan	o=m+n	565.97	655.62	848.34	976.85	1,143.20	992.37	1,277.97	1,633.17

Borrowed Loan in Opening GFA	$p=m*a/c$	347.36	347.36	408.45	505.64	598.01	441.47	598.21	778.53
Borrowed Loan in Closing GFA	$q=\max(o*e/g,p)$	347.36	408.45	505.64	598.01	681.67	598.21	778.53	1,006.15
<b>Equity</b>									
<b>Particulars</b>	<b>Legend</b>	<b>FY2008-09</b>	<b>FY 2009-10</b>	<b>FY 2010-11</b>	<b>FY 2011-12</b>	<b>FY 2012-13</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>
Opening Gross Equity	$r=c-h-m$	937.93	988.34	1,136.97	1,318.21	1,458.95	1,568.40	1,631.40	1,702.80
Equity addition during the Year	$t=s-r$	50.40	148.63	181.24	140.74	109.45	63.00	71.40	88.80
Closing Gross Equity	$s=g-j-o$	988.34	1,136.97	1,318.21	1,458.95	1,568.40	1,631.40	1,702.80	1,791.60
Gross Equity in Opening GFA	$u=a-k-p$	575.65	599.16	708.33	785.70	893.14	935.22	983.41	1,037.33
Gross Equity in Closing GFA	$v=e-l-q$	599.16	708.33	785.70	893.14	935.22	983.41	1,037.33	1,103.76
Average Gross Equity during the year	$w=\text{avg}(u,v)$	587.41	653.75	747.02	839.42	914.18	959.31	1,010.37	1,070.54
<b>Permissible Equity</b>									
<b>Particulars</b>	<b>Legend</b>	<b>FY2008-09</b>	<b>FY 2009-10</b>	<b>FY 2010-11</b>	<b>FY 2011-12</b>	<b>FY 2012-13</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>
Permissible Equity in Opening GFA	$x=\text{MIN}(2+(a-1)*30\%,u)$	552.70	571.52	636.70	693.92	782.77	881.10	947.40	1,022.40
Permissible Equity in Closing GFA	$y=\text{MIN}(2+(e-1)*30\%,v)$	571.52	636.70	693.92	782.77	881.10	947.40	1,022.40	1,103.76
Average Gross Permissible Equity during the year	$z=\text{avg}(x,y)$	562.11	604.11	665.31	738.35	831.94	914.25	984.90	1,063.08
<b>Normative Loan</b>									
<b>Particulars</b>	<b>Legend</b>	<b>FY2008-09</b>	<b>FY 2009-10</b>	<b>FY 2010-11</b>	<b>FY 2011-12</b>	<b>FY 2012-13</b>	<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>
Opening Normative Loan	$aa=x-u$	22.95	27.64	71.64	91.78	110.36	54.11	36.01	14.93
Closing Normative Loan	$ab=v-z$	27.64	71.64	91.78	110.36	54.11	36.01	14.93	-

Thus, there has been no change in approach from FY 2011-12 onwards as contended by CSPDCL, as the Consumer Contribution and Grants have been reduced from the GFA addition before considering the normative debt:equity ratio, which has been consistently done for all the years.

The approach adopted by the Commission is also in accordance with Regulation 21 of the MYT Regulations, 2012, which clearly specifies that no depreciation, Return on Equity and Interest on Loan Capital shall be given on assets funded by consumer contribution and grants. This Clause has been totally missed by CSPDCL in its contentions in this regard.

Further, the Hon'ble APTEL in its Judgment dated March, 14, 2016 in Appeal No. 157 of 2015, upheld that the amount of grants and consumer contribution have to be reduced before considering the debt:equity ratio. The relevant text of the Judgment is reproduced below:

*“9.1.8 That the whole argument of the appellant is deviating from the main issue of whether the grant should be considered as grant or not. The correct method of accounting is to consider the debt equity ratio after reducing the amount of grants and consumer contribution as this reflects an amount that utility has to arrange either through own fund or through debts. The grants and consumer contribution do not have any costs i.e. they neither have to be returned nor have any interest or dividend to be paid on these amounts. Whereas, on equity capital, the utility is entitled to ROE and for debt, interest is allowed. Thus, there is no merit in the contention of the appellant that 30% of the asset value should be considered as equity. If the appellant's contention is accepted then, if tomorrow 100% of the asset is funded by grant, the appellant will claim ROE on 30% of such amount and claim interest on normative loan on 70% of such amount. Even though, by virtue of grant neither does the amounts have to be returned nor have any interest or dividend to be paid on these amounts, which would be totally opposed to all norms of tariff determination.”*

Further, in Judgment dated 17 September 2014 in Appeal No. 46 of 2014, the Hon'ble APTEL has held that the Consumer Contribution cannot be capitalised and considered for the purpose of claiming RoE.

It is also pertinent to note that CSPDCL had raised the similar issue in Appeal No. 308 of 2013, wherein the methodology for determination of equity for the period from FY 2005-06 to FY 2013-14 in Order dated July 2013, was challenged and the Order of the Commission was upheld and approved by the Hon'ble APTEL.

CSPDCL is indirectly re-opening the same issue, by claiming RoE on assets funded by Grants/Consumer Contribution, which is not permissible.

It shows that the Commission had followed the correct approach while computing the equity base of CSPDCL during FY 2011-12 and for subsequent years. In order to bring more clarity to the same issue, the Commission in its MYT Regulations, 2015, under Regulation 17.1 introduced the provision to reduce the consumer contribution and grants from capital expenditure for the purpose of computation of normative debt:equity.

It should be further noted that Regulation 23(2) of the CSERC (Conduct of Business) Regulations, 2009 provides for filing a review before the Commission, if the Party is aggrieved by the Order passed by the Commission. The relevant text of the Regulation is reproduced below.

***“23. Review of decisions, directions and orders***

.....

*An application for review shall be filed within a period of 30 days from the date of decision / order or direction or the date of communication of such decision / order or direction which is sought to be reviewed, and it shall be filed in the same manner as a petition.”*

Apart from this, Section 111(2) of the Electricity Act, 2003 provides for the aggrieved Party to file an Appeal before the Appellate Tribunal for Electricity, as reproduced below.

***“Section 111. (Appeal to Appellate Tribunal):***

.....

*(2) Every appeal under sub-section (1) shall be filed within a period of forty-five days from the date on which a copy of the order made by the adjudicating officer or the Appropriate Commission is received by the aggrieved person and it shall be in such form, verified in such manner and be accompanied by such fee as may be prescribed:*

.....”

It is observed that CSPDCL has neither filed any Review Petition before the Commission or the higher courts within the time frame provided in the Regulations on this issue, nor has this issue been raised in Appeal, though CSPDCL has filed Appeals on other issues on each of these Tariff Orders.



Further, CSPDCL has questioned the basis of restructuring the equity base only from FY 2011-12, but the same could be restructured from FY 2005-06 onwards, i.e., from the time CSPDCL was unbundled from CSEB. It is important to note that the Commission in its Orders from FY 2005-06 onwards took a liberal approach while considering the equity and approved normative equity on net-worth of the Utility, when the actual equity was merely Rs. 23 Crore, so that the Utility could utilise the surplus in expanding its T&D network, though the CSERC (Terms and Conditions for Determination of Tariff) Regulations, 2006 provided for considering the actual equity for computation of Return on Equity, if the actual equity is less than 30%. The relevant text of the Regulation and the Tariff Order is reproduced below:

As per clause 12 (1) of CSERC (Terms and Conditions for determination of Tariff) Regulations, 2006 –

*“In case of a new distribution line or substation commissioned or capacity expanded on or after 1.4.2005, the debt and equity in the capital cost of such a project shall be considered in the ratio of 70:30 for the purpose of determination of tariff.*

*Provided that where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. The interest rate applicable on the equity above 30%, treated as loan, has been specified in clause 20.*

*Provided that where actual equity employed is less than 30%, the actual equity shall be considered.”*

However, the Commission in its Tariff Order dated June 15, 2005 took a liberal view and approved returns of Rs. 53.32 Crore in spite of CSPDCL having a low equity base of Rs. 23 Crore. The relevant text of the Tariff Order is reproduced below:

*“5.3.8 Reasonable Return*

*.....*

*The equity base of the Board is very low at only Rs. 23 Crore. Therefore, even if the Commission allows 14% return on the equity, it will be of little consequence to the Board. In consideration of the provisions of the EA, 2003, CERC guidelines, draft Tariff Policy and to allow the Board adequate surplus for investment in new generation units and expansion of T & D network, the Commission considers it appropriate to allow 14% return on the net-worth of the Board at the beginning of the year. Net-worth has been considered for the purpose of the ROR because the*

*retained earnings are supposed to have gone into creation of new fixed assets. The draft Tariff Policy also provides that for the purposes of return on equity, premium raised by a company while issuing share capital and investment or internal resources created out of free reserves of existing company, if any, for the funding of a project, should be reckoned as paid up capital for the purpose of computing return on equity, provided such premium and internal resources are actually utilized for meeting the capital expenditure of the project (para 5.3 of the draft Tariff Policy). The Commission also feels that this will give a right signal to private investment in the power sector of the State.*

*The Commission accordingly allows a return of Rs. 53.32 Crore on the net-worth of Rs. 380.84 Crore at the beginning of the FY06.”*

It is therefore observed that the claims made by CSPDCL are giving rise to re-opening previous Orders, where the Commission went beyond the Regulations and approved what was in greater public interest.

Therefore, CSPDCL’s claim does not have any rationale, and hence, the capital structure and equity base has been considered as approved in previous Orders and the computation is done accordingly for FY 2016-17.

Further, it is observed that CSPDCL has restated the values of asset addition in FY 2013-14 and FY 2014-15 and the values of CWIP for all the Years, which are at variation with the figures as per the Audited Accounts for the respective years, as shown in the Table below:

**Table 6-14: Revised Capital Structure as submitted by CSPDCL (Rs. Crore)**

<b>Year</b>	<b>Particulars</b>	<b>Audited Accounts</b>	<b>Revised Submission</b>
FY 2011-12	Opening GFA	2220.30	2220.30
	Opening CWIP	1204.80	1506.58
	Capitalisation during the year	407.97	407.97
	Closing GFA	2628.27	2628.27
	Closing CWIP	1180.29	1482.54
FY 2012-13	Opening GFA	2628.27	2628.27
	Opening CWIP	1180.29	1482.54
	Capitalisation during the year	430.40	430.38
	Closing GFA	3058.67	3058.65
	Closing CWIP	1203.86	1506.12
FY 2013-14	Opening GFA	3058.65	3058.65
	Opening CWIP	1203.86	1506.12
	Capitalisation during the year	1329.19	1106.55
	Closing GFA	4387.84	4165.20
	Closing CWIP	1442.97	1745.23

<b>Year</b>	<b>Particulars</b>	<b>Audited Accounts</b>	<b>Revised Submission</b>
FY 2014-15	Opening GFA	4387.84	4165.20
	Opening CWIP	1442.97	1745.23
	Capitalisation during the year		549.80
	Closing GFA	5217.25	4715.00
	Closing CWIP	1717.16	2019.43
FY 2015-16	Opening GFA	5217.25	4715.00
	Opening CWIP	1717.16	2019.43
	Capitalisation during the year	444.28	444.00
	Less: Asset transfer under RGGVY	502.24	
	Closing GFA	5159.29	5159.00
	Closing CWIP	2149.72	2273.74

The restatement of GFA addition in FY 2013-14 and FY 2014-15 is because of exclusion of RGGVY assets capitalized in FY 2013-14 and FY 2014-15 and eventually transferred to GoCG in FY 2015-16. However, the restatement of CWIP for all the Years, which are at variation with the figures as per the Audited Accounts for the respective years, is highly objectionable, and shows that CSPDCL is not giving due sanctity to the audited accounts.

In conclusion, the Commission is of the view that CSPDCL's contentions in this regard have no merit due to the following reasons:

- (a) There has been no change in approach from FY 2011-12 as contended by CSPDCL, as the Consumer Contribution and Grants have been reduced from the GFA addition, before considering the normative debt:equity ratio, which has been consistently done for all the years.
- (b) CSPDCL's submission that the provision for deducting the consumer contribution and grants before determination of Debt:Equity ratio for the purpose of calculating depreciation, RoE and interest, is absent in the MYT Regulations, 2012, is factually incorrect. Clause 21 of the MYT Regulations, 2012 clearly specifies that no depreciation, Return on Equity and Interest on Loan Capital shall be given on assets funded by consumer contribution and grants. Similar provision existed in the Tariff Regulations, 2006 also.
- (c) Even the first proviso of Clause 17.1 specifies that where the equity actually deployed is lower than normative of 30% of capitalised asset, then actual equity shall be considered. It is inconceivable as to how CSPDCL is claiming grant and consumer contribution as equity

contribution and claiming Interest expenses, Depreciation and Return on Equity on such funds.

- (d) The issue has achieved finality and final true-up from FY 2005-06 to FY 2015-16 has been completed. This issue was also raised in Appeal No. 308 of 2013 and the Commission's Order has been upheld by the Hon'ble APTEL. The Tariff Orders for FY 2014-15, FY 2015-16, and FY 2016-17 have been challenged before the Hon'ble APTEL, which covers the true-up of FY 2011-12 to FY 2014-15, but this issue was never raised before the Hon'ble APTEL in the respective Appeals. Hence, CSPDCL's contentions in this regard are not acceptable.

Further, CSPDCL has submitted that the consumer contribution/grant has been considered as Rs. 359.97 Crore, however, as per the provisional accounts submitted by CSPDCL the consumer contribution/grants is Rs. 1230.09 Crore. CSPDCL was asked to justify the difference. In response, CSPDCL submitted that UDAY grant of Rs. 870.12 Crore received in FY 2015-16 was wrongly linked with the consumer contribution and grant instead of showing it as a separate head, and requested the Commission to consider Rs. 359.97 Crore as consumer contribution as submitted in the Petition. As regards the GFA for FY 2016-17, the closing GFA for FY 2015-16 as approved in the true-up order has been considered as the opening GFA for FY 2016-17. The GFA considered in the provisional true-up for FY 2016-17 is shown in the table below:

**Table 6-15: GFA approved for CSPDCL for FY 2016-17 (Rs. Crore)**

<b>Particulars</b>	<b>MYT Order</b>	<b>CSPDCL Petition</b>	<b>Approved after Provisional true-up</b>
Opening GFA	5,530.83	5,159.00	5,159.00
Additional Capitalisation during the Year	686.24	662.93	662.93
Less: Transfer of assets under RGGVY	-	-	-
Closing GFA	6,217.08	5,821.93	5,821.93

## **6.7 Depreciation**

### **CSPDCL's Submission**

CSPDCL submitted that the depreciation has been calculated as per Regulation 24 of MYT Regulations 2015. It has considered the treatment of grant received under

UDAY while calculating the depreciation for FY 2016-17. CSPDCL has claimed depreciation of Rs. 131.19 Crore for FY 2016-17 as against Rs. 97.79 Crore approved in the MYT Order dated April 30, 2016, for the purpose of provisional truing up.

### Commission's View

The Commission sought computation of depreciation on fully depreciated assets from CSPDCL. The depreciation for FY 2016-17 has been computed by applying the weighted average depreciation rate of 5.33%, which has been computed by applying the specified depreciation rates for each asset group with the GFA under that asset group. The depreciation on fully depreciated assets has been deducted in accordance with the approach adopted in the previous Orders. The depreciation on consumer contribution in live assets has been deducted as per Regulation 24 of the MYT Regulations, 2015. Similarly, depreciation on assets converted from loan to grant under UDAY has been deducted. The depreciation approved for FY 2016-17 after provisional true-up is shown in the Table below:

**Table 6-16: Approved Depreciation for FY 2016-17 (Rs. Crore)**

Particulars	MYT Order	CSPDCL Petition	Approved after Provisional True-Up
Opening GFA	5530.83	5,159.00	5,159.00
Additional Capitalisation during the Year	1579.17	662.93	662.93
GFA at the end of the year after transfer of RGGVY assets	-	5,821.93	5,821.93
Average GFA for the year	6320.42	5,490.47	5,490.47
Depreciation Rates (%)	4.95%	5.33%	5.33%
Gross Depreciation	312.81	292.69	292.69
Less: Depreciation on consumer contribution on live assets	153.31	98.54	122.31
Less: Depreciation on Fully Depreciated Assets	16.94	16.58	16.58
Less: Depreciation on assets converted from loan to grant under UDAY	-	46.39	46.39
<b>Net Depreciation</b>	<b>142.56</b>	<b>131.19</b>	<b>107.42</b>

## 6.8 Interest on Loan Capital

### CSPDCL's Submission

CSPDCL submitted that the interest on loan capital has been computed in accordance with Regulation 23 of the MYT Regulations, 2015. CSPDCL submitted the actual loan details as per the provisional accounts as shown in the following Table:

**Table 6-17: Actual loan details for FY 2016-17 as submitted by CSPDCL (Rs. Crore)**

Particulars	Opening Loan	Addition	Repayment	Closing	Average
REC Ltd.	331.03	251.47	7.59	574.90	452.97
Power Finance Corporation Ltd.	190.84	35.05	1.14	224.74	207.79
CSPHCL	100.00	0.00	100.00	0.00	50.00
State Government	86.35	0.00	0.00	86.35	86.35
<b>Total</b>	<b>708.21</b>	<b>286.52</b>	<b>108.73</b>	<b>886.00</b>	<b>797.10</b>

CSPDCL submitted that the repayment of CSPHCL (SBI SLR Bonds) includes final payment of bond holder's interest. CSPDCL has considered the closing loan balance as per its submission in the true-up for FY 2015-16 as the opening loan balance for FY 2016-17. The provisional debt component of GFA addition in FY 2016-17 has been considered as the loan addition during the year, which is Nil, due to conversion of loan into grant under UDAY. The allowable depreciation for the year has been considered as the normative repayment for the year. The weighted average interest rate of 7.11% has been considered for computation of interest expenses for FY 2016-17. CSPDCL claimed the interest on loan capital of Rs. 19.09 Crore for FY 2016-17 as against the interest expenses of Rs. 132.52 Crore approved in the MYT Order.

### Commission's View

The Commission sought the documentary evidences for the opening loan balance for FY 2016-17, applicable interest rate for each source of loan and also the computation of weighted average rate of interest for FY 2016-17. The Commission has considered the closing Net normative loan for FY 2015-16 as approved by the Commission in its previous Tariff Order as opening net

normative loan for FY 2016-17. The debt portion of the approved capitalisation for FY 2016-17 has been considered as the loan addition during the year.

The Commission has considered the fact that no grants has been received by CSPDCL under UDAY in FY 2016-17 towards the repayment of loans. The allowable depreciation for the year has been considered as normative repayment for the year. The actual weighted average interest rate based on the actual loan portfolio has been considered for computing the interest expenses for FY 2016-17. The interest expense approved for FY 2016-17, after provisional Truing up, is shown in the following Table:

**Table 6-18: Approved Interest Expense for FY 2016-17 for CSPDCL (Rs. Crore)**

Particulars	MYT Order	CSPDCL Petition	Approved after Provisional True-Up
Total Opening Net Normative Loan	2,069.08	115.68	716.91
Repayment during the period	142.56	131.19	107.42
Additional Capitalization of Borrowed Loan during the year	444.73	118.75	144.17
Addition/(Reduction) in Normative loan during the year		241.14	211.27
Total Closing Net Normative Loan	2,371.25	344.38	964.94
Average Normative Loan during the year	2,220.16	230.03	840.92
Wt. Avg. Interest Rate	8.24%	7.11%	7.11%
<b>Interest Expense</b>	<b>182.90</b>	<b>16.35</b>	<b>59.75</b>

## 6.9 Interest on Working Capital

### CSPDCL's Submission

CSPDCL submitted that the Interest on Working Capital (IoWC) has been computed as per Clause 25 of the MYT Regulations, 2015. It has considered the interest rate of 12.80% (9.30% - SBI-PLR on April 1, 2016 plus 350 basis points) for computing the IoWC. CSPDCL submitted the normative IoWC for FY 2016-17 as Rs. 45 Crore for provisional Truing up.

### Commission's View

The normative IoWC has been computed in accordance with the MYT Regulations, 2015. The Commission has considered the revised normative O&M expenses for computing the working capital requirement. The receivables have been considered equivalent to one month's actual revenue. The average Consumer Security Deposit of Rs. 1523.99 Crore has been considered during FY 2016-17. Since, the Consumer Security Deposit is more than normative working capital requirement, the actual IoWC for FY 2016-17 is negative and works out as shown in the Table below:

**Table 6-19: Approved IoWC for CSPDCL for FY 2016-17 (Rs. Crore)**

Particulars	MYT Order	CSPDCL Petition	Approved after Provisional True-Up
Operation and Maintenance expenses for one Month	88.86	97.03	89.17
Maintenance spares at 15% of O&M Expense	50.38	76.04	48.00
Receivable equivalent to one month of revenue from sale of electricity	977.09	963.91	922.98
Total Working Capital Requirement	1,116.33	1,136.98	1,060.16
Less: Average amount of Consumer Security Deposit Held during the year	1,352.81	1,488.56	1,523.99
Gross Interest on Working Capital	-	(351.58)	(463.83)
Rate of Interest on Working Capital	13.20%	12.80%	12.80%
<b>Net Interest on Working Capital</b>	-	<b>(45.00)</b>	<b>(59.37)</b>

### 6.10 Interest on Consumer Security Deposit

#### CSPDCL's Submission

CSPDCL has considered the Interest on Consumer Security Deposit (CSD) paid to the consumers in line with the Regulation 6.13 of the Chhattisgarh Electricity Supply Code, 2011. Accordingly, the actual interest on CSD paid by CSPDCL in FY 2016-17 is Rs. 99.88 Crore as per the provisional accounts.



### Commission's View

The Commission sought details of actual interest on CSD paid to consumers/adjusted in consumer's bills and variation with the interest on CSD booked as per provisional accounts for FY 2016-17. CSPDCL confirmed that the interest on CSD booked in the provisional accounts for FY 2016-17 has been actually paid to consumers/adjusted in consumer's bills. The Commission has approved the interest on CSD for FY 2016-17 as claimed by CSPDCL as shown in the Table below:

**Table 6-20: Approved Interest on CSD for CSPDCL for FY 2016-17 (Rs. Crore)**

Particulars	MYT Order	CSPDCL Petition	Approved after Provisional True-Up
Opening Consumer Security Deposit	1,288.39	1,373.78	1,444.64
Addition to Consumer Security Deposit	128.84	229.55	158.69
Closing Consumer Security Deposit	1,417.23	1,603.33	1,603.33
Average Consumer Security Deposit	1,352.81	1,488.56	1,523.99
<b>Interest on Consumer Security Deposit</b>	<b>90.19</b>	<b>99.88</b>	<b>99.88</b>

### 6.11 Return on Equity

#### CSPDCL's Submission

CSPDCL has computed permissible equity as per the capital restructuring proposed by CSPDCL in its Petition and Regulation 17.1 of the MYT Regulations, 2015. CSPDCL has considered 16% as rate of Return on Equity for FY 2016-17. CSPDCL has claimed RoE of Rs. 264.30 Crore in the provisional true-up for FY 2016-17.

#### Commission's View

The Commission has considered the closing permissible equity approved for FY 2015-16 in the final true-up, as the opening permissible equity for FY 2016-17. The equity portion of the additional net capitalisation for FY 2016-17 has been considered as the equity addition for the year. The Commission has considered rate of return as 16% on average equity for the year as per MYT Regulations,

2015. The RoE approved after provisional true-up for FY 2016-17 is shown in the Table below:

**Table 6-21: Approved RoE for CSPDCL for FY 2016-17 (Rs. Crore)**

<b>Particulars</b>	<b>MYT Order</b>	<b>CSPDCL Petition</b>	<b>Approved after Provisional True-Up</b>
Permissible Equity in Opening GFA	1,686.31	1,574.76	1,269.14
Permissible Equity in Closing GFA	1,892.18	1,729.00	1,468.02
Average Gross Permissible Equity during the year	1,789.25	1,651.88	1,368.58
Rate of Return on Equity	16.00%	16.00%	16.00%
<b>Return on Equity</b>	<b>217.40</b>	<b>264.30</b>	<b>218.97</b>

## **6.12 Non-Tariff Income**

### **CSPDCL's Submission**

CSPDCL submitted the Non-Tariff income of Rs. 201.99 Crore for FY 2016-17 for the purpose of provisional Truing up. This includes Non-Tariff income of Rs. 180.35 Crore and revenue from Wheeling Charges, Open Access and Cross-Subsidy Charges of Rs. 21.64 Crore for FY 2016-17.

### **Commission's View**

The Commission sought head-wise details of Non-Tariff Income for FY 2016-17 and explanation for the significantly lower income compared to that approved in the Tariff Order.

However, CSPDCL submitted that audited accounts for FY 2016-17 are under preparation due to introduction of new accounting principles, which have to undergo a further stage of statutory audit thereafter. Under such circumstances, it is difficult to provide details of Non-Tariff Income as sought by the Commission.

Hence, for the purpose of the provisional truing up, the Commission approves the Non-Tariff Income as submitted by CSPDCL for FY 2016-17. CSPDCL should submit all the necessary details at the time of final truing up for FY 2016-17.

### 6.13 Aggregate Revenue Requirement

The Commission in MYT Order had approved the component-wise ARR for each year of the Control Period from FY 2016-17 to FY 2020-21. The provisional true-up for FY 2016-17 has been done with respect to the ARR components approved in the MYT Tariff Order.

Based on the above, the ARR approved in the Provisional True-up for FY 2016-17 is shown in the Table below:

**Table 6-22: Approved ARR for CSPDCL for FY 2016-17 (Rs. Crore)**

Sr. No.	Particulars	MYT Order	CSPDCL Petition	Approved after Provisional True-Up
<b>A</b>	<b>Power Purchase Expenses</b>	<b>8,005.64</b>	<b>9,846.92</b>	<b>10,884.11</b>
1	Power Purchase Cost	6,828.11	8,683.99	9,721.17*
2	Inter-State Transmission charges (PGCIL)	341.63	256.85	256.85
3	Intra-State Transmission Charges	823.49	835.41	835.41
4	WRLDC Charges		1.31	1.31
5	CSLDC Charges	12.41	5.52	5.52
6	Other Charges		63.85	63.85
<b>B</b>	<b>Operation &amp; Maintenance Expenses</b>	<b>1,365.06</b>	<b>1,463.11</b>	<b>1,368.86</b>
1	Net Employee Expenses	750.78	820.92	820.92
2	Net Administrative and General Expenses	135.52	153.28	129.13
3	Net Repair and Maintenance charges	125.95	190.10	120.01
4	Pension & Gratuity	298.80	298.80	298.80
5	Interim Wage Relief	54.01	-	-
<b>C</b>	<b>Interest &amp; Finance Expenses</b>	<b>122.16</b>	<b>73.96</b>	<b>100.26</b>
1	Interest on Loan	64.18	19.09	59.75
2	Interest on Security Deposit	90.19	99.88	99.88
3	Interest on Working Capital Requirement	(32.21)	(45.00)	(59.37)

Sr. No.	Particulars	MYT Order	CSPDCL Petition	Approved after Provisional True-Up
<b>D</b>	<b>Other Expenses</b>	<b>315.19</b>	<b>395.49</b>	<b>326.39</b>
1	Depreciation	97.79	131.19	107.42
2	Return on Equity	217.40	264.30	218.97
<b>E</b>	<b>Gain/(Loss) on Efficiency</b>	<b>-</b>	<b>(10.56)</b>	<b>(46.29)</b>
1	Gain/(Loss) on Sharing O&M Efficiency	-	(45.96)	(46.29)
2	Licensee's Share in Gain on account of reduction in distribution losses	-	35.40	-
<b>G</b>	<b>Less: Non-Tariff Income</b>	<b>322.83</b>	<b>201.99</b>	<b>208.95</b>
1	Non-Tariff Income	252.01	180.35	187.31
2	Wheeling Charges, Open Access & Cross Subsidy Charges	70.82	21.64	21.64
<b>G</b>	<b>Annual Revenue Requirement</b>	<b>11,634.22</b>	<b>11,566.94</b>	<b>12,516.96</b>

**Note:** \* - Revenue from sale of surplus power has been considered separately, whereas CSPDCL has reduced the power purchase expenses to the extent of revenue from sale of surplus power

#### **6.14 Revenue from Sale of Power**

##### **CSPDCL's Submission**

CSPDCL submitted the total revenue from sale of power of Rs. 10,725.78 Crore for FY 2016-17 as per provisional accounts, as against Rs. 11,981.15 Crore as approved by the Commission in the MYT Order.

##### **Commission's View**

The revenue from Retail Sale for FY 2016-17 as submitted by CSPDCL is Rs. 10,725.78 Crore, while the provisional accounts as submitted by CSPDCL reflects the revenue of Rs. 10,789.02 Crore. CSPDCL clarified that it would like to stick with Rs. 10,725.78 Crore as revenue from sale of power, as the remaining revenue of Rs. 63.24 Crore pertains to various items like fuse charges, disconnection /reconnection charges, public lighting maintenance, service charges, etc., and has been considered in Non-Tariff Income. The Commission has accepted CSPDCL's submission in this regard. The State Government

subsidy of Rs. 350 Crore towards targeted subsidy for steel industry has been considered in the Revenue from Sale of Power to Steel Industry rather than State Government subsidy as considered by CSPDCL. Thus, the Revenue from Sale of Power has been considered as Rs. 11075.78 crore (Rs. 10725.78 crore + Rs. 350 crore). The balance State Government subsidy of Rs. 350 crore has been considered separately as Revenue Subsidy.

The revenue from sale of surplus power of Rs. 1037.19 crore has been considered under revenue, for the purposes of computing the Revenue Gap/(Surplus) after provisional true-up for FY 2016-17.

Further, the Commission has considered the amount of Rs. 240.24 Crore as additional revenue towards Agriculture metered category, as discussed in earlier Section of this Order.

The Commission has accordingly considered total Revenue from sale of power in the provisional true-up for FY 2016-17 as shown in the Table below:

**Table 6-23: Approved Revenue for FY 2016-17 (Rs. Crore)**

<b>Particulars</b>	<b>CSPDCL Petition</b>	<b>Approved after Provisional Truing up</b>
Revenue from Retail Sale of Electricity	10,725.78	11,075.78
Add: Additional revenue for Agriculture Metered category	-	240.24
<b>Net Revenue from Sale of Electricity</b>	<b>10,725.78</b>	<b>11,316.02</b>

**Note:** \* has been considered towards reduction of power purchase cost by CSPDCL

## **6.15 Revenue Gap/(Surplus) for FY 2016-17**

### **CSPDCL's Submission**

CSPDCL has submitted a standalone Revenue Gap of Rs. 841.16 Crore for FY 2016-17 based on the provisional ARR and Revenue. CSPDCL also submitted that GoCG has provided revenue subsidy of Rs. 700 Crore, wherein Rs. 350 Crore is towards the committed revenue subsidy and remaining Rs. 350 Crore is towards rebate provided to the Steel Industries. Further, true-up surplus of CSPGCL, CSPTCL, and CSLDC after provisional true-up for FY 2016-17 has been considered. CSPDCL submitted that it has considered all other applicable

adjustments to arrive at final provisional True-up Revenue Gap of Rs. 2,297.68 Crore along with carrying cost.

### Commission's View

As discussed earlier, the Commission has considered the Revenue Subsidy as Rs. 350 Crore, while the targeted subsidy of Rs. 350 Crore for Steel Industry has been considered in the Revenue from Sale of Power. Further, as per past practice, the true-up Revenue Gap/(Surplus) after provisional true-up for CSPGCL, CSPTCL, and CSLDC for FY 2016-17 has not been considered for computing the Revenue Gap/(Surplus) of CSPDCL for FY 2016-17, and the same have been considered while computing the cumulative Revenue Gap/(Surplus) for FY 2018-19, as discussed in the subsequent Chapters. The summary of standalone Revenue Gap/(Surplus) approved after provisional true up for CSPDCL for FY 2016-17, is shown in the Table below:

**Table 6-24: Approved Stand-alone Revenue Gap/Surplus for FY 2016-17 (Rs. Crore)**

Sl.	Particulars	MYT Order	CSPDCL Petition	Approved after Provisional True-up
1	CSPDCL ARR	11,634.22	11,566.94	12,516.96
2	Balance FCA to be recovered	202.55	-	-
3	Impact of truing up of 2014-15 and APTEL Judgment with carrying cost up to 2016-17 for CSPGCL	514.30	-	-
4	Impact of truing up of 2014-15 and APTEL Judgment with carrying cost up to 2016-17 for CSPTCL	89.90	-	-
5	Impact of truing up of 2014-15 and APTEL Judgment with carrying cost up to 2016-17 for CSLDC	0.54	-	-
6	Impact of truing up of 2014-15 and APTEL Judgment with carrying cost up to 2016-17 for CSPDCL	2,799.56	2,799.56	2,799.56
<b>7</b>	<b>Total ARR of CSPDCL for FY 2016-17</b>	<b>15,241.07</b>	<b>14,366.50</b>	<b>15,316.52</b>
8	Less: State Government Subsidy	350.00	700.00	350.00
9	Less: Revenue from sale of surplus power	2,149.08	-	1,037.19
<b>10</b>	<b>Net ARR of CSPDCL for FY 2016-17</b>	<b>12,741.99</b>	<b>13,666.50</b>	<b>13,929.34</b>
11	Less: Regulatory asset for CSPDCL	760.80	760.80	760.80

Sl.	Particulars	MYT Order	CSPDCL Petition	Approved after Provisional True-up
12	Impact of Correction in Capital Structure	-	120.96	-
13	ARR of CSPDCL to be recovered in FY 2016-17	11,981.19	13,026.66	13,168.54
14	True-up Revenue Gap/(Surplus) of CSPDCL	-	-	-
15	True-up Revenue Gap/(Surplus) of CSPGCL	-	(122.05)	-
16	True-up Revenue Gap/(Surplus) of CSPTCL	-	(18.61)	-
17	True-up Revenue Gap/(Surplus) of CSLDC	-	(0.74)	-
<b>18</b>	<b>Revenue from Sale of Power</b>	<b>-</b>	<b>10,725.78</b>	<b>11,316.02</b>
<b>19</b>	<b>Revenue Gap/(Surplus)</b>	<b>-</b>	<b>2,159.48</b>	<b>1,852.52</b>

After applying the carrying cost for 2 years, i.e., from mid-point of FY 2016-17 to mid-point of FY 2018-19 on this Revenue Gap of Rs. 1,852.52 Crore, the total amount which is required to be factored in the revenue requirement of CSPDCL for FY 2018-19 works out to Rs. 2,357.60 Crore.

## **7 REVISED ARR FOR FY 2018-19**

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### **7.1 Background**

CSPDCL, in accordance with the MYT Regulations, 2015, submitted the revised projection of sales, power purchase and revised ARR for FY 2018-19.

Regulation 5.7 (b) (ii) of the CSERC MYT Regulations, 2015 specifies as under:

*"2. Revised power purchase quantum/cost (if any), with details thereof, for the ensuing year.*

*3. Revenue from existing tariffs and charges and projected revenue for the ensuing year.*

*4. Application for re-determination of ARR for the ensuing year along-with retail tariff proposal."*

In view of the above, in this Chapter, the Commission has revised the projection of energy sales, power purchase and determined the revised ARR for FY 2018-19 for CSPDCL.

### **7.2 Energy Sales**

#### **CSPDCL's Submission**

CSPDCL submitted that there are various factors, which can have an impact on the actual consumption of electricity and are often beyond the control of the Licensee, such as Government Policy, economic scenario, weather conditions, force-majeure events like natural disasters, change in consumption mix, etc. CSPDCL submitted that the Commission has specified the sales mix and quantum of sales as uncontrollable, which are beyond the control of the Licensee and cannot be mitigated.

CSPDCL further submitted that the Commission in the MYT Order had merged the HV and EHV categories into supply at HV voltage level to be effective from April 1, 2016. For projecting the category-wise energy sales for FY 2018-19, CSPDCL has categorized the past sales prior to FY 2016-17 based on new/re-defined categories/ sub-categories and apportioned it so that the total actual category-wise sales remain the same. CSPDCL has considered the past growth trends in each consumer category for projecting energy sales for FY 2018-19. The Compounded Annual Growth Rate (CAGR) has been computed for each LV and HV consumer category for the past 5-year period from FY 2011-12 to FY 2016-



17, 4-year period from FY 2012-13 to FY 2016-17, 3-year period from FY 2013-14 to FY 2016-17, 2-year period from FY 2014-15 to FY 2016-17, along with Year-on-Year growth rate in FY 2016-17 over FY 2015-16.

Subject to the specific characteristics of each consumer category, the 5-Year CAGR has been chosen as the basis of sales projection for that category. For example, if an abnormal growth rate (very high) relative to the current trend is observed at the beginning of the five-year period considered, then the maximum growth has been considered as 10% for that particular category/sub-category. Further, if the five-year CAGR is less than 10%, then the actual growth has been considered. In cases where the past data has showed a declining trend, Nil growth has been considered.

For making projections of energy sales and connected load/number of consumers, the actual sales for FY 2016-17 for each consumer category has been considered as the base, i.e., the CAGR is applied over the actual sales for FY 2016-17 to make projections for each category for FY 2017-18 and FY 2018-19.

### **Commission's View**

In order to project more realistic energy sales for FY 2018-19, the Commission sought the actual category-wise sales from April 2017 to September 2017, and estimated category-wise sales for the remaining months of FY 2017-18.

Based on the actual energy sales for April 2017 to September 2017, the Commission has projected the category-wise sales for the remaining months of FY 2017-18 based on past trends. The Commission has computed the 5-Year, 4-Year, 3-Year, and 2-Year CAGR and Year-on-Year growth rate. The appropriate growth rate has been selected for projecting the category-wise energy sales for FY 2018-19. The category-wise sales projected by CSPDCL and approved by the Commission has been discussed in the following paragraphs:

### **LV-1: Domestic Consumers including BPL consumers**

#### **CSPDCL's Submission**

CSPDCL submitted that as per the latest available data at the end of FY 2016-17, it has 38.75 lakh Domestic Consumers including BPL Consumers. It has recorded a 4-year CAGR of 7.65%, and the same has been used to project the sales for this category at 5,471.95 MU for FY 2018-19.

### **Commission's View**

The Commission notes that CSPDCL has projected sales of 5471.95 MU to this category as compared to the sales of 6704.56 MU approved in the MYT Order. The Commission has projected the energy sales based on the long-term 4-year CAGR of 7.65%. Accordingly, the Commission has estimated sales to domestic category (including BPL) at 5785.87 MU for FY 2018-19. The Commission has projected the slab-wise energy sales in the same proportion of the actual sales for FY 2016-17.

### **LV-2.1: Non-Domestic Category**

#### **CSPDCL's Submission**

CSPDCL submitted that it has recorded a 4-year CAGR of 5.99% for the Non-domestic category and the same has been considered for projecting sales of 930.40 MU for FY 2018-19.

#### **Commission's View**

The Commission notes that CSPDCL has projected sales of 930.40 MU to this category as compared to the sales of 1065.36 MU approved in the MYT Order.

The sales to Non-domestic category have increased at CAGR of 7.30% over the last five years, 5.99% over the last four years, 4.84% over the last three years, 4.57% over the last two years, and 3.03% Year-on-Year based on actual sales for FY 2016-17.

The Commission has considered the 4-year CAGR of 5.99% for projection of sales to Non-domestic category on the estimated sales for FY 2017-18. The Commission has estimated sales to Non-domestic category at 915.37 MU for FY 2018-19. The Commission has projected the slab-wise energy sales in the same proportion of the actual sales for FY 2016-17.

### **LV-2.2: Non-Domestic Consumers (Demand Based Tariff)**

#### **CSPDCL's Submission**

CSPDCL submitted that that for the Non-domestic (Demand based tariff) category, it has considered the CAGR of 10% due to abnormally high 5-Year CAGR, 4-year CAGR, etc., for projecting the sales of 41.11 MU for FY 2018-19.

### **Commission's View**

The Commission notes that CSPDCL has projected sales of 41.11 MU to this category as compared to the sales of 78.01 MU approved in the MYT Order. The sales to non-domestic (demand-based tariff) category have increased at CAGR of 52.26% over the last five years, 45.75% over the last four years, 49.84% over the last three years, 53.57% over the last two years, and 48.06% year-on-year based on the actual sales for FY 2016-17.

The substantial increase in the sales to this category is because of the low base, and hence, the Commission has considered fixed CAGR of 10% for projection of sales for FY 2018-19 over the estimated sales for FY 2017-18. The Commission has estimated sales to Non-domestic category (demand-based tariff) at 47.36 MU for FY 2018-19.

### **LV 3: Agriculture Metered Category**

#### **CSPDCL's Submission**

CSPDCL submitted that Agriculture Metered category sales have grown at a rate of 12.49% based on the 5-year CAGR with the sales recorded at 3753.69 MU in FY 2016-17. Therefore, considering increase on the sales of FY 2016-17 based on past trends would not be appropriate. Hence, CSPDCL has projected the energy sales by considering an increase of 10%.

#### **Commission's View**

The Commission notes that CSPDCL has projected 4541.96 MU sales to this category as compared to the sales of 4139 MU approved in the MYT Order. The sales to Agriculture metered category has increased at CAGR of 12.49% over the last five years, 13.58% over the last four years, 18.88% over the last three years, 18.07% over the last two years, and 6.02% year-on-year based on the actual sales for FY 2016-17.

The Commission is of view that the above growth rates include the impact of assessed consumption for Agriculture metered category, and are hence, not reliable. It would be pertinent to note that GoCG is not providing any grant for new agriculture pump connections by conventional means. However, GoCG is encouraging use of solar pumps for Agriculture connection by providing grants. Therefore, it would not be appropriate to consider such high growth rate for projection. Hence, the Commission has considered growth rate of 2% on ad-hoc

basis for projecting energy sales for FY 2018-19 for Agriculture metered category. The Commission has estimated energy sales of 3,905.34 MU for FY 2018-19.

#### **LV 4: Agriculture Allied Services**

##### **CSPDCL's Submission**

CSPDCL submitted that it has considered an increase of 5.75% for projecting the sales for Agriculture Allied Services category.

##### **Commission's views**

The Commission notes that CSPDCL has projected 19.61 MU sales to this category as compared to the sales of 17.65 MU approved in the MYT Order. The sales to Agriculture Allied Services category has increased at CAGR of 7.08% over the last five years, 3.30% over the last four years, 4.79% over the last three years, 3.81% over the last two years, and 5.69% year-on-year based on the actual sales for FY 2016-17.

The Commission has considered the 3-year CAGR of 4.79% for projection of sales over the estimated sales for FY 2017-18. The Commission has estimated sales to Agriculture Allied Services category at 15.34 MU for FY 2018-19.

#### **LV 5: LT Industry**

##### **CSPDCL's Submission**

CSPDCL submitted that the growth rate in LT Industrial category has been estimated for each sub-category and has been assumed as 1.73% equivalent to 5-year CAGR, as a smooth trend is observed over the past five years.

##### **Commission's Views**

The Commission notes that CSPDCL has projected sales of 562.94 MU as compared to the sales of 495.09 MU approved in the MYT Order. The Commission has observed a CAGR of 1.73% over the last five years, 2.08% over the last four years, 0.12% over the last three years, -0.44% over the last two years, and -2.29% year-on-year based on the actual sales for FY 2016-17.

The Commission has considered an increase of 0.12% in sales to LT Industry in FY 2018-19 over the estimated sales in FY 2017-18 and has accordingly approved sales at 560.39 MU for FY 2018-19.

## **LV 6: Public Utilities**

### **CSPDCL's Submission**

CSPDCL submitted that Public Utilities category, comprising street lights and public water works, has shown a smooth growth trend in the past. Therefore, a 4-year CAGR of 7.15% has been considered appropriate for projecting the growth in Sales.

### **Commission's Views**

The Commission notes that CSPDCL has projected sales of 363.06 MU for Public Utilities category as compared to sales of 314.49 MU approved in the MYT Order. The sales to this category consumers have increased at CAGR of 10.68% over the last five years, 7.15% over the last four years, 5.97% over the last three years, 5.73% over the last two years, and 10.01% year-on-year based on the actual sales for FY 2016-17.

The Commission has considered the 3-year CAGR of 5.97% for projection of sales over the estimated sales for FY 2017-18. The Commission has estimated sales to Public Utilities category at 382.72 MU for FY 2018-19.

## **LV 7: Temporary**

### **CSPDCL's Submission**

CSPDCL submitted that it has considered 5-year CAGR of 5% for projection of sales to the Temporary category.

### **Commission's Views**

The Commission notes that CSPDCL has projected the sales of 669.54 MU to this category as compared to sales of 809.33 MU approved in the MYT Order. The sales to Temporary category have increased at CAGR of 32.49% over the last five years, 17.83% over the last four years, 24.74% over the last three years, 12.43% over the last two years, and 9.43% year-on-year based on the actual sales for FY 2016-17.

The Commission has considered the fixed CAGR of 10% for projection of sales over the estimated sales for FY 2017-18. The Commission has estimated sales to Temporary category at 842.41 MU for FY 2018-19.

## **HV 1: Railway Traction**

### **CSPDCL's Submission**

CSPDCL submitted that it has projected 2.74% growth for the Railway Traction category based on 5-Year CAGR.

### **Commission's Views**

The Commission notes that CSPDCL has projected sales of 952.87 MU to Railway Traction category as compared to the sales of 946.41 MU approved in the MYT Order. The sales to this category have increased at CAGR of 2.74% over the last five years, 0.09% over the last four years, 2.54% over the last three years, 2.10% over the last two years, and 1.44% year-on-year based on the actual sales for FY 2016-17.

The Commission has accepted CSPDCL's assumption of CAGR of 2.74% for projection of sales for FY 2018-19. The Commission has estimated sales of 952.87 MU for FY 2018-19 for Railways.

## **HV 2: Mines**

### **CSPDCL's Submission**

CSPDCL submitted that it has considered the growth rate of 7.77% for the Mines category based on the weighted average of 3-year and 5-Year CAGR across different voltages.

### **Commission's Views**

The sales to Mines category have increased at CAGR of 15.10% over the last five years, 15.87% over the last four years, 17.62% over the last three years, 23.69% over the last two years, and 41.53% year-on-year based on the actual sales for FY 2016-17.

The Commission has considered the 5-year CAGR of 15.10% for projection of sales over the estimated sales for FY 2017-18. The Commission has estimated sales to Mines category at 828.33 MU for FY 2018-19.

### **HV 3: Other Industrial & General Purpose Non-Industrial**

#### **CSPDCL's Submission**

CSPDCL submitted that it has projected growth rate of 4.25% based on the weighted average of growth of 5-year CAGR across different voltages. CSPDCL projected the energy sales of 2,510.80 MU for FY 2018-19.

#### **Commission's Views**

The Commission notes that CSPDCL has projected sales of 2,510.80 MU to this category. The sales to this category have been increased at CAGR of 3.68% over the last five years, 2.14% over the last four years, -0.77% over the last three years, -10.49% over the last two years, and -17.33% year-on-year based on the actual sales for FY 2016-17.

The Commission has not considered any growth in this category as a negative growth has been witnessed in the recent years. Hence, the Commission has considered sales of 2,207.77 MU in this category, which is same as actual sales in FY 2016-17.

### **HV 4: Steel Industries**

#### **CSPDCL's Submission**

CSPDCL submitted that it has projected increase of 4.27% based on the weighted average of fixed growth of 10% and 5-year CAGR across the different voltage categories. CSPDCL projected the energy sales of 4,518.11 MU for FY 2018-19.

#### **Commission's Views**

The Commission notes that CSPDCL has projected sales of 4,518.11 MU to this category as compared to the sales of 4,954.67 MU approved in the MYT Order. The sales to Steel category has increased at CAGR of 5.27% over the last five years, 8.01% over the last four years, 11.60% over the last three years, 10.94% over the last two years, and 9.08% year-on-year based on the actual sales for FY 2016-17.

In view of the higher growth rate in sales to this category in the recent past, the Commission has projected the sales to this category for FY 2018-19 on the basis

of 5-year CAGR of 5.27%. The Commission has also considered the sales to the upcoming NMDC Plant as per their schedule submitted before the Commission for FY 2018-19 under 220 kV category. The Commission has estimated sales to Steel category at 4,772.93 MU for FY 2018-19.

## **HV 5: Irrigation & Agriculture Allied Activities, Public Water Works**

### **CSPDCL's Submission**

CSPDCL submitted that the Irrigation & Agriculture Allied Activities and Public Water Works Category has recorded a 4-year CAGR of 1.91%, which has been considered for projecting sales to this category for FY 2018-19. CSPDCL has projected energy sales of 117.62 MU for FY 2018-19.

### **Commission's Views**

The Commission has considered the 3-year CAGR of 2.68% for projection of sales over the actual sales for FY 2016-17. The Commission has estimated sales to HV-5 category at 119.41 MU for FY 2018-19.

## **HV 6: Residential**

### **CSPDCL's Submission**

CSPDCL submitted that residential category has recorded a 4-year CAGR of 0.77%, hence, it has considered the same growth rate for sales projection for FY 2018-19. CSPDCL projected the energy sales of 186.51 MU for FY 2018-19.

### **Commission's Views**

The sales to HV 6 category have increased at CAGR of -0.91% over the last five years, 0.77% over the last four years, 1.15% over the last three years, 3.18% over the last two years, and 2.88% year-on-year based on the actual sales for FY 2016-17.

The Commission has considered the 3-year CAGR of 1.15% for projection of sales over the estimated sales for FY 2017-18. The Commission has estimated sales to HV-6 category at 187.93 MU for FY 2018-19.



## **HV 7: Start-up Power**

### **CSPDCL's Submission**

CSPDCL has considered 10% fixed growth for projecting the Sales to Start-up Power category. CSPDCL projected the energy sales of 144.49 MU for FY 2018-19.

### **Commission's Views**

The Commission notes that CSPDCL has projected sales of 144.49 MU to this category as compared to sales of 33.24 MU approved in the MYT Order. The sales to HV-7 category have increased at CAGR of -0.83% over the last five years, 18.07% over the last four years, 59.59% over the last three years, 107.92% over the last two years, and 82.17% year-on-year based on the actual sales for FY 2016-17.

Since, the growth in the previous years is abnormally high and fluctuating, the Commission has considered a fixed growth rate of 10% for projecting the sales to this category. The Commission has estimated sales to HV-7 category at 144.49 MU for FY 2018-19.

## **HV 8: Industries related to manufacturing of equipment for power generation from renewable energy sources**

### **CSPDCL's Submission**

CSPDCL submitted that a normal increase of 10% has been considered for projecting the Sales to Industries related to manufacturing of equipment for power generation from renewable energy sources. CSPDCL projected energy sales of 2.49 MU for FY 2018-19.

### **Commission's Views**

The Commission notes that CSPDCL has projected sales of 2.49 MU to this category as compared to the sales of 1.16 MU approved in the MYT Order. The Commission has accepted CSPDCL's projections of a 10% increase in sales to HV 8 category and accordingly estimated sales of 2.49 MU for FY 2018-19.

## HV 10: Temporary Connection at HV

### CSPDCL's Submission

CSPDCL has considered Nil growth for projecting the Sales to Temporary Category. CSPDCL projected energy sales of 3.74 MU for FY 2018-19.

### Commission's Views

The Commission has accepted CSPDCL's projection of sales to this category in the absence of past data and has estimated sales of 3.74 MU for FY 2018-19.

The summary of category-wise sales for FY 2018-19 approved by the Commission in the MYT Order, estimated by CSPDCL, and approved in this Order is shown in the Table below:

**Table 7-1: Consumer category-wise sales estimated by the Commission for FY 2018-19 (MU)**

Particulars	MYT Order*	CSPDCL Petition	Approved in this Order
<b>LV Category</b>	<b>13803.51</b>	<b>12,600.56</b>	<b>12,454.79</b>
LV 1: Domestic Including BPL	6704.56	5,471.95	5,785.87
LV 2: Non-Domestic (Normal Tariff)	1065.36	930.40	915.37
LV 2.1: Non-Domestic (Demand Based Tariff)	78.01	41.11	47.36
LV 3: Agriculture – Metered	4319.00	4,541.96	3,905.34
LV 4: Agriculture - Allied Activities	17.65	19.61	15.34
LV 5: LT Industry	495.09	562.94	560.39
LV 6: Public Utilities	314.49	363.06	382.72
LV 7: IT Industries	0	-	-
LV 8: Temporary	809.33	669.54	842.41
<b>HV Category</b>	<b>4678.25</b>	<b>9,158.93</b>	<b>9,219.97</b>
HV 1: Railway Traction	946.41	952.87	952.87
HV 2: Mines	2244.17	722.31	828.33
HV 3: Other Industrial and General Purpose Non-Industrial	1606.48	2,510.80	2,207.77

Particulars	MYT Order*	CSPDCL Petition	Approved in this Order
HV 4: Steel Industries	4678.25	4,518.11	4,772.93
HV 5: Irrigation & Agriculture Allied Activities, Public Water Works	234.53	117.62	119.41
HV 6: Residential		186.51	187.93
HV 7: Start-up Power Tariff	33.24	144.49	144.49
HV 8: Industries related to manufacturing of equipment for RE power generation	1.16	2.49	2.49
HV 9: Information Technology Industries	-	-	-
HV 10: Temporary Connection at HV	-	3.74	3.74
<b>Total Sales for FY 2018-19</b>	<b>23,972.99</b>	<b>21,759.49</b>	<b>21,674.76</b>

Note - \*In MYT Order, the energy sales of 72.55 MU was approved for HV – Low Load Factor consumer category, which was subsequently merged with respective category based on purpose and voltage.

Similarly, the Commission has estimated the category wise number of consumers and load based on the analysis of past growth trend as done for sales projections. Further, the category-wise number of consumers and load estimated by the Commission for FY 2018-19 is shown in the following Table:

**Table 7-2: Category-wise Consumers and load as estimated by Commission**

Particulars	No. of consumers	Load (MW)
<b>LV Category</b>	52,51,759	6,149.14
LV 1: Domestic Including BPL	42,83,963	3,100.94
LV 2: Non-Domestic (Normal Tariff)	3,34,475	792.04
LV 2.1: Non-Domestic (Demand Based Tariff)	989	31.47
LV 3: Agriculture – Metered	4,43,342	1,187.59
LV 4: Agriculture - Allied Activities	2,693	16.27
LV 5: LT Industry	34,338	632.21
LV 6: Public Utilities	31,412	117.72
LV 7: IT Industries	-	-
LV 8: Temporary	1,20,547	270.91

<b>Particulars</b>	<b>No. of consumers</b>	<b>Load (MW)</b>
<b>HV Category</b>	3,066	2,903.58
HV 1: Railway Traction	21	347.09
HV 2: Mines	118	208.34
HV 3: Other Industrial and General Purpose Non-Industrial	2,282	980.78
HV 4: Steel Industries	376	1,216.24
HV 5: Irrigation & Agriculture Allied Activities, Public Water Works	170	40.88
HV 6: Residential	56	49.93
HV 7: Start-up Power Tariff	38	53.53
HV 8: Industries related to manufacturing of equipment for RE power generation	1	1.00
HV 9: Information Technology Industries	-	-
HV 10: Temporary Connection at HV	4	5.78

### **7.3 Distribution Loss and Energy Balance**

#### **CSPDCL's Submission**

CSPDCL submitted that it has considered Intra-state transmission loss of 3.22% as approved in the MYT Order. CSPDCL has considered the inter-State transmission losses of 3.63%, which is the weighted average transmission loss of actual last 12 months of Western Region. CSPDCL has considered distribution loss of 20% as specified in Regulation 71 of the MYT Regulations, 2015.

#### **Commission's Views**

As discussed in earlier Chapter of this Order, the Commission has considered the Distribution loss of 16.50% for FY 2018-19 for below 33 kV system as per the targets set under UDAY scheme. The Commission has considered the intra-State Transmission loss of 3.22% as approved in the MYT Order and inter-State transmission loss of 3.66% for FY 2018-19, which is the average of the actual loss for April 2016 to March 2017. The Energy Balance approved by the Commission for FY 2018-19 is shown in the following Table:

**Table 7-3: Energy Balance approved by the Commission for FY 2018-19**

<b>Particulars</b>	<b>Formula</b>	<b>MYT Order</b>	<b>CSPDCL Petition</b>	<b>Approved in this Order</b>
LV Sales	A	12,441	12,601	12,455
HV Sales (11 kV & 33 kV)	B	6,422	6,417	6,356
<b>Sub-total</b>	<b>C=A+B</b>	<b>18,863</b>	<b>19,018</b>	<b>18,811</b>
<b>Distribution Loss below 33 kV (%)</b>	<b>D</b>	<b>21.00%</b>	<b>20.00%</b>	<b>16.50%</b>
Distribution Loss below 33 kV (MU)	E	5,014	4,754	3,717
Gross Energy requirement at 33 kV level	F=C+E	23,877	23,772	22,528
Less: Direct Input to distribution at 33 kV level	G	1,625	257	257
Net Energy Input required at Distribution Periphery at 33 kV level	H=F-G	22,252	23,515	22,271
Sales to HV consumers (132 kV & 220 kV)	I	2,928	2,742	2,864
<b>Net Energy requirement at Distribution periphery</b>	<b>J=H+I</b>	<b>25,180</b>	<b>26,257</b>	<b>25,135</b>
Distribution loss including EHV Sales	K	18.71%	17.93%	14.64%
Intra-State Transmission loss (in %)	L	3.22%	3.22%	3.22%
Intra-State Transmission loss (in MU)	M	838	874	836
<b>Net energy requirement at Transmission periphery</b>	<b>N=J+M</b>	<b>26,018</b>	<b>27,130</b>	<b>25,971</b>

## **7.4 Power Purchase Expenses**

### **CSPDCL's Submission**

CSPDCL submitted that it has broadly categorised the sources of energy into Generation from CSPGCL, Allocation (firm and non-firm) from CGS, Captive Power Plants (CPPs), Independent Power Producers (IPPs), Biomass, and Solar Power Plants and Short-Term/UI/Bilateral purchases, etc. CSPDCL has projected the purchase of power from various sources as detailed below:

### **Power Purchase from Central Generating Stations**

CSPDCL submitted that it has firm allocation of power from CGS like Korba Super Thermal Power Station (STPS), Vindhyachal Thermal Power Station, Sipat Super Thermal Power Station, Kahalgaon Super Thermal Power Station, Mauda Super Thermal Power Station, Solapur Super Thermal Power Station, and Tarapur Atomic Power Stations, to meet its energy requirement.

The power purchase cost comprises fixed charges and energy charges for stations having two-part tariff, i.e., NTPC, NPCL and others. CSPDCL has considered the average energy charge (excluding FCA) of the latest six months (April 2017 to September 2017) for projecting the energy charge for FY 2018-19. The fixed charges have been considered as per the latest Tariff Orders issued by the Central Electricity Regulatory Commission (CERC). CSPDCL, while estimating the costs, has considered only the fixed charge and energy charge and has estimated that any cost over and above the same would be passed through on actual basis.

CSPDCL estimated the gross energy availability from the existing stations based on the allocated capacity and the average Plant Load Factor (PLF) for the past five years, i.e., from FY 2012-13 to FY 2016-17 (till August). The same has been considered for FY 2018-19 for calculating the gross energy availability for the State. For the recently commissioned stations, CSPDCL has considered PLF of 80%.

CSPDCL submitted that the expected commissioning date of upcoming Lara STPS Units I and II are April 1, 2018 and September 1, 2018 respectively. CSPDCL has submitted that while estimating the power purchase cost for FY 2018-19 from Lara, it has considered the average power purchase cost at Rs. 3.90/kWh (equivalent to Marwa TPS).

The summary of the power purchase quantum and cost as submitted by CSPDCL for CGS is shown in the Table below:

**Table 7-4: Power Purchase from CGS for FY 2018-19 as projected by CSPDCL**

Source	Units Purchased (MU)	Fixed Cost (Rs. crore)	Variable Cost (Rs. crore)	Total Cost (Rs. crore)
Korba STPS	1,507.71	79.31	202.56	281.87
Korba STPS Unit VII	550.24	73.38	70.28	143.65
Vindhyachal	1,356.10	196.63	201.33	397.96
Sipat STPS	3,139.67	426.13	384.56	810.68
Mauda STPS	984.51	140.40	262.81	403.21
NTPC - SAIL (NSPCL)	297.95	52.71	46.41	99.12
Lara STPS	4,143.32	-	1,615.90	1,615.90
<i>Unit I</i>	2,620.99	-	1,022.19	1,022.19
<i>Unit II</i>	1,522.33	-	593.71	593.71
Solapur STPS	520.59	19.63	128.09	147.72
Kahalgaon STPS	182.63	22.99	44.41	67.40
Tarapur (Unit 3 & 4)	303.97	-	93.30	93.30
Hirakud (OHPCL)	13.95	-	2.87	2.87
<b>Total Central Generating Stations</b>	<b>13,000.64</b>	<b>1,011.17</b>	<b>3,052.51</b>	<b>4,063.68</b>

#### **Power Purchase from State Generating Stations**

CSPDCL submitted that it has allocation of 3,312.20 MW from CSPGCL. CSPDCL, while estimating the costs, has considered the fixed charges as approved by the Commission in the MYT Order. CSPDCL has considered the average energy charge (excluding FCA) of the latest six months (April 2017 to September 2017) for projecting the energy charge for FY 2018-19 and has estimated that any cost over and above would be passed through on actual basis.

CSPDCL has submitted that for projecting the quantum of energy purchased from each State Generating Station, it has considered PLF as approved by the Commission in the MYT Order for FY 2018-19.

For State Hydro and Co-generation Plant of CSPGCL, it has considered the latest Tariff Order of the Commission and cost as per latest figures available for the last 6 months (April 2017 to September 2017). CSPDCL submitted that it has considered sale of the power from Marwa to Telangana at State periphery for FY 2018-19 under back-to-back arrangement without any trading margin at the rate approved by the Commission, i.e., Rs 3.90 /kWh.

The total quantum and cost of power purchase from CSPGCL is shown below:

**Table 7-5: Power Purchase from CSPGCL for FY 2018-19 as submitted by CSPDCL**

<b>Source</b>	<b>Units Purchased (MU)</b>	<b>Fixed Cost (Rs crore)</b>	<b>Variable Cost (Rs crore)</b>	<b>Total Cost (Rs crore)</b>
KTPS – East	1,714.28	352.29	330.34	682.63
DSPM	3,387.93	500.65	523.44	1,024.09
Hasdeo TPS	4,942.28	591.84	734.92	1,326.76
KTPS- West	3,527.54	711.18	445.88	1,157.06
Marwa	7,055.09	-	2,751.48	2,751.48
HPS Bango	271.26	-	25.01	25.01
HPS Korba Mini Hydro	4.38	-	1.67	1.67
HPS Gangrel	25.75	-	9.48	9.48
HPS Sikaser	24.04	-	6.46	6.46
Co-Gen Kawardha	47.70	-	22.75	22.75
<b>Total State Generating Stations</b>	<b>21,000.24</b>	<b>2,155.96</b>	<b>4,851.42</b>	<b>7,007.38</b>

#### **Power Purchase from Renewable Sources**

CSPDCL submitted that the Commission in CSERC (Renewable Purchase Obligation and REC Framework Implementation) Regulations, 2013, has specified the trajectory for RPO compliance till FY 2015-16. Further, the Commission, in MYT Order, has increased Solar RPO by 0.50% for FY 2016-17. CSPDCL has considered the same percentage of total consumption for meeting RPO from FY 2018-19 with an increase of 0.50% in Solar, as shown in the following Table:



**Table 7-6: Minimum quantum of electricity to be procured through Renewable Energy Sources**

Particulars	FY 2018-19
Solar	1.50%
Bio Mass	3.75%
Other RE (Hydro, Wind, Co-generation etc.)	2.50%

CSPDCL submitted that it has purchased solar power from SECI in FY 2016-17 and proposed to meet Solar Obligation from physical power only. The power purchase from Solar has been estimated at the cost of Rs. 6.50/kWh for the entire Control Period, whereas the power purchase from biomass and other RE has been estimated @ Rs. 5.50/kWh and Rs. 5.00/kWh in FY 2017-18 and FY 2018-19, respectively. Based on the above, the quantum of Renewable Energy required to be purchased by CSPDCL in FY 2018-19 is shown in the following Table:

**Table 7-7: Purchase of RE in FY 2018-19 as projected by CSPDCL**

Source	Units Purchased (MU)	Fixed Cost (Rs crore)	Variable Cost (Rs crore)	Total Cost (Rs crore)
Bio-mass	946.57	-	520.61	520.61
Solar	530.28	-	344.68	344.68
Hydel/Other RE	346.30	-	173.15	173.15
<b>Total Renewables</b>	<b>1,823.15</b>	<b>-</b>	<b>1,038.44</b>	<b>1,038.44</b>

#### **Power Purchase from Concessional Sources**

CSPDCL submitted that it has projected availability from concessional sources of power purchase as per current availability @ Rs 1.90/kWh and Rs 2.00/kWh during FY 2018-19 as shown in the following Table:

**Table 7-8: Concessional Power Purchase as projected by CSPDCL for FY 2018-19**

Source	Units Purchased (MU)	Fixed Cost (Rs. crore)	Variable Cost (Rs. crore)	Total Cost (Rs. crore)
At Rate of Rs. 2.00/kWh	112.13	-	22.43	22.43
At Rate of Rs. 1.90/kWh	2,404.80	-	456.91	456.91
<b>Total Concessional Power</b>	<b>2,516.92</b>	<b>-</b>	<b>479.34</b>	<b>479.34</b>

### Power Purchase from Short-Term Sources

CSPDCL submitted that while there is estimated net surplus of power, as seen from past trends, there is still a shortage of power during certain durations of day/month/year. Accordingly, CSPDCL submitted that it has considered short-term purchase of 100 MU from Power Exchange and availability of 600 MU from unscheduled sources and requested the Commission to approve the same for FY 2018-19 as shown in the following Table:

**Table 7-9: Short-term Power Purchase as projected by CSPDCL for FY 2018-19**

Source	Units Purchased (MU)	Fixed Cost (Rs crore)	Variable Cost (Rs crore)	Total Cost (Rs crore)
IEX/PXIL/Traders (Short Term Purchase)	100.00	-	32.50	32.50
Unscheduled sources	600.00	-	96.00	96.00
<b>Total Short-Term Purchase</b>	<b>700.00</b>	<b>-</b>	<b>128.50</b>	<b>128.50</b>

### Transmission Charges – Inter-State, Intra-State and CSLDC Charges

CSPDCL has to pay Transmission Charges to PGCIL for use of transmission facilities enabling power drawal from Western and Eastern region. The PGCIL Charges have been calculated as per prevailing CERC Regulations for Point of Connection (PoC) rates and transmission losses and are as per latest CERC Order No. L-1/44/2010-CERC dated October 31, 2017.

Further, CSPDCL submitted that it has considered intra-State Transmission Charges and CSLDC charges as approved by the Commission in the MYT Order.

### Inter-State Sale

CSPDCL has considered the sale of power from Marwa at State periphery at Rs. 3.90/kWh and the sale of balance surplus power has been estimated at Rs 3.35/kWh (as approved by the Commission in the MYT Order) for FY 2018-19. CSPDCL submitted that the sale of electricity other than to retail consumers is not within the regulatory purview of the Commission. As electricity cannot be stored, the surplus energy has to be sold as and when available at the market realised rates. The availability of surplus energy is dependent on the consumption of the consumers and not on the Licensee. The surplus energy is always ensured to be

sold with the objective of maximising the revenue from such sale and to pass on the accrued benefit to the retail consumers.

**Commission’s View**

The details submitted by CSPDCL have been analysed in detail and additional information was asked on the same. The Commission has approved the Power Purchase expenses for FY 2018-19 in the following manner:

- (a) The quantum of purchase from CGS has been considered same as submitted by CSPDCL. The fixed charges for such CGS have been considered based on latest applicable CERC Order.
- (b) The purchase from Lara STPS has been considered same as proposed by CSPDCL. It may be noted that the Power Purchase Agreement (PPA) between CSPDCL and NTPC-Lara is under consideration before the Commission. The Commission clarifies that the inclusion of this quantum of energy in the power purchase of CSPDCL does not imply de-facto approval for the PPA.
- (c) The actual rates of power purchase from different sources of power, other than CSPGCL, in the first 5 months of FY 2017-18, i.e., April to August, 2017, have been considered as the base rate of power purchase in FY 2017-18.
- (d) An increase of 5% has been considered on the above rates, and any further variation in rates will be adjusted through the FCA and VCA mechanism. However, no escalation in energy charge has been considered for power purchased from State Generating Stations. The energy charge rate as approved by the Commission for CSPGCL in the Tariff Order for FY 2017-18 has been considered for projecting the power purchase expenses for FY 2018-19.
- (e) The RPO percentage has been considered in accordance with the CSERC (RPO and REC Framework Implementation) Regulations, 2016 notified on December 1, 2016. The following RPO percentages are applicable on the quantum of sales to LV, HV and EHV categories for CSPDCL in FY 2018-19:

<b>Year</b>	<b>Solar</b>	<b>Non-Solar</b>	<b>Total</b>
FY 2018-19	3.50%	7.50%	11.00%

- (f) The quantum of purchase of RE has been considered based on the actual purchase in FY 2016-17. The shortfall in Solar and Non-solar RE purchase has been considered as being met through purchase of Renewable Energy Certificates (RECs) at the floor rates of Re. 1.00 per kWh and Rs. 1.50 per kWh for Solar and Non-Solar REC, respectively.
- (g) The purchase of concessional power from various sources of power purchase has been provisionally estimated at an average rate of Rs. 1.80 per kWh. The Petition for determination of the rate for such purchase is presently under consideration of the Commission, and any variation between the estimated average rate and the approved billing rate shall be passed through/recovered, as the case may be.
- (h) To meet the demand-supply gap, the Commission has considered short-term purchase of 2100 MU at rate of Rs. 3.41/kWh and 600 MU at rate of 1.68/kWh from unscheduled sources.
- (i) The Commission has accepted CSPDCL's proposal of selling the Power generated by Marwa to Telangana. The Commission has estimated the sale of power to Telangana at rate of Rs. 3.97/kWh, after taking into account the trading margin of 7 paise/kWh, as considered in the Tariff Order for FY 2017-18. It may be worthy to mention here that the energy charge rate as approved in Tariff Order for FY 2016-17 has not been revised or re-determined and any variation in fuel cost has to be passed on to ultimate buyer of power.
- (j) As regards the sale of surplus power, the Commission notes that CSPDCL sold energy quantum of 2789 MU at rate of Rs. 3.72/kWh in FY 2016-17. The estimated quantum of power to be sold during FY 2018-19 is higher than the actual quantum sold in FY 2016-17. The sale of surplus power for such increased quantum at rate of Rs. 3.72/kWh may not be possible considering the changing market scenario. The Commission has estimated the lower energy rate for such quantum of sale of surplus power. Hence, the Commission has estimated the sale of surplus power at weighted average rate of 3.20/kWh, for FY 2018-19. The actual quantum and rate of sale of surplus power shall be considered at the time of truing up for FY 2018-19. On the legal point raised by CSPDCL that sale of surplus power of Distribution Licensee does not come within the purview of the Commission, CSPDCL is advised to go through the Judgments pronounced by Hon'ble APTEL on the jurisdiction of sale of surplus

power of the Distribution Licensee. CSPDCL has raised this issue before Hon'ble APTEL and this issue of jurisdiction of CSERC has already been settled, but it is unfortunate to note that CSPDCL tries to repeatedly remind the Commission in its Tariff Petitions regarding the jurisdiction, thereby ignoring and having disregard to Judgments of Hon'ble APTEL.

- (k) The inter-State transmission charges payable to PGCIL have been accepted as approved by the Commission in MYT Order for FY 2018-19.
- (l) The intra-State transmission charges have been considered based on the ARR of CSPTCL for FY 2018-19, approved in the MYT Order.
- (m) The CSLDC charges have been considered based on the ARR of CSLDC for FY 2018-19, approved in the MYT Order.

The summary of power purchase cost for FY 2018-19 as submitted by CSPDCL and approved by the Commission in this Order, is shown in the Table below:

**Table 7-10: Power Purchase Cost approved by the Commission for FY 2018-19**

Sr. No.	Particulars	MYT Order			CSPDCL Petition			Approved in this Order		
		Units (MU)	Total Cost (Rs crore)	Rs/ kWh	Units (MU)	Total Cost (Rs crore)	Rs/ kWh	Units (MU)	Total Cost (Rs crore)	Rs/ kWh
<b>1</b>	<b>Central Generating Stations</b>	<b>15479.11</b>	<b>4772.54</b>	<b>3.08</b>	<b>13,000.64</b>	<b>4,063.68</b>	<b>3.13</b>	<b>12,133.56</b>	<b>3,783.45</b>	<b>3.12</b>
a	<i>NTPC</i>	14354.53	4413.46	3.07	12,384.77	3,868.40	3.12	11,517.69	3,581.04	3.11
b	<i>NTPC - SAIL (NSPCL)</i>	322.76	131.20	4.06	297.95	99.12	3.33	297.95	101.44	3.40
c	<i>NPCIL</i>	787.94	225.79	2.87	303.97	93.30	3.07	303.97	97.96	3.22
d	<i>Others</i>	13.88	2.08	1.50	13.95	2.87	2.05	13.95	3.01	2.16
<b>2</b>	<b>State Generating Stations</b>	<b>13535.93</b>	<b>3758.01</b>	<b>2.77</b>	<b>21,000.24</b>	<b>7,007.38</b>	<b>3.34</b>	<b>20,971.46</b>	<b>6,993.66</b>	<b>3.33</b>
a	<i>CSPGCL – Thermal</i>	13439.01	3755.22	2.79	20,627.11	6,942.02	3.37	20,898.37	6,967.03	3.33
b	<i>CSPGCL – Renewables</i>	96.92	45.51	4.71	373.13	65.36	1.75	73.09	26.63	3.64
<b>3</b>	<b>Short Term Purchase</b>	<b>1245.28</b>	<b>435.85</b>	<b>3.50</b>	<b>700.00</b>	<b>128.50</b>	<b>1.84</b>	<b>2,700.00</b>	<b>817.43</b>	<b>3.03</b>
<b>4</b>	<b>Concessional Power - Through CSPTrdCL</b>	<b>2154.96</b>	<b>410.39</b>	<b>1.90</b>	<b>2,516.92</b>	<b>479.34</b>	<b>1.90</b>	<b>2516.92</b>	<b>455.29</b>	<b>1.78</b>
<b>5</b>	<b>Others – Renewables</b>				<b>1,823.15</b>	<b>1,038.44</b>	<b>5.70</b>	<b>1,208.58</b>	<b>920.72</b>	<b>7.62</b>
a	<i>Biomass</i>	1063.35	584.84	5.50	946.57	520.61	5.50	911.31	541.02	5.94
b	<i>Solar</i>	296.17	192.51	6.51	530.28	344.68	6.50	290.66	138.84	4.78
c	<i>Hydel/Other RE</i>	429.89	214.94	5.00	346.30	173.15	5.00	6.61	4.56	6.89

Sr. No.	Particulars	MYT Order			CSPDCL Petition			Approved in this Order		
		Units (MU)	Total Cost (Rs crore)	Rs/ kWh	Units (MU)	Total Cost (Rs crore)	Rs/ kWh	Units (MU)	Total Cost (Rs crore)	Rs/ kWh
d	<i>Solar RECs</i>	-	-	-	-	-	-	-	66.57	-
E	<i>Non-Solar RECs</i>	-	-	-	-	-	-	-	169.73	-
<b>6</b>	<b>Transmission Charges</b>					<b>1,414.39</b>			<b>1349.88</b>	
A	<i>Inter-State Transmission Charges</i>		341.63			406.14			341.63	
b	<i>Intra-State Transmission Charges</i>		993.46			993.46			993.46	
c	<i>CSLDC Charges</i>		14.79			14.79			14.79	
<b>7</b>	<b>Gross Power Purchase Cost</b>	<b>34204.70</b>	<b>11761.68</b>	<b>3.44</b>	<b>39,040.95</b>	<b>14,131.73</b>	<b>3.62</b>	<b>39,530.52</b>	<b>14,320.42</b>	<b>3.62</b>
<b>8</b>	<i>Less: Sale of Surplus Power</i>	3529.08	1182.24	3.35	12,055.77	4,414.22	3.66	6,337.19	2,030.17	3.20
	<i>Less: Sale to Telangana</i>		48.99					6,827.91	2,710.68	3.97
<b>9</b>	<b>Net Power Purchase Cost</b>	<b>34204.70</b>	<b>10530.45</b>	<b>3.08</b>	<b>26,985.18</b>	<b>9,717.51</b>	<b>360</b>	<b>26,365.43</b>	<b>9,579.57</b>	<b>3.63</b>

## 7.5 Non-Tariff Income for FY 2018-19

### Commission's View

The Commission has re-determined the Non-Tariff Income for FY 2018-19 as Rs. 247.72 Crore after applying escalation of 15% on the actual Non-Tariff Income of Rs. 187.31 Crore for FY 2016-17.

## 7.6 Revised ARR for FY 2018-19

Based on the above, the revised ARR approved by the Commission for FY 2018-19 is shown in the Table below:

**Table 7-11: ARR approved by the Commission for FY 2018-19 (Rs. Crore)**

Sr. No	Particulars	FY 2018-19		
		MYT Order	CSPDCL Petition	Approved in this Order
<b>A</b>	<b>Power Purchase Expenses</b>	<b>11,761.68</b>	<b>14,131.73</b>	<b>14,320.42</b>
1	<i>Power Purchase Cost</i>	<i>10,411.80</i>	<i>12,717.34</i>	<i>12,970.54</i>
2	<i>Inter-State Transmission charges (PGCIL)</i>	<i>341.63</i>	<i>406.14</i>	<i>341.63</i>
3	<i>Intra-State Transmission Charges</i>	<i>993.46</i>	<i>993.46</i>	<i>993.46</i>
4	<i>CSLDC Charges</i>	<i>14.79</i>	<i>14.79</i>	<i>14.79</i>
<b>B</b>	<b>Operation &amp; Maintenance Expenses</b>	<b>1,610.39</b>	<b>1,610.39</b>	<b>1,610.39</b>
1	<i>Net Employee Expenses</i>	<i>892.80</i>	<i>892.80</i>	<i>892.80</i>
2	<i>Net Administrative and General Expenses</i>	<i>154.48</i>	<i>154.48</i>	<i>154.48</i>
3	<i>Net Repair and Maintenance charges</i>	<i>143.57</i>	<i>143.57</i>	<i>143.57</i>
4	<i>Terminal Benefits (Pension &amp; Gratuity)</i>	<i>355.31</i>	<i>355.31</i>	<i>355.31</i>
5	<i>Interim Wage Relief</i>	<i>64.23</i>	<i>64.23</i>	<i>64.23</i>
<b>C</b>	<b>Interest &amp; Finance Expenses</b>	<b>158.92</b>	<b>114.37</b>	<b>158.92</b>
1	Interest on Loan	96.39	96.39	96.39
2	Interest on Security Deposit	109.13	110.23	109.13
3	Interest on Working Capital	(46.60)	(92.25)	(46.60)
<b>D</b>	<b>Other Expenses</b>	<b>136.22</b>	<b>136.22</b>	<b>136.22</b>
1	Depreciation	136.22	136.22	136.22
<b>E</b>	<b>Gross Expenditure (A+B+C+D)</b>	<b>13,667.21</b>	<b>15,992.71</b>	<b>16,225.95</b>
<b>F</b>	<b>Return on Equity</b>	<b>234.45</b>	<b>234.45</b>	<b>234.45</b>
<b>G</b>	<b>Gross ARR (E+F)</b>	<b>13,901.66</b>	<b>16,227.16</b>	<b>16,460.40</b>



Sr. No	Particulars	FY 2018-19		
		MYT Order	CSPDCL Petition	Approved in this Order
<b>H</b>	<b>Less: Other Income</b>	<b>1,621.85</b>	<b>4,804.84</b>	<b>5,074.26</b>
1	<i>Non-Tariff Income</i>	304.93	304.93	247.72
2	<i>Trading of Electricity</i>	1,231.23	4,414.22	4,740.85
3	<i>Wheeling Charges, Open Access &amp; Cross Subsidy Charges</i>	85.69	85.69	85.69
<b>G</b>	<b>Net Annual Revenue Requirement</b>	<b>12,279.81</b>	<b>11,422.33</b>	<b>11,386.14</b>

## 7.7 Revenue at existing tariff

### CSPDCL's Submission

CSPDCL submitted that it has computed Revenue from Sale of Power for FY 2018-19 based on the tariff determined by the Commission in the Tariff Order for FY 2017-18. CSPDCL has estimated the Revenue from sale of electricity at existing tariff as Rs. 13,898.54 Crore.

### Commission's View

The Commission has estimated the revenue from sale of electricity at existing tariff as Rs. 13,963.80 Crore, on the basis of the prevailing tariff and applicable terms and conditions as specified in the Tariff Schedule for each consumer category, and the category-wise sales projected by the Commission, as discussed earlier.

## 7.8 Standalone Revenue Gap/(Surplus)

Based on the estimation of ARR and Revenue at existing tariff, the standalone Revenue Gap/Surplus for FY 2018-19 approved by the Commission is shown in the Table below:

**Table 7-12: Standalone Revenue Gap/(Surplus) approved by the Commission for FY 2018-19 (Rs. Crore)**

Sl.	Particulars	CSPDCL's Petition	Approved in this Order
1	Aggregate Revenue Requirement	11,422.33	11,386.14
2	Income from sale of Power at Existing Tariff	13,898.54	13,963.80
3	Standalone Revenue Gap/(Surplus)	2,476.22	(2,577.66)

## 8 TARIFF PRINCIPLES AND DESIGN

### 8.1 Cumulative Revenue Gap/(Surplus) for FY 2018-19

#### CSPDCL's Submission

CSPDCL submitted that there is net standalone Revenue Surplus of Rs. 2,476.22 Crore in FY 2018-19. However, considering the net Revenue Gap of Rs. 2,584.89 Crore (Revenue Gap of Rs. 2,297.68 Crore plus carrying cost) carried forward after provisional true-up for FY 2016-17, there is an overall net Revenue Gap of Rs. 108.68 Crore in FY 2018-19.

#### Commission's View

The Commission notes that CSPDCL has not factored in the impact of the Revenue Gap/(Surplus) of CSPGCL, CSPTCL and CSLDC, arising after provisional true-up for FY 2016-17 in the revised ARR for FY 2018-19, as CSPDCL has adjusted the same in the provisional true-up for FY 2016-17 itself. As elaborated earlier in the Provisional true-up, the Commission has not adjusted the same in the provisional true-up for FY 2016-17. The Commission has adjusted the Revenue Gap/(Surplus) of CSPDCL, CSPGCL, CSPTCL and CSLDC after provisional true-up for FY 2016-17 including carrying cost, as approved in earlier Chapters of this Order, in the revised ARR for FY 2018-19 for CSPDCL, to arrive at net ARR for tariff recovery.

The cumulative Revenue Gap approved by the Commission for CSPDCL for FY 2018-19, after considering all the above Revenue Gap/(Surplus) of CSPDCL, CSPGCL, CSPTCL, and SLDC for FY 2016-17, is shown in the Table below:

**Table 8.1-1: Approved Cumulative Revenue Gap/(Surplus) for FY 2018-19**

Sl.	Particulars	CSPDCL Petition	Approved
1	Standalone Revenue Gap/(Surplus) for CSPDCL	(2,476.21)	(2,577.66)
2	Revenue Gap/(Surplus) for CSPDCL for FY 2016-17 including carrying cost	2,584.89	2,357.60
3	Revenue Gap/(Surplus) for CSPGCL for FY 2016-17 including carrying cost	-	(279.52)
4	Revenue Gap/(Surplus) for CSPTCL for FY 2016-17 including carrying cost	-	(29.98)
5	Revenue Gap/(Surplus) for CSLDC for FY 2016-17 including carrying cost	-	(1.26)
6	<b>Cumulative Revenue Gap/(Surplus)</b>	<b>108.68</b>	<b>(530.83)</b>

Thus, the Commission has determined a cumulative Revenue Surplus of Rs. 530.83 crore for FY 2018-19, as against the cumulative Revenue Gap of Rs. 108.68 crore projected by CSPDCL. The treatment of this Revenue Surplus is elaborated in subsequent paragraphs.

The Average Cost of Supply (ACoS) approved by the Commission for FY 2018-19 is shown in the Table below:

**Table 8.1-2: Approved Average Cost of Supply for FY 2018-19**

<b>Particulars</b>	<b>Approved</b>
ARR for FY 2018-19 (Rs. Crore)	11,386.14
Total Estimated Sales for FY 2017-18 (MU)	21,674.76
<b>Average Cost of Supply (Rs./kWh)</b>	<b>5.25</b>
Adjusted ARR for FY 2018-19 after considering the Cumulative Revenue Gap/(Surplus) (Rs. Crore)	13,432.98
<b>Average Cost of Supply on adjusted ARR (Rs./kWh)</b>	<b>6.20</b>

## 8.2 Voltage-wise Cost of Supply (VCOS)

### CSPDCL's Submission

CSPDCL submitted that the Hon'ble APTEL in its Judgment in Appeal No 102 of 2010 dated May 30, 2011 has opined that embedded cost approach requires a detailed database of information regarding voltage of supply, power factor, load factor, time of use of electricity, quantity of electricity consumed, AT&C losses, etc. Most of the above-mentioned information is not readily available and taking into account the difficulties faced by SERCs, the Hon'ble APTEL has suggested that, in absence of adequate data, it would be appropriate to determine the Voltage-wise cost of supply (VCoS) taking into account the major cost element which would be applicable to all the categories of consumers connected to the same voltage level.

CSPDCL further submitted that the Hon'ble APTEL has concluded that the mandate of the Tariff Policy to limit cross subsidies within (+/-) 20% of the ACoS can be applied to determine the category-wise retail supply tariff. However, determination of VCoS is required to evaluate cross subsidies prevalent at various voltages. In the absence of detailed study or requisite data, the Hon'ble APTEL has further advised that the power purchase cost, which is the major component of the Discom's costs, can be apportioned to different voltage levels in proportion to the sale and losses at the respective voltage levels. As regards the other costs such as Return on Equity,

Interest on Loan, depreciation, Interest on Working Capital and O&M costs, these costs can be pooled and apportioned equitably on pro-rata basis to all voltage levels.

The Commission in previous Tariff Order has directed CSPDCL to compute the VCoS to ensure that the tariff progressively reflects the cost of supply and cross-subsidy is reduced within a specific period. CSPDCL submitted that the MYT Regulations, 2015, which specifies the distribution loss trajectory, do not provide segregation of normative losses into voltage-wise technical and commercial losses. The determination of voltage-wise losses would require detailed technical studies of the Distribution network, which would require time, efforts, etc.

Based on the approach described by the Hon'ble APTEL, CSPDCL using different factors and assumptions, has computed the VCoS as under:

- (a) As a first step in the direction of working out category-wise cross subsidy based on VCoS, CSPDCL has attempted to determine the same based on Hon'ble APTEL Judgement. The category-wise cross subsidy thus worked out is indicative in nature, not accurate and based on sample feeder-wise data, as the base data for the same needs to be duly culled out based on actual details.
- (b) VCoS has been computed for above 33 kV and below 33 kV and 11 kV (inclusive of LT) categories only, as 11 kV sales are bare minimum.
- (c) Methodology of allocation of losses as well as costs is as per the last Tariff Order issued by the Commission.
- (d) Total technical losses at EHV and 33 kV levels have been considered the same as approved by the Commission.

CSPDCL submitted the VCoS for FY 2018-19 as shown in the following Table:

**Table 8.2-1: Voltage-wise Cost of Supply for FY 2018-19 as submitted by CSPDCL**

Sl.	Particulars	UoM	EHV	33 kV	11 kV and LV	Total
1	Energy Sales	MU	-	6,150.99	12,866.66	19,017.65
2	Distribution Loss	%	-	4.85%	25.66%	20.00%
3	Distribution Loss	MU	-	313.53	4,440.88	4,754.41
4	Energy requirement at 33 kV	MU	-	6,464.52	17,307.54	23,772.06
5	Energy injected into Distribution system at 33/kV	MU	-	69.93	187.22	257.15
6	Net Energy requirement at 33 kV Level	MU	-	6,394.60	17,120.32	23,514.91
7	EHV Sales	MU	2,741.84	-	-	2,741.84

Sl.	Particulars	UoM	EHV	33 kV	11 kV and LV	Total
8	Energy requirement for Distribution	MU	2,741.84	6,394.60	17,120.32	26,256.75
9	Transmission Loss	%	3.22%	3.22%	3.22%	
10	Energy requirement at G<>T Interface	MU	2,833.07	6,607.35	17,689.93	27,130.35
11	Avg. Power Purchase Cost Rate	Rs./kWh	3.58	3.58	3.58	
12	Power Purchase Cost	Rs crore	1,014.74	2,366.61	6,336.16	9,717.51
13	Other Cost	Rs crore	178.02	415.19	1,111.60	1,704.81
14	Gap Cost for only for FY 17 including Past Gaps as per latest petition	Rs crore	269.93	629.53	1,685.44	2,584.89
15	Total Cost	Rs crore	1,462.69	3,411.33	9,133.19	14,007.22
16	Energy Sales	MU	2,741.84	6,150.99	12,866.66	21,759.49
17	<b>Voltage Wise Cost to Serve</b>	<b>Rs/kWh</b>	<b>5.33</b>	<b>5.55</b>	<b>7.10</b>	<b>6.44</b>

### Commission's View

As discussed in the Tariff Order for FY 2017-18, the Commission has noted the ruling of the Hon'ble APTEL in its Judgment dated March 24, 2015 in Appeal No. 103 of 2012, on the issue of determination of tariff and cross-subsidy with reference to the VCoS.

The Commission has taken due cognisance of the submissions of CSPDCL. It has been observed that CSPDCL has computed VCoS for FY 2018-19 in line with the approach adopted by the Commission in previous year's Tariff Order. Further, CSPDCL submitted that the determination of voltage-wise losses requires detailed technical studies of distribution system, which would require time. The Commission notes that at present, the voltage-wise losses available are based on certain assumptions. The actual voltage-wise losses would be available only after the studies carried out by CSPDCL. In view of the above, the Commission determines the VCoS on the basis of available data.

Further, the framework prescribed by the Hon'ble APTEL requires that the category-wise tariffs be determined on the basis of ACoS as well as VCoS, and also that the tariffs for all categories should be within  $\pm 20\%$  of the overall ACoS for the Distribution Licensee. The Commission feels that in the absence of a realistic assessment of the voltage-wise losses, the determination of VCoS may lead to incorrect conclusions. However, the Hon'ble APTEL has directed that the tariffs and

cross-subsidies have to be determined keeping in view the VCoS, while ensuring that the tariffs are within  $\pm 20\%$  of ACoS. Further, there is no denying that the cost of supply at higher voltages, i.e., 220 kV, 132 kV, etc., will be lower than the cost of supply at lower voltages, i.e., LT, 11 kV, etc., on account of the lower distribution losses at higher voltages and non-utilisation of the assets at lower voltages for supplying electricity to the consumers at higher voltages.

Hence, in this Order, the Commission has determined the category-wise tariffs on the basis of ACoS, while at the same time moving towards the philosophy that the tariffs for the consumers taking supply at higher voltages is lower than that for consumers taking supply at lower voltages. However, due to historical reasons, this objective cannot be achieved immediately, and hence, the gradual movement initiated in the MYT Order has been carried forward in this Order.

The VCoS for FY 2018-19, as estimated by the Commission based on approved ARR and available data, is given in the Table below:

**Table 8.2-2: VCOS for FY 2018-19 as calculated by Commission**

Sr. No.	Particulars	Units	FY 2018-19			
			EHV	33 kV	11 kV and LV	Total
1	Energy Sales	MU	-	5,705.57	13,105.19	18,810.75
2	Distribution Loss	%	-	4.85%	20.73%	16.50%
3	Energy input at 33 kV	MU	-	5,996.39	16,531.46	22,527.85
4	Less: Direct input to Distribution at 33/11 kV	MU		69.93	187.22	257.15
5	Energy input at Discom level	MU		5,926.46	16,344.24	22,270.70
6	EHV Sales	MU	2,864.01	-	-	2,864.01
7	Energy requirement for Distribution	MU	2,864.01	5,926.46	16,344.24	25,134.71
8	Transmission Loss	%	3.22%	3.22%	3.22%	3.22%
9	Energy requirement at G<>T Interface	MU	2,959.30	6,123.64	16,888.03	25,970.97
10	Avg. Power Purchase Cost Rate	Rs./kWh	3.69	3.69	3.69	3.69
11	Power Purchase Cost	Rs. Crore	1,091.56	2,258.75	6,229.26	9,579.57
12	Other Cost	Rs. Crore	439.08	908.59	2,505.74	3,853.41
13	Total Cost	Rs. Crore	1,530.64	3,167.33	8,735.00	13,432.98
14	Energy Sales	MU	2,864.01	5,705.57	13,105.19	21,674.76
15	<b>Cost of Supply</b>	<b>Rs./kWh</b>	<b>5.34</b>	<b>5.55</b>	<b>6.67</b>	<b>6.20</b>

### 8.3 Tariff Proposal for FY 2018-19

#### CSPDCL's Submission

CSPDCL has proposed the following in its Tariff Proposal:

- (a) CSPDCL has proposed uniform increase of 5 paise per unit in energy charges across all categories (except HV-1: Railway Traction)
- (b) CSPDCL has proposed the energy charges of Rs. 4.20/kVAh for HV-1: Railway Traction for FY 2018-19.
- (c) CSPDCL has proposed the change in applicability of LV-1: Domestic as under:

*This tariff is applicable to domestic light and fan and power used for all domestic appliances, in residential premises, orphanages, homes for old/physically challenged people and homes for destitute; dharamshalas; student hostels; working women's hostels; ashrams; schools and hospitals (including X-rays, etc.) run by charitable trusts; Government hospitals/dispensaries, (excluding private clinics and nursing homes); Government Schools; Government aided cultural and educational institutes; farm houses; mosques; temples; churches, gurudwaras; religious and spiritual institutions; **offices of registered political parties**; water works and street lights in private colonies and cooperative societies; common facilities such as lighting in staircase, lifts, fire-fighting in multi-storied housing complex, light and fan in khalihan, kothar, byra where agriculture produce is kept, post office at residence of a villager; residential premises of professionals such as advocates, doctors, artists, consultants, weavers, bidi makers, beauticians, stitching and embroidery workers including their chambers; public toilets; fractional HP motors used for Shailchak by Kumhars in their residences; zero waste centre compost unit.*

- (d) CSPDCL has proposed the change in applicability of HV-6: Residential as under:

*This tariff shall be applicable for bulk supply at one point to **Government aided cultural and educational institutes, offices of registered political parties**, colonies, multi-storied residential buildings, townships, including townships of industries provided that consumption of non-domestic nature for other general purpose load (excluding drinking water supply, sewage pumping and street light) shall not be more than 10% of total monthly energy consumption.*

*In case the consumption of non-domestic nature for other general purpose load exceeds 10% of total monthly energy consumption, the tariff of HV-3: Other Industrial and General Purpose Non-Industrial, shall be applicable on entire consumption.*

- (e) CSPDCL has proposed the revision in load factor rebate for HV-4: Steel Industries as under:
- a. Load factor rebate of 1% on normal energy charge is proposed to be started from 60% instead of 65% as approved in existing tariff.
  - b. For every 1% increase in monthly load factor, the rebate is proposed to increase by 1%.
  - c. The load factor rebate up to 20% for monthly load factor of 79% and above is proposed.

### **Commission's view**

As discussed earlier, the Commission has determined a cumulative Revenue Surplus of Rs. 530.83 crore for FY 2018-19. For adjusting the Revenue Surplus, the Commission has proposed reduction in tariff across all categories.

The approach of the Commission for determination of tariff for FY 2018-19 for LV consumer categories is discussed below:

### **LV-1 Domestic**

In continuation of the principle adopted by the Commission in its Tariff Order dated March 31, 2011, there shall be no separate category for BPL consumers. All domestic consumers including BPL card holders shall be provided a domestic connection. Each BPL card holder will be eligible for the subsidy, if any, given by the State Government (subject to the condition of fulfilling the eligibility criteria specified by the State Government). The consumers in the BPL category shall be charged for their consumption over and above the subsidised units at the rate determined for domestic consumers in this Order.

The tariff for all consumption slabs of LV-1 category has been revised. No revision in fixed charges has been approved from the existing tariff. However, energy charges for each slab has been reduced. No revision in tariff applicability has been approved for this Category.



## **LV-2: Non-Domestic**

The tariff for all consumption slabs of LV-2 category has been reduced from the existing tariff. The option for demand-based tariff for non-domestic category will continue. No revision in fixed charges has been approved for Demand based tariff.

## **LV-3: Agriculture**

The tariff for agriculture category has been kept at 82% of ACOS. The agricultural consumers should be given the due benefit of the subsidy, if any, made available to them by the GoCG, from time to time. No revision in existing fixed charges are approved for FY 2018-19, however, the energy charges are reduced from the existing level by 10 paise per unit. The concession of 10% on energy charge for non-subsidised agriculture pump connection will continue for FY 2018-19.

## **LV-4: Agriculture allied activities**

The tariff for all sub-categories of agricultural allied category has been reduced from the existing level. The option for demand-based tariff for agriculture allied activities category will continue.

A new category of *LV-4.1 (A) upto 25 HP* has been created in order to promote the smaller agriculture allied units.

## **LV-5: LT Industries**

The tariff for all sub-categories of LV-5 industries has been reduced. In order to give impetus to LT industries located in rural areas, a rebate of 5% in energy charges for consumers categorised under this tariff category shall be allowed for LV industries located in rural areas notified by Government of Chhattisgarh.

In order to give impetus to small scale industries in southern part of the State a new sub-category has been created. In accordance with Section 62(3) of EA, 2003 providing for differentiation in tariff based on geographical position of any area, a new sub-category has been created under *LV 5.2.2 Above 25 HP up to 100 HP*, and considerably lower tariff has been determined for consumers located in the areas covered under "**Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran**" (notified vide Order dated August 22, 2005).

Further, new category of *LV 5.2.3 above 100 HP upto 150 HP* has been created in order to cater the higher load at LV level. The metering of the consumers under this sub-category shall be at HV side, after considering due transformation losses.

The option of demand-based tariff for LV Industry category will continue.

### **LV-6: Public Utilities**

The tariff for the Public Utilities category has been reduced from the existing level and kept at 102% of Average Cost of Supply.

### **LV-7: Information Technology Industries**

The tariff for Information Technology Industries category has retained at existing level.

### **LV-8: Temporary Supply**

The tariff for Temporary Supply category has retained at existing level.

The approach of the Commission for determination of tariff for FY 2018-19 for HV consumer category is discussed below:

### **HV-1: Railway Traction**

The Commission has accepted the proposal of CSPDCL to reduce the energy charges for Railway Traction category. No revision in fixed charges has been approved for FY 2018-19. Further, the existing condition of rebate of 30% on energy charges in case load factor for any month is above 20% will continue for FY 2018-19.

### **HV-2: Mines**

The tariff for HV Mines category has been retained at existing level. However, the revision in other applicable conditions of tariff has resulted in reduction in the overall tariff for this category by 1%.

### **HV-3: Other Industry and General Purpose Non-Industrial**

The tariff for HV-3 category has been revised. The energy charges are reduced. However, no revision in fixed charges is approved. In line with the approach adopted in MYT Order, the tariff for supply at higher voltage has been kept lower.

### **HV-4: Steel Industries**

The tariff for HV-4 category has been revised. The energy charges are reduced. However, no revision in fixed charges is approved. In line with the approach adopted in MYT Order, the tariff for supply at higher voltage has been kept lower.

Further, to boost industrialization in the areas covered under "**Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran**" (notified vide Order dated August 22, 2005) and "**Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran**" (notified vide Order dated August 22, 2005), the existing condition of special rebate of 7% on energy charge to the consumers starting production on or after April 1, 2017 will continue for FY 2018-19.

#### **HV-5: Irrigation, Agriculture Allied Activities & Public Water Works**

The tariff for HV-5 category has been revised. The energy charges are reduced by 20 paise per unit from existing level. However, no revision in fixed charges is approved.

#### **HV-6: Residential**

The tariff for HV-6 category has been reduced by overall 3%. The energy charges are reduced by 20 paise per unit from existing level. However, no revision in fixed charges is approved. No revision in tariff applicability has been approved for FY 2018-19.

#### **HV-7: Start up Power**

The tariff for HV-7 category has been retained at existing level. The power requirement of solar and wind power generators shall be met by availing supply under HV-3 category.

HV-8: Industries related to manufacturing of equipment for power generation from renewable energy sources

The tariff for HV-8 category has been retained at existing level.

#### **HV-9: Information Technology Industries**

The tariff for HV-9 category has been retained at existing level.

### **8.4 Category Specific Charges**

The category-specific changes approved for FY 2018-19 are elaborated below:

- i. A discount of 5% on monthly electricity bill (Fixed Charges + Energy Charges) has been approved, under *LV-2: Non-Domestic* and *HV-3: Other Industrial and General Purpose Non-Industrial* category, for Dispensaries, Clinics and Hospitals, other than Government Hospitals.

ii. **Load Factor Rebate for HV 4 Steel category:**

The HV 4: Steel category consumers shall be eligible for load factor rebate on energy charges, as under:

<b>Monthly Load Factor (LF)</b>	<b>Rebate</b>
65% - 65.99%	rebate of 1% on normal Energy Charge calculated on entire energy consumption
66% - 66.99%	rebate of 2% on normal Energy Charge calculated on entire energy consumption
67% - 67.99%	rebate of 3% on normal Energy Charge calculated on entire energy consumption
68% - 68.99%	rebate of 4% on normal Energy Charge calculated on entire energy consumption
69% - 69.99%	rebate of 5% on normal Energy Charge calculated on entire energy consumption
70% - 70.99%	rebate of 6% on normal Energy Charge calculated on entire energy consumption
71% - 71.99%	rebate of 7% on normal Energy Charge calculated on entire energy consumption
72% - 72.99%	rebate of 8% on normal Energy Charge calculated on entire energy consumption
73% - 73.99%	rebate of 9% on normal Energy Charge calculated on entire energy consumption
74% - 74.99%	rebate of 10% on normal Energy Charge calculated on entire energy consumption
75% - 75.99%	rebate of 11% on normal Energy Charge calculated on entire energy consumption
76% - 76.99%	rebate of 12% on normal Energy Charge calculated on entire energy consumption
77% - 77.99%	rebate of 13% on normal Energy Charge calculated on entire energy consumption
78% - 78.99%	rebate of 14% on normal Energy Charge calculated on entire energy consumption
79% and above	rebate of 15% on normal Energy Charge calculated on entire energy consumption

Provided that in case the monthly Load Factor is 64.99% or below, then no Load Factor Rebate shall be payable in that month:

Provided further that hours of load restriction enforced by CSPDCL/CSPTCL shall be excluded for calculation of Load Factor:

Provided also that the Load Factor Rebate shall not be payable on the excess energy consumed corresponding to exceeding contract demand for that billing month:

Provided also that the monthly Load Factor shall be rounded off to the lowest integer.

- iii. The applicable load factor limit for HV-4 Steel Industries for 33 and 11 kV supply has been revised to 25% from the existing level of 15% for exclusive Rolling Mills consumers.
- iv. The Energy charges in the Peak Period shall be billed at 120% instead of 115%. Similarly, during Non-Peak Period, Energy charges shall be billed at 75% instead of 90%.

## 8.5 Wheeling Charges

### CSPDCL's Submission

CSPDCL has proposed an allocation matrix for wheeling charges and retail supply, wherein the entire power purchase expenses including transmission charges, interest on CSD, and Non-Tariff Income has been considered as part of the retail supply business, along with 50% of the employee expenses, 70% of the A&G expenses, 10% of the R&M expenses, 50% of pension payment, 10% of interest expenses, 10% of depreciation, 10% of RoE, and 90% of the interest on working capital.

CSPDCL has accordingly proposed the Wheeling Charges as under:

**Table 8.5-1: Wheeling Charges Proposed by CSPDCL for FY 2018-19**

Particulars	FY 2018-19
Total Energy Input to 33 kV distribution system (MU)	23,514.91
Distribution Cost for Wires Business (Rs. Crore)	1,242.86
Distribution Cost for 33 kV voltage level (Rs. Crore)	435.00
Wheeling Charges for 33 kV voltage level (Rs/kWh)	<b>0.185</b>

## Commission's Views

The Wheeling Charges have been computed by considering the Wires cost as the total ARR less the power purchase expenses and the interest on Consumer Security Deposit, and by considering the distribution cost for 33 kV voltage level as 35% of the total cost. The total energy requirement at 33 kV has been considered as 22,270.70 MU based on the approved Energy Balance for FY 2018-19.

For long-term, medium-term and short-term Open Access customers, Wheeling Charges shall be Rs. 254/MWh (or Rs. 0.254 per kWh) for the energy computed as per the provisions made in Regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for wheeling. The same charges shall be applicable for both collective and bilateral transaction at the point of injection.

Distribution losses shall be applicable at the rate of 6% for the energy scheduled for distribution at the point or points of injection at 33 kV side of 33/11 kV sub-station.

## 8.6 Revenue at Approved Tariff

The revised tariff will be applicable with effect from April 1, 2018, for the consumers of the State for FY 2018-19. The category-wise revenue at revised tariffs approved in this Order are shown in the Table below:

**Table 8.6-1: Revenue in FY 2018-19 at Tariffs approved by the Commission**

Consumer Category		Revenue (Rs. Crore)
<b>A</b>	<b>LV Categories</b>	<b>6,652.97</b>
1	Domestic including BPL	2,695.82
2	Non-Domestic (Normal Tariff & Demand Based Tariff)	823.45
3	Agriculture – Metered & Allied Activities	1,999.92
4	LT Industry	410.47
5	Public Utilities	239.92
6	Temporary	483.40
<b>B</b>	<b>HV Categories</b>	<b>6,780.00</b>
1	HV 1: Railway Traction	551.85
2	HV 2: Mines (Coals & others)	664.18
3	HV 3: Other Industry & General purpose Industry	1,810.41
4	HV 4: Steel Industries	3,409.47
5	Others	344.10
<b>C</b>	<b>Total Revenue from LV and HV categories</b>	<b>13,432.98</b>

## 8.7 Cross Subsidy

An element of cross-subsidy is inherent in the present and revised tariff structure. The tariffs of different consumer categories in relation to the approved adjusted ACoS of Rs. 6.20 per kWh is such that the tariffs for some categories of consumers are higher than the ACoS while the tariffs for other categories are lower than the ACoS. The Commission has reduced the cross-subsidy in this Order and ensured that the tariffs are within +/-20% of the ACOS for most of the categories, as shown in the Table below:

**Table 8.7-1: Cross Subsidy with existing and approved Tariff (Rs./kWh)**

Consumer Category		Approved in Tariff Order for FY 2017-18		Approved in Tariff Order for FY 2018-19	
		ABR (Rs./kWh)	ABR/ ACOS (%)	ABR (Rs./kWh)	ABR/ ACOS (%)
LV	Domestic	4.91	77%	4.66	75%
	Non-Domestic	8.62	134%	8.52	138%
	Agriculture	5.18	81%	5.09	82%
	LT Industry	7.98	124%	7.32	118%
	Public Utilities	6.41	100%	6.27	101%
HV	HV 1: Railway Traction	6.71	105%	5.79	93%
	HV 2: Mines (Coals & others)	8.21	128%	8.02	129%
	HV 3: Other Industry & General-Purpose Industry	8.97	140%	8.20	132%
	HV 4: Steel Industries	7.00	109%	7.14	115%

### 8.7.1 Cross-Subsidy Surcharge

The Commission has determined the Cross-Subsidy Surcharge (CSS) to be paid by the open access consumers, in accordance with CSERC (Connectivity and Intra-State Open Access) Regulations, 2011 as under:

For Open Access consumers procuring power from renewable energy-based power generating plant, the Cross-Subsidy Surcharge payable shall be 50% of the Cross-Subsidy Surcharge determined for that year.

The approved Cross-Subsidy Surcharge is as under:

- a) Rs. 1.23 per kWh for 220 kV/132 kV consumers (which is 90% of the computed value of Rs. 1.37 per kWh).
- b) Rs. 1.49 per kWh for 33 kV consumers (which is 90% of the computed value of Rs. 1.65 per kWh).

The approved Tariff Schedule for FY 2018-19 is given in **Chapter 11**.

The Order will be applicable from 1<sup>st</sup> April, 2018 and will remain in force till March 31, 2019 or till the issue of next Tariff Order, whichever is later. The Commission directs the Companies to take appropriate steps to implement the Tariff Order.



## 9 TARIFF SCHEDULE FOR FY 2018-19

### 9.1 Tariff Schedule for Low Voltage (LV) Consumers

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

- a) Single-phase, 230 Volts up to a maximum connected load of 3 kW, and
- b) Three-phase, 400 volts for maximum demand up to 112.5 kW in case of demand based tariff or for maximum contracted load of 150 HP in case of other tariff, as applicable.

#### 9.1.1 LV-1: Domestic

##### Applicability

This tariff is applicable to domestic light and fan and power used for all domestic appliances, in residential premises, orphanages, homes for old/physically challenged people and homes for destitute; dharamshalas; student hostels; working women's hostels; ashrams; schools and hospitals (including X-rays, etc.) run by charitable trusts; Government hospitals/dispensaries, (excluding private clinics and nursing homes); Government Schools; farm houses; mosques; temples; churches, gurudwaras; religious and spiritual institutions; water works and street lights in private colonies and cooperative societies; common facilities such as lighting in staircase, lifts, fire-fighting in multi-storied housing complex, light and fan in khalihan, kothar, byra where agriculture produce is kept, post office at residence of a villager; residential premises of professionals such as advocates, doctors, artists, consultants, weavers, bidi makers, beauticians, stitching and embroidery workers including their chambers; public toilets; fractional HP motors used for Shailchak by Kumhars in their residences; zero waste centre compost unit.

##### Tariff:

Category of Consumers	Units Slab	Fixed Charge (Rupees per kWh)	Energy Charge (Rs. per kWh)	Minimum Fixed Charge
LV-1: Domestic				
Domestic including BPL Consumers	0 -40 units	2.55	1.15	Single Phase Rs. 40/- per month
	41-200 units	2.60	1.20	
	201 - 600 units	3.40	1.90	Three Phase Rs. 120/- per month
	601 and above units	4.90	2.45	

**Notes:**

- i. Only those domestic consumers who hold BPL Card issued by the State Government will be considered as BPL domestic consumer. BPL Card holders shall be entitled for subsidy for 40 units as per State Government Order, and their consumption shall be billed as per tariff LV-1.
- ii. All BPL domestic consumers shall be billed as per meter reading. All the new BPL domestic connections shall be served with meter only.
- iii. If a portion of the dwelling is used for the conduct of any business other than those stipulated above, the entire consumption shall be billed under Non-domestic tariff LV-2.

**9.1.2 LV-2: Non-Domestic**

**Applicability**

This tariff is applicable to light and fan and power to shops, showrooms, business houses, offices, educational institutions (except those included in LV-1 and LV-5), public buildings, Warehouses, 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, Mobile Towers, coaching centres, 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, offset printers, bakery shop, banks, parlours, printing press, computer centre, petrol pumps and service stations, electric charging centres for Vehicles, HV industrial consumers seeking separate independent LV connection in the same premises of HV industrial connection and other consumers not covered under any other category of LV consumers.

**Tariff:**

Category of Consumers	Units Slab	Fixed Charge (Rs per kW of Contracted load/Demand)	Energy Charge (Rs. per kWh)
LV-2.1: Non-Domestic	0 – 100 units	Rs. 70 per kW per month up to 3 kW and	5.65
	101 - 500 units		6.65
	501 and above units	Rs. 120 per kW per month above 3 kW	7.95
LV-2.2: Non-Domestic Demand Based Tariff (for Contract Demand of 15 to 112.5 kW)		Demand Charges- Rs 240/kW/month on billing demand	7.25

**Note:**

- i. Fixed Charges for LV-2.1 are non-telescopic. For example, if connected load is 5 kW then monthly fixed charges shall be Rs. 600 per month;
- ii. The tariff LV-2.2 will be optional.
- iii. Fixed Charges of LV-2.1 and Demand Charge on contract demand of tariff LV-2.2 is a monthly minimum charge, whether any energy is consumed during the month or not.
- iv. A discount of 5% on monthly electricity bill (Fixed Charges + Energy Charges) shall be applicable for Dispensaries, Clinics and Hospitals, other than Government Hospitals.

**9.1.3 LV-3: L.V. Agriculture****Applicability**

This tariff is applicable to agricultural pumps/tube wells used for irrigation (including drip and sprinkler system) for crops, nursery, horticulture crops (growing vegetables and fruits), floriculture (growing flowers), growing of herbs/medicinal plants and mushroom, jatropha plantation, chaff cutters, thresher, winnowing machines, sugarcane crushers used on agricultural land, lift irrigation pumps/tube wells of State Government or its agencies; water drawn by agriculture pumps used by labour, cattle, and farm houses in the premises of agriculture farms for drinking purposes only and packaging of agriculture produce at farm, khalihan, etc.

**Tariff:**

Category of Consumers	Fixed Charge	Energy Charge (Rs. per kWh)
<b>LV-3:</b> L.V. Agriculture	Rs. 80/HP/month	4.70

One 40W incandescent bulb or CFL/LED bulb of wattage not exceeding 20W is permitted at or near the motor pump set in the power circuit.

**Notes:**

- i. All new connections of above 3 HP load shall be served only after installation of capacitor of specified rating to maintain power factor of 0.85 and above.
- ii. All pump connections of above 3 HP load not provided with capacitors of specified rating and who do not maintain power factor of 0.85 and above, shall be required to pay surcharge of 35 paise per kWh.
- iii. Fixed Charge is monthly minimum charge whether any energy is consumed or not during the month.
- iv. For non-subsidized agriculture pump connection, a concession of 10% on energy charge shall be allowed.

**9.1.4 LV- 4: L.V. Agriculture Allied Activities****Applicability**

This tariff is applicable to pump/tube well connections, other equipment and light and fan for tree plantation, fisheries, hatcheries, poultry farms, dairy, cattle breeding farms, sericulture, tissue culture, aquaculture laboratories, and milk chilling plant.

**Tariff:**

Category of Consumers	Fixed Charge	Energy Charge (Rs. per kWh)
<b>LV-4.1 (A):</b> Up to 25 HP	Rs. 100 per HP per month or Rs. 135 per kW per month	5.00
<b>LV-4.1 (B):</b> Above 25 HP up to 100 HP	Rs. 110 per HP per month or Rs. 147 per kW per month	5.60
<b>LV-4.2:</b> Demand based tariff for Contract Demand of 15 to 112.5 kW	Rs. 200 per kW per month on billing demand	5.50

**Note:**

- i. All connections shall be required to maintain average monthly power factor of 0.85 by providing capacitors of suitable rating, failing which they shall be required to pay surcharge of 35 paise per kWh.
- ii. For tariff LV-4.1, Fixed Charge is monthly minimum charge and for tariff LV-4.2 Demand Charge on contract demand is monthly minimum charge, whether any energy is consumed during the month or not.

**9.1.5 LV-5: L.V. Industry****Applicability**

These tariffs are applicable to power, light and fan 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, terracotta, handloom, handicraft, agro-processing units, minor forest produce, laboratories of engineering colleges, ITIs and polytechnics and industrial institutions, aluminium based factory, bakery/biscuit industries, bottling plant, cable/insulation industries, Cement Based Factory, Chemical Plant, Coal Based Industries, Conductor Wire Industries, Cutting & Polishing Of Marble, Fabrication Workshop, Food Processing Industry, Forest Product based factory, GI Wire Industries, Glass Industries, Hot Mixing Plant, IT based industries, Mineral based factory, Plastic Industries, Plywood factory, Pulverize industries, Rolling Mill, Saw Mill, Stone Crusher, Toy Industries, Wire Drawing / Steel Industries, Wire Product, workshops and fabrication shop, etc.

**Tariff:**

Category of Consumers		Fixed Charge	Energy Charge (Rs. per kWh)
<b>LV-5: L.V. Industry</b>			
<b>5.1</b>	Flour mills, Hullers, power looms, grinders for grinding masalas, terracotta, handloom, handicraft, agro-processing units, minor forest produce up to 15 HP	Rs 65/HP/month	3.80
<b>a)</b>	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs 65/HP/month	3.40

Category of Consumers		Fixed Charge	Energy Charge (Rs. per kWh)
5.2	Other Industries		
5.2.1	Up to 25 HP	Rs. 100/HP/month	4.80
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs. 80/HP/month	3.80
5.2.2	Above 25 HP up to 100 HP	Rs. 110/HP/month	5.50
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran *	Rs. 90/HP/month	5.00
5.2.3	Above 100 HP up to 150 HP	Rs. 300/HP/month	5.85
5.3	Demand based Tariff- for Contract Demand of 15 kW to 112.5kW	Demand Charges- Rs. 190/kW/month on billing demand	5.70

\*Notified Vide Order dated August 22, 2005

**Notes:**

- i. Demand based tariff LV-5.3 is applicable for maximum Contracted Demand from 15 kW to 112.5 kW.
- ii. For tariff LV-5.1 and LV-5.2, Fixed Charge is monthly minimum charge and for tariff LV-5.3, the Demand Charge on contract demand is a monthly minimum charge whether any energy is consumed during the month or not.
- iii. In order to give impetus to LT industries located in rural areas, a rebate of 5% in energy charges for consumers specified under tariff category shall be allowed for LV industries located in rural areas notified by Government of Chhattisgarh.
- iv. In accordance with the Section 62(3) of EA 2003 providing for differentiation in tariff based on geographical position of any area, a new sub-category has been created under LV 5.2.2, and considerably lower tariff has been determined for consumers located in the areas covered under "**Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran**" (notified vide Order dated August 22, 2005) and "**Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran**" (notified vide Order dated August 22, 2005).

### 9.1.6 LV-6: Public Utilities

#### Applicability

This tariff is applicable to colonies developed by Chhattisgarh State Housing Board and 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.

#### Tariff:

Category of Consumers	Fixed Charge	Energy Charge (Rs. per kWh)
LV-6: Public utilities	Rs. 125/HP/month or Rs. 168/kW/month	5.65

#### Note:

Fixed Charge is monthly minimum charge whether any energy is consumed during the month or not.

### 9.1.7 LV-7: Information Technology Industries

#### Applicability

This tariff is applicable to Information Technology Industries having minimum contract demand of 50 kW.

#### Tariff:

Category of Consumers	Fixed Charge	Energy Charge (Rs. per kWh)	Minimum Charge
LV-7: Information Technology Industries	Nil	4.50	Rs. 1500/- per month

#### Note:

Minimum Charge is monthly minimum charge whether any energy is consumed during the month or not.

### **9.1.8 LV 8: Temporary Supply**

#### **Applicability**

This tariff is for connections that are temporary in nature. The tariff applicable shall be as given for the respective category of consumer.

Provided that for construction purpose, a consumer shall be given a temporary connection only.

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.

#### **Tariff:**

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

Provided that for Agricultural pump connections, the Fixed Charge and Energy Charge shall be billed at the normal tariff applicable for LV 3 category.

#### **Notes:**

- i. 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.
- ii. No temporary connection shall be served without a meter.
- iii. Connection and disconnection charge shall be paid as per the schedule of miscellaneous charges.
- iv. No rebates/concessions under any head shall be applicable to temporary connections.
- v. A month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or part thereof.
- vi. In case connected load/maximum demand is found more than contracted load/contract demand, then the billing of excess load/supply shall be done for the amount calculated as per para 1.1.11.
- vii. Any expenditure made by the Licensee for providing temporary supply up to the point of supply, shall be paid for by the consumer as per prescribed procedure.



- viii. Temporary connections shall not be served unless suitable capacitors, wherever applicable, are installed so as to ensure Power Factor of not less than 0.85 lagging.
- ix. 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.

#### **9.1.9 Terms and Conditions of L.V. Tariff**

- 1. Energy will be supplied to the consumer ordinarily at a single point for the entire premises of the consumer.
- 2. Contracted Load/Connected Load or Contract Demand/Maximum Demand in fraction shall be rounded off to the next whole number.
- 3. For the purpose of separate independent LV connection to HV Industrial consumer in the same premises of HV industrial connection, to meet out its essential load during emergency or non-availability of supply in HV connection under LV 2 category, conditions as mentioned in Clause 4.40 of the Chhattisgarh State Electricity Supply Code and its amendment, if any, shall be applicable.
- 4. For the purpose of Demand Based Tariff (LV-2.2, LV-4.2 and LV-5.3)
  - i. **Determination of Maximum Demand**- The maximum demand means the highest load measured by sliding window principle of measurement in average kVA or average kW as the case may be at the point of supply of a consumer during any consecutive period of 30 minutes during the billing period.
  - ii. **Billing Demand** – The billing demand for the month shall be the actual maximum kW demand of the consumer recorded during the month or 75% of the Contract Demand or 15 kW, whichever is higher. The billing demand shall be rounded off to the next whole number.
  - iii. **Minimum Charge** – The demand charge on contract demand (CD) is a monthly minimum charge whether any energy is consumed during the month or not.
  - iv. There shall be no restriction on connected load for applicability of demand based tariff.

### 9.1.10 Power Factor Incentive and Surcharge

1. All LV industrial, agriculture allied, public water works, sewage treatment plants and sewage pumping installations' consumers shall arrange to install suitable low tension capacitors of appropriate capacity at their cost. The consumer also shall ensure that the capacitors installed by them properly match with the actual requirement of the load so as to ensure average monthly Power Factor of 0.85 or above. A consumer who fails to do so shall be liable to pay Power Factor surcharge @ 35 paise per kWh on the entire consumption of the month.
2. All the agriculture pump connections of above 3 HP load shall be provided with capacitor of specified rating and maintain average monthly Power Factor of 0.85 or above failing which they shall be required to pay Power Factor surcharge @ 35 paise per kWh on the entire consumption of the month.
3. All LV non-domestic consumers with Contracted Load/Connected Load of 15 kW or above shall arrange to install suitable Low Tension capacitors of appropriate capacity at their cost. The consumer shall ensure that the capacitors installed by him properly match with the actual requirement of the load so as to ensure average monthly Power Factor of 0.85 or above. A consumer who fails to do so will be liable to pay Power Factor surcharge @ 35 paise per kWh on the entire consumption of the month.
4. All LV installations having welding transformer are required to install suitable Low Tension capacitors so as to ensure Power Factor of not less than 0.85. Consumers not complying with the above shall have to pay Power Factor surcharge of 75 paise per kWh on the entire monthly consumption, provided the load of the welding transformer(s) exceeds 25% of the total connected load.

**Note** - For the purposes of computing the connected load of welding transformers in kW, a Power Factor of 0.6 shall be applied to the kVA rating of such welding transformers. The kVA rating can also be calculated on the basis of load voltage and maximum load current on secondary side of welding machine.

5. The average monthly Power Factor recorded in the meter shall be considered for billing of Power Factor surcharge or Power Factor incentive, as the case maybe.
6. Levy of Power Factor surcharge as indicated above, shall be without prejudice to the rights of CSPDCL to disconnect the consumer's installation after issue of 15 days' notice if the average monthly Power Factor remains 0.7 or below

for a period of more than two consecutive months. It shall remain disconnected till the consumer makes suitable arrangements to improve the Power Factor.

7. Notwithstanding the above, if the average monthly Power Factor of a new consumer is found to be less than 0.85 at any time during the first six months from the date of connection and if he maintains average monthly Power Factor continuously in subsequent three months at not less than 0.85, then the surcharge billed on account of low Power Factor during the said period shall be withdrawn and credited in next month's bill.
8. All categories of LV consumers except the LV domestic consumers in whose case Power Factor surcharge is applicable; shall also be eligible for Power Factor incentive. Such incentive shall be payable @ 10 paise per kWh on the entire consumption of that month in which he maintains an average monthly Power Factor equal to or above 0.90 and @ 15 paise per kWh of entire consumption of that month in which he maintains an average monthly Power Factor of 0.95 or above.

#### **9.1.11 Provisions of billing in case of Excess Supply**

##### **i. For connected load based tariff**

1. The consumers, except the domestic (LV-1) consumers, availing supply at connected load based tariff shall restrict their actual connected load within the contracted load. However, in case the actual connected load in any month exceeds the contracted load, the connected load based tariff shall apply only to the extent of contracted load and corresponding units of energy. The connected load in excess of contracted load and corresponding units of energy shall be treated as excess supply. The excess supply so consumed in any month, shall be charged at the rate of one and half times of the connected load based tariff applicable to the consumer (fixed and energy charges and VCA charges) for the excess connected load to the extent of 20% of contracted load and at the rate of two times of connected load based tariff if the excess connected load is found beyond 20% of contracted load for actual period of enhancement of load or 6 months whichever is less, including the month in which the existence of excess load is detected and shall be continued to be billed till excess load is removed or contract load is enhanced.

2. Where the recording facility of demand is available, the billing on account of excess supply shall be restricted to the recorded month only.

**ii. For Demand Based tariff consumers**

Consumers availing supply at demand based tariff (LV-2.2/LV-4.2/LV- 5.3) should at all times restrict their maximum demand to the contract demand. However, contract demand for the demand based tariff consumer can be less than connected load. In case the maximum demand in any month exceeds the contract demand, the said demand based tariff (LV-2.2/LV-4.2/LV- 5.3) shall apply only to the extent of the contract demand and corresponding units of energy. The demand in excess of contract demand and corresponding units of energy shall be treated as excess supply. The excess supply so availed in any month, shall be charged at the rate of one and half times of the normal tariff applicable to the consumer (fixed and energy charges and VCA charges) for the excess demand to the extent of 20% of contract demand and at the rate of two times of normal tariff if the excess demand is found beyond 20% of contract demand.

For the purpose of billing of excess supply, the billing demand and the units of energy shall be determined as under:

- a) Billing Demand: The demand in excess of the contract demand in any month shall be the billing demand.
- b) Units of Energy: the units of energy corresponding to kW portion of the demand in excess of the contract demand shall be:-

$$EU = TU (1 - CD/MD)$$

Where

EU – denotes excess units;

TU – denotes total units supplied during the month;

CD – denotes contract demand, and

MD – denotes actual maximum demand.

- I. The excess supply availed in any month shall be charged along with the monthly bill and shall be payable accordingly.
- II. The above billing of excess supply at one and half times/two times of the normal tariff shall be applicable to consumers without prejudice to

CSPDCL's right to discontinue supply in accordance with the provisions contained in the Chhattisgarh State Electricity Supply Code, 2011, as amended from time to time.

**1. Delayed Payment Surcharge**

If the bill is not paid by the consumer within the period (due date) prescribed 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), subject to minimum of Rs. 5 shall be payable in addition, from the due date of payment as mentioned in the bill.

**2. Additional Charges**

Every Local Body shall pay an additional charge equivalent to any tax or fee levied by it under the provisions of any law including the Corporation Act, District Municipalities Act or Gram Panchayat Act on the poles, lines, transformers and other installations through which the Local Body receives supply.

**3. Advance Payment Rebate**

For advance payment made before commencement of consumption period for which bill is to be prepared, a rebate @ 0.5% per month on the amount which remains with the Licensee at the end of the calendar month excluding security deposit, shall be credited to the account of consumer after adjusting any amount payable to the Licensee subject to the net amount of advance being not less than Rs.1000 and shall be adjustable in next month's bill.

**4. 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 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 levied on outstanding amount, which is less than Rs. 10.

**5. Applicability of tariff**

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

**6. 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.

**7. Meter Hire**

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

**8. Variable Cost Adjustment (VCA) Charge**

VCA charge on consumption from April 1, 2018 as per the formula and conditions specified in the CSERC MYT Regulations, 2015 shall be levied in addition to energy charge on all the LV categories including temporary supply.

However, from the date of applicability of this Order, the base values for computation of VCA for succeeding period shall be revised in accordance to this Order.

**9. Conditions to have over-riding effect**

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 Licensee.

## 9.2 Tariff Schedule for High Voltage (HV) Consumers

### 9.2.1 HV-1: Railway Traction

#### Applicability:

This tariff is applicable to the Railways for traction loads only.

#### Tariff:

Supply Voltage	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
Railway Traction on 132 kV / 220 kV	350	4.20

#### Specific terms and conditions:

1. The maximum demand means the highest load measured by sliding window principle of measurement in average kVA at the point of supply of a consumer during any consecutive period of 15 minutes during the billing period.
2. Provided that if as a result of an emergency in the consumer's installation or in the transmission lines supplying energy to the said traction sub-station, extra load is availed by the consumer with prior intimation to the Licensee, the period of such emergency shall not be taken into account for the purpose of working out the maximum demand.
3. Provided further that as a result of emergency in the traction sub-station (TSS) or in the transmission line supplying power, if the entire load of the TSS or part thereof is transferred to adjacent TSS, the maximum demand (MD) of the TSS for the month shall not be taken as less than the average MD recorded for the previous three months during which no emergency had occurred.
4. In order to give impetus to electrification of railway network in the State, a rebate of 10% in energy charges for new railway traction projects shall be allowed for a period of five years from the date of connection for such new projects for which Agreements for availing supply from the Licensee are finalised during FY 2018-19.
5. Other terms and condition shall be as mentioned in the general terms and conditions of HV tariff.
6. For traction sub-stations of Indian Railways, if Load Factor for any month is above 20%, then a rebate of 30% shall be allowed on Energy Charge calculated on entire energy consumption for that month.

### 9.2.2 HV-2: Mines

#### Applicability

This tariff is applicable to all types of mines, mines with stone crusher unit, coal mines, coal washery, etc., for power, lights, fans, cooling ventilation, etc., which shall mean and include all energy consumption for mining purpose, and consumption for residential and general use therein including offices, stores, canteen compound lighting, etc.

#### Tariff:

Supply Voltage	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
220 kV supply	500	6.00
132 kV supply	500	6.15
33 kV supply	500	6.40
11 kV supply	500	6.70

### 9.2.3 HV-3: Other Industrial and General Purpose Non-Industrial

#### Applicability

1. This tariff is applicable to all types of industries including cement industries and industries not covered under HV-1, HV-2 and HV-4 for power, lights, fans, cooling ventilation, etc., which shall mean and include all energy consumption in factory; and consumption for residential and general use therein including offices, stores, canteen compound lighting, etc.
2. This tariff is also applicable for bulk supply at one point to establishment such as Railways (other than traction), hospitals, offices, hotels, shopping malls, electric charging centres for Vehicles, power supplied to outside of State (border villages), educational institutions, mixture and/or stone crushers and other institutions, etc., having mixed load or non-industrial and/or non-residential load. This tariff is also applicable to all other HT consumers not covered specifically in any other HV tariff category.



**Tariff:**

Supply Voltage HV- 3	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
220 kV supply	375	5.85
132 kV supply	375	5.95
33 kV supply (Load factor >15%)	375	6.30
33 kV supply (Load factor <=15%)	190	6.45
11 kV supply (Load Factor >15%)	375	6.65
11 kV supply (Load Factor <=15%)	190	6.85

**Note:-**

- i. A discount of 5% on monthly electricity bill (Fixed Charges + Energy Charges) shall be applicable for Dispensaries, Clinic and Hospitals other than Government Hospitals.

**9.2.4 HV-4: Steel Industries****Applicability**

This tariff is applicable to steel industries, mini-steel plant, rolling mills, sponge iron plants, ferro alloy units, steel casting units, pipe rolling plant, iron ore pellet plant, iron beneficiation plant and combination thereof including wire drawing units with or without galvanizing unit; for power, lights, fans, cooling ventilation, etc., which shall mean and include all energy consumption in factory, and consumption for residential and general use therein including offices, stores, canteen compound lighting, etc.

**Tariff:**

Supply Voltage HV- 4	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
220 kV supply	375	5.30
132 kV supply	375	5.45
33 kV supply (Load factor >15%)*	375	5.85
33 kV supply (Load factor <=15%)*	190	6.35
11 kV supply (Load Factor >15%)*	375	5.95
11 kV supply (Load Factor <=15%)*	190	6.75

**Note:-**

\*The applicable Load Factor limit for 33 kV and 11 kV supply for exclusive Rolling mills consumers shall be 25%.

Further, to boost industrialization in the areas covered under "**Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran**" (notified vide Order dated August 22, 2005) and "**Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran**" (notified vide Order dated August 22, 2005), a special rebate of 7% on energy charge is being provided to the consumers starting production on or after April 1, 2017.

**Load Factor Rebate**

The consumers of this category shall be eligible for Load Factor rebate on Energy Charges:

<b>Monthly Load Factor (LF)</b>	<b>Rebate</b>
65% - 65.99%	rebate of 1% on normal Energy Charge calculated on entire energy consumption
66% - 66.99%	rebate of 2% on normal Energy Charge calculated on entire energy consumption
67% - 67.99%	rebate of 3% on normal Energy Charge calculated on entire energy consumption
68% - 68.99%	rebate of 4% on normal Energy Charge calculated on entire energy consumption
69% - 69.99%	rebate of 5% on normal Energy Charge calculated on entire energy consumption
70% - 70.99%	rebate of 6% on normal Energy Charge calculated on entire energy consumption
71% - 71.99%	rebate of 7% on normal Energy Charge calculated on entire energy consumption
72% - 72.99%	rebate of 8% on normal Energy Charge calculated on entire energy consumption
73% - 73.99%	rebate of 9% on normal Energy Charge calculated on entire energy consumption
74% - 74.99%	rebate of 10% on normal Energy Charge calculated on entire energy consumption
75% - 75.99%	rebate of 11% on normal Energy Charge calculated on entire energy consumption

<b>Monthly Load Factor (LF)</b>	<b>Rebate</b>
76%-76.99%	rebate of 12% on normal Energy Charge calculated on entire energy consumption
77%-77.99%	rebate of 13% on normal Energy Charge calculated on entire energy consumption
78%-78.99%	rebate of 14% on normal Energy Charge calculated on entire energy consumption
79% and above	rebate of 15% on normal Energy Charge calculated on entire energy consumption

Provided that in case the monthly Load Factor is 64.99% or below, then no Load Factor Rebate shall be payable in that month:

Provided further that hours of load restriction enforced by CSPDCL/CSPTCL shall be excluded for calculation of Load Factor:

Provided also that the Load Factor Rebate shall not be payable on the excess energy consumed corresponding to exceeding contract demand for that billing month:

Provided also that the monthly Load Factor shall be rounded off to the lowest integer.

### **9.2.5 HV-5: Irrigation & Agriculture Allied Activities, Public Water Works**

#### **Applicability**

- i. This tariff shall be applicable for Chhattisgarh State Housing Board and agriculture pump connections, irrigation pumps of lift irrigation schemes of State Government or its agencies/co-operative societies, including colonies developed and energy used for lighting pump houses.
- ii. This tariff is also applicable to the consumer availing supply at HV for the purpose of pump/tube well connections, other equipment for tree plantation, fisheries, hatcheries, poultry farms, dairy, cattle breeding farms, sericulture, tissue culture and aquaculture laboratories and milk chilling plant and bakery for power, lights, fans, coolers, etc., which shall mean and include all energy consumed in factory, offices, stores, canteen, compound lighting, etc., and residential use therein.
- iii. This tariff shall be applicable for public utility water supply schemes, sewerage treatment plants and sewage pumping installations run by P.H.E. Department, Local Bodies, Gram Panchayat or any organization made

responsible by the Government to supply/maintain public water works/sewerage installation including energy used for lighting pump house.

**Tariff:**

Supply Voltage	Demand charge (Rs./kVA/month)	Energy charge (Rs. per kVAh)
Irrigation, Agriculture Allied Activities & Public Water Works	375	5.30

**9.2.6 HV-6: Residential**

**Applicability**

This tariff shall be applicable for bulk supply at one point to colonies, multi-storied residential buildings, townships, including townships of industries provided that consumption of non-domestic nature for other general purpose load (excluding drinking water supply, sewage pumping and street light) shall not be more than 10% of total monthly energy consumption.

In case the consumption of non-domestic nature for other general purpose load exceeds 10% of total monthly energy consumption, the tariff of HV-3: Other Industrial and General Purpose Non-Industrial, shall be applicable on entire consumption.

**Tariff:**

Category of Consumers	Demand charge (Rs./kVA/month)	Energy charge (Rs. per kVAh)
Residential	375	5.70

**9.2.7 HV-7: Start-Up Power Tariff**

**Applicability**

The tariff shall be applicable to those consumers who avail supply for start-up power for their power plant (generating station and captive generating plant) at 400/220/132/33/11 kV.

**Tariff:**

Supply Voltage	Demand charge (Rs./kVA/month)	Energy charge (Rs. per kVAh)
400/220/132/33/11 kV	200	8.05

**Conditions for start-up power consumers:**

- i. Contract demand shall not exceed 10% of the highest capacity of generating unit of the generating station/captive generating plant
- ii. Captive generating plants, which do not have any co-located industrial load and who use the grid for transmission and wheeling of electricity can avail start up-power tariff.
- iii. Captive generating plants, which have co-located industrial load are also entitled for start-up power tariff.
- iv. Drawal of power shall be restricted to within 10% of Load Factor based on the Contract Demand in each month. In case the Load Factor in a month is recorded beyond 10%, the demand charge shall be charged at double the normal rate. Supply can also be disconnected if the monthly Load Factor exceeds 10% in any two consecutive months. Load Factor shall be computed from contract demand.
- v. Start-up power shall also be made available to the generator/captive generating plant connected to CTU grid with proper accounting.
- vi. This tariff shall also be applicable to generators for the consumption upto COD of the plant.
- vii. Generators who have not availed start-up connection but eventually draw power from the grid shall be billed @ Rs 12 per kVAh. In case of captive generating plant, which do not have any co-located industrial load and who use the grid for transmission and wheeling of electricity, such CGP's, if they have not availed start-up connection but eventually draw power, shall be billed @ Rs. 12 per kVAh.
- viii. In case of captive generating plant, which have co-located industrial load and who have not availed start-up connection but eventually draws power from the grid shall be billed @ Rs. 12 per kVAh. All renewable generators (biomass, small hydro, solar and wind) are exempted from payment of demand charge for the first five years from the date of commercial operation of their power plant, i.e., they will be required to pay only energy charge during first five years from COD and full start-up tariff from sixth year onwards. However, in case during first five years from the date of its connection, if the actual demand exceeds the contract demand, the billing for that month shall be as per other start-up power consumers exceeding contract demand. In case if the Load Factor is within 10% but actual demand exceeds the contract demand then also the billing for that month shall be as per other start-up power

consumer exceeding contract demand. In case, it is established that the biomass based generator has used biomass in the lesser ratio than as mentioned in the guidelines of the Ministry of New and Renewable Energy during any financial year in first five years from the date of availing start up power tariff then demand charge as per this tariff category (HV-7) shall also become payable for the whole of such financial year and such payable amount will be billed in three equal instalments after such happening comes to the notice of CSPDCL.

**9.2.8 HV-8: Industries related to manufacturing of equipment for power generation from renewable energy sources**

**Applicability**

This tariff is applicable to consumers availing supply at 220/132/33/11 kV for manufacturing of plant, machinery and equipment used for generation of power from renewable sources of energy including for the manufacturing of hydel turbine, generator and related auxiliaries needed for small hydel plants up to 25 MW but excluding manufacturing of boilers, turbines, generators, and the related auxiliaries, which otherwise can be used for generation of power from conventional source of energy. This tariff shall also not be applicable for manufacturing of such common machines/equipment/and other items such as electrical motors, structural items, nuts bolts, etc. which can be used for other purposes also.

**Tariff:**

Supply Voltage	Demand charge (Rs./kVA/month)	Energy charge (Rs. per kVAh)
220/132/33/11 kV	110	3.70

**9.2.9 HV-9: Information Technology Industries**

**Applicability**

This tariff is applicable to Information Technology Industries having minimum contract demand of 50 kW.

**Tariff:**

Category of Consumers	Fixed Charge	Energy Charge (Rs. per kVAh)	Minimum Charge
HV-8: Information Technology Industries	Nil	4.50	Rs. 3000/-per month

**Note:**

Minimum Charge is monthly minimum charge whether any energy is consumed during the month or not.

**9.2.10 HV-10: Temporary Connection at HV****Applicability**

This tariff is applicable to all HV connections (other than the consumers availing Start up power Tariff (HV-7)), of temporary nature at 220/132/33/11 kV.

Provided that for construction purpose, a consumer shall be given a temporary connection only.

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.

**Tariff:**

One and half times of the normal Tariff applicable for the corresponding category of consumer for demand and energy charge shall be applicable.

**Notes**

- i. An amount equal to estimated bill for 3 months or for the period requisitioned, whichever is less; shall be payable in advance before the temporary connection is served subject to replenishment from time to time and adjustment in the last bill after disconnection.
- ii. 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 permanent connection, and shall be calculated as per Clause 10 of Terms & Conditions of HV tariff.
- iii. Any expenditure made by CSPDCL up to the point of supply for giving temporary connection shall be payable by the consumer as per prescribed procedure.
- iv. Connection and disconnection charges shall be paid separately.
- v. No rebates/concessions under any head shall be applicable to temporary connections.

- vi. Month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or for part thereof.
- vii. Other terms and conditions of the relevant category of tariff shall also be applicable.
- viii. 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 payment of bill, if the bill is not paid by the consumer within the period prescribed.

**9.2.11 Time of Day Tariff**

This tariff is applicable to HV-2, HV-3, and HV-4 tariff category. Under the Time of Day (TOD) Tariff, electricity consumption in respect of HV industries for different periods of the day, i.e., normal period, peak load period and off-peak load period, shall be recorded by installing a TOD meter. Consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer:

Period of Use	Normal rate of Demand Charge Plus
(i) Normal period (5:00 a.m. to 6:00 p.m.)	Normal rate of Energy Charges
(ii) Evening peak load period (6:00 p.m. to 11:00 p.m.)	120% of normal rate of Energy Charge
(iii) Off-peak load period (11:00 p.m. to 5:00 am of next day)	75% of normal rate of Energy Charge

**Applicability and Terms and Conditions of TOD tariff:**

- i. The terms and conditions of the applicable tariff (such as monthly tariff minimum charge, etc.) shall continue to apply to a consumer to whom TOD tariff is applicable.
- ii. In case, the consumer exceeds the contract demand, the demand in excess and the corresponding energy shall be billed at one and half/two times (as per methodology specified in Para “Additional Charges for Exceeding Contract Demand” of the Terms and Conditions of HV Tariff) of the normal tariff applicable for the day time (i.e., 5.00 a.m. to 6.00 p.m.) irrespective of the time of use.



### 9.2.12 Terms and Conditions of HV Tariff

The maximum and minimum contract demand for different supply voltages is governed as per provisions of the Chhattisgarh State Electricity Supply Code, 2011 and its amendments thereof. Presently, the minimum and maximum permissible load at respective supply voltage are as below:

Supply Voltage	Minimum	Maximum
11 kV	60 kVA	500 kVA
33 kV	60 kVA	15 MVA
132 kV	4 MVA	40 MVA
220 kV	15 MVA	150 MVA

Deviation in contract demand, if any, in respect of the above provisions on account of technical reasons, may be permitted with the approval of the Commission and billing shall be done accordingly. The HV consumers having contract demand exceeding the maximum limit mentioned above for respective voltage of supply shall be billed as specified at Clause 7 of Terms and Conditions of HV Tariff.

#### Point of Supply

Power will be supplied to consumers ordinarily at a single point for the entire premises. In certain categories like coal mines, power may be supplied at more than one point on the request of consumer subject to technical feasibility. HV industrial consumers can avail separate LV supply as per Clause 4.40 of the Chhattisgarh State Electricity Supply Code, 2011 and its amendments thereof, in the same premises.

#### Billing demand

The billing demand for the month shall be the maximum demand (in kVA) of the consumer recorded during the billing month or 75% of the contract demand or 60 kVA, whichever is higher, except for the consumers who have reduced their contract demand to zero. The billing demand shall be rounded off to the next whole number.

#### Determination of Demand

The maximum demand means the highest load measured by sliding window principle of measurement in average kVA at the point of supply of a consumer during any consecutive period of 15 minutes during the billing period.

**1. Minimum Charge**

The demand charge on contract demand (CD) is a monthly minimum charge whether any energy is consumed during the month or not.

**2. Rounding off**

The amount of HV energy bill shall be rounded off to the nearest multiple of Rs.10.

For example - the amount of Rs. 12345 will be rounded off to Rs. 12350 and Rs. 12344.95 shall be rounded off to Rs. 12340.

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

**3. 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.

**4. Additional charges for Local Bodies**

Every Local Body shall pay an additional charge equivalent to any tax or fee levied by it under the provisions of any law including the Corporation Act, District Municipalities Act or Gram Panchayat Act on the poles, lines, transformers and other installations through which the Local Body receives supply.

**5. Advance Payment Rebate**

For advance payment made before commencement of consumption period for which bill is to be prepared, a rebate @ 0.5% per month on the amount, which remains with the Licensee at the end of calendar month excluding security deposit, shall be credited to the account of consumer after adjusting any amount payable to the Licensee, subject to the net amount of advance being not less than Rs.20,000 and shall be adjustable in next month's bill.

**6. Additional Charge for Exceeding Contract Demand**

The consumers should restrict their maximum demand to the extent of contract demand. In case the maximum demand during any month exceeds the contract demand, the tariff at normal rate shall apply only to the extent of the contract demand and corresponding units of energy. The demand in excess of contract demand and corresponding units of energy shall be treated as excess supply. The excess supply so

availed, if any, in any month shall be charged at one and half times of the normal tariff applicable to the consumer (demand and energy charges) for the excess demand to the extent of 20% of contract demand and at the rate of two times of normal tariff if the excess demand is found beyond 20% of contract demand.

Provided that in all categories where TOD is applicable:

- i. During Off-Peak Hours, no additional charge will be levied on exceeding Contract Demand up to a maximum limit of 20%.
- ii. Beyond 120% of contract demand, excess supply will be billed as per prescribed formula.
- iii. Provided that maximum recorded demand during off peak load hours period will not be considered for the purpose of demand charges billing, i.e., demand charges will be levied on maximum recorded demand during normal and peak load hours.

For the purpose of billing of excess supply, the billing demand and the units of energy shall be determined as under:-

i. **Billing Demand / Contract Demand:**

The demand in excess of the contract demand in any month shall be the billing demand/ contract demand of the excess supply.

ii. **Units Energy:**

The units of energy corresponding to kVA of the portion of the demand in excess of the contract demand shall be:

$$EU = TU (1 - CD/MD)$$

Where

EU - denotes units corresponding to excess supply;

TU - denotes total units supplied during the month;

CD - denotes contract demand; and

MD - denotes maximum demand.

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 CSPDCL's right to discontinue the supply in accordance with the provisions contained in the Chhattisgarh State Electricity Supply Code, 2011 and its amendments thereof.

iii. No rebates/incentive is payable on such excess supply.

**7. Additional Charge**

The HV consumers having contract demand exceeding the maximum limit as prescribed in Clause 1 of terms and conditions of HV tariff shall be levied additional charges at the rate of 5% on Energy Charges of the respective consumer category.

**8. Meter Hire**

Meter hire shall be charged as per the schedule of miscellaneous charges to all categories of HV consumers.

**9. 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.

**10. Variable Cost Adjustment (VCA) charge**

VCA charge on consumption from April 1, 2018 as per the formula and conditions specified in the CSERC MYT Regulations, 2015 shall be levied in addition to energy charge on all the HV categories including temporary supply.

However, from the date of applicability of this Order, the base values for computation of VCA for succeeding period shall be revised in accordance to this Order.

**11. Dispute on applicability of tariff**

In case of any dispute on applicability of tariff on a particular category of HV industry/ consumer, the decision of the Commission shall be final and binding.

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 Licensee.

**12. Parallel Operation Charges (POC)**

Parallel Operation Charges shall be payable by CPP to CSPDCL for its captive and non-captive load at the rate Rs. 21 per kVA/month.

### **13. Open Access Charges**

#### **a) Transmission Charges**

The long-term and medium-term open access customers including CSPDCL shall be required to pay the Annual Transmission Charges approved by the Commission. Bills shall be raised for Transmission Charge on monthly basis by the STU (CSPTCL), and payments shall be made by the beneficiaries and long-term and medium-term open access customers directly to the CSPTCL. These monthly charges shall be shared by the long-term open access customers and medium-term open access customers as per allotted capacity proportionately. The monthly transmission charge is Rs. 80.29 Crore.

For short-term open access customer: Rs. 349/MWh (or Rs. 0.3492 per kWh) for the energy computed as per the provisions made in Regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% Load Factor for transmission. The same charges shall be applicable for both collective and bilateral transactions at the point or points of injection.

#### **b) Energy losses for transmission**

Transmission Losses of 3.22% for the energy scheduled for transmission at the point or points of injection shall be recoverable from open access customers.

#### **c) Wheeling Charges**

For long-term, medium-term and short-term open access customer: Rs. 254/MWh (or Rs. 0.254 per kWh) for the energy computed as per the provisions made in Regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for wheeling. The same charges shall be applicable for both collective and bilateral transactions at the point of injection.

#### **d) Energy losses for distribution**

Distribution Losses of 6 % for the energy scheduled for distribution at the point or points of injection at 33 kV side of 33/11 kV sub-station shall be recoverable from open access customers.

#### **e) Operating Charges**

The short-term open access customer shall pay the Operating Charges to SLDC at the rate of Rs. 2000 per day.

**f) Reactive Energy Charges**

Reactive Energy Charges shall be levied at the rate of 27 paise/kVARh.

**g) Cross Subsidy Surcharge**

- i. For 220 kV/132 kV consumers Rs. 1.23 per kWh (which is 90% of the computed value of Rs. 1.37 per kWh).
- ii. For 33 kV consumers Rs. 1.49 per kWh (which is 90% of the computed value of Rs. 1.65 per kWh).

**h) Standby charges**

The Standby Charges for consumers availing open access (using transmission and/or distribution system of Licensee) and who draw power from the grid up to the contracted capacity of open access during the outage of generating plant/CPP shall be 1.5 times of the per kWh weighted average tariff of HV consumers, which is Rs. 11.06 per kWh (1.5 times of the average billing rate of Rs.7.38 per kWh). For drawal of power in excess of the contracted capacity of open access, the tariff for availing standby support from the grid shall be two times of the per unit weighted average tariff of HV consumers, which is Rs. 14.75 per kWh (2 times of the average billing rate of Rs. 7.38 per kWh). Further, in case of outage of CPP supplying power to captive/non-captive consumer who has reduced its contract demand to zero and also availed open access draws power of CSPDCL, then billing of such power drawn shall be done as per the standby charges mentioned above.

**14. Intra-State Open Access Charges for Renewable Energy transactions**

- a) Transmission Charges in cash for long-term/medium-term/short-term open access - NIL
- b) Wheeling Charges in cash for long-term/medium-term/short-term open access - NIL
- c) SLDC Charges (Operating Charges) for long-term/medium-term/short-term open access - NIL
- d) Total Transmission Charges or Wheeling Charges or Combination thereof in kind (energy losses) for long-term/medium-term/short-term open access - 6%
- e) Cross-Subsidy Surcharge -
  - i. A consumer availing open access is required to pay the cross-subsidy surcharge.
  - ii. In case a generating company is an open access customer and is

supplying power to a consumer of the State, the liability of paying cross-subsidy surcharge shall be on the consumer. If a captive generating plant avails open access for supplying power to its captive users, and if the captive users do not fulfil the requirement of captive users in a financial year as prescribed in the Electricity Rules, 2005, then that end user/s shall be liable to pay the Cross-Subsidy Surcharge.

- iii. The Cross Subsidy Surcharge payable is 50% of the Cross Subsidy Surcharge determined for that year, which is as under:
  - a) For 220 kV/132 kV consumers Rs. 0.69 per kWh (which is 50% of the computed value of Rs. 1.37 per kWh).
  - b) For 33 kV consumers Rs. 0.83 per kWh (which is 50% of the computed value of Rs. 1.65 per kWh).
- iv. In case of a consumer receiving power from biomass based power generating plants through open access, if it is established that the biomass based power generating plants supplying power to such consumer has used biomass in the lesser ratio than as mentioned in the guidelines of the Ministry of New and Renewable Energy during any financial year, then the relaxations at (iii) above given to the open access consumer shall be treated as withdrawn for that financial year and the biomass generator shall be liable to pay to CSPDCL full Cross Subsidy Surcharge.

## **10 DIRECTIVES**

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The directives passed in the previous Orders of the Commission shall be continued.

### **10.1 New directives to CSPGCL**

- (i) The Commission directs CSPGCL to make all possible efforts to complete LDCC work and other pending works on or before January 31, 2019.

### **10.2 New directives to CSPDCL**

- (i) The Commission directs CSPDCL to submit the following details along with necessary reconciliation, at the time of Final Truing up for FY 2016-17:
  - a. Power purchase expenses including break-up of Delayed Payment Surcharge payable/paid to CSPGCL, CSPTCL and CGS, as well as details of Other charges
  - b. Monthly transmission charges paid to CSPTCL
  - c. Reconciliation of payment made by CSPDCL to CSPGCL for thermal and hydro generation, with revenue booked by CSPGCL.
  - d. Reconciliation of payment made by CSPDCL to CSPTCL with revenue booked by CSPTCL.
- (ii) The Commission directs CSPDCL to submit the Banking Agreements for all the banking transactions entered into during FY 2016-17, and the reconciliation of each transaction with regard to the respective Banking Agreement, clearly showing the energy units received under forward banking and the units returned under return banking. These details should be submitted along with the Petition for final true-up for FY 2016-17 and each subsequent true-up Petition.



**11 LIST OF STATE ADVISORY COMMITTEE (SAC)  
MEMBER WHO ATTENDED SAC MEETING ON  
19.01.2018 ON THE TARIFF PETITION**

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<b>S. No.</b>	<b>Name</b>
1.	Shri Arun Choubey, President, Shram Kalyan Mandal, Raipur (CG)
2.	Shri Naresh Kumar Somani, Padmnabhpur, Durg (CG)
3.	Shri Dhiraj Kumar Pandey, Kirandul (CG)
4.	Shri D.P.Sharma, Bilaspur, (CG)
5.	Dr. N.D.Londhe, Raipur (CG)

## 12 LIST OF PERSONS WHO SUBMITTED WRITTEN SUBMISSION

S. No.	Name
1.	Shri D.P.Sharma, Member, State Advisory Committee CSERC, Raipur (CG)
2.	Officer of the Principal Chief Electrical Engineer, South East Central Railway, Bilaspur (CG)
3.	Shri Yogesh Agrawal (President) Chhattisgarh Pradesh Rice Millers Association, Raipur (CG)
4.	Shri Manish Dhupad (Mahasachiv), Chhattisgarh Mini Steel Plant Association, Raipur (CG)
5.	Shri Shyam Kabra, Telibandha, Raipur (CG)
6.	Dr. Rakesh Gupta, President, Hospital Board, Indian Medical Association, Raipur Branch, Raipur (CG)
7.	Shri Vikas Agrawal (President) Chhattisgarh Mini Steel Plant Association, Raipur (CG)
8.	Shri Manoj Agrawal (President) Chhattisgarh Steel Re-Rollers Association, Raipur (CG)
9.	Shri Ashwin Garg (President), Urla Industries Association, Urla, Raipur (CG)
10.	Shri Ravi Tiwari, Chief Executive (Co-ordination), Shree Cement Ltd., Raipur (CG)
11.	South Eastern Coalfields Ltd., Bilaspur (CG)
12.	Shri Hitesh Varu, Chhattisgarh Yuva Pragatishil Kisan Sangh, Kumhari, Distt. Durg (CG)
13.	Shri Bahadur Ali, Indian Agro & Food Industries Ltd. Rajnandgaon (CG)
14.	Adani Green Energy Ltd., Ahmednagar (Gujrat)
15.	Shri B.K.Bhargava, Uniworth Ltd., Urla, Raipur (CG)
16.	Shri Ravikant Jaiswal, Secretary, Akhil Bhartiya Grahak Panchayat (CG)
17.	Shri Rajkumar Gupta, Kasaridih, Durg (CG),
18.	Shri Lalchand Gulwani (Pradesh Mahamantri) Chhattisgarh Chamber of Commerce and Industries, Raipur (CG)
19.	Shri Suryakant Sur, President, Chhattisgarh State Poultry Farms Association, Raipur (CG)
20.	Shri Dilesh Kumar Gautam, Village Bhedsar, Dist. Durg (CG)
21.	Shri Vikas Upadhyay, President, Raipur Shahar Zila Congress Committee, Raipur (CG)
22.	Shri M.A.Iqbal, Vidyut Karmchari Sangh (Federation), Raipur (CG)
23.	KALYANI, Social Welfare & Research Organization, Bhilai Nagar Durg (CG)

### **13 LIST OF PERSONS WHO SUBMITTED COMMENTS DURING HEARING**

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<b>S.No.</b>	<b>Name</b>
1.	Shri Sanjay Agrawal
2.	Shri Nitin Khandelwal
3.	Shri Vikas Agrawal
4.	Shri Shyam Kabra
5.	Shri Manoj Agrawal
6.	Shri Inderchand Dhadiwal
7.	Shri Radheshyam
8.	Shri Dhanendra Sahu
9.	Shri Ramesh Varlyani
10.	Shri Rajkumar Gupta
11.	Shri Gajendra Singh Koshle
12.	Shri I.K.Verma
13.	Shri Ajay Kumar
14.	Shri Ashvin Garg
15.	Shri Vikas Upadhyay
16.	Shri Dhananjay Singh
17.	Shri Daulal Sahu
18.	Smt. Sunita Sharma
19.	Shri Arun Janghel
20.	Shri Amit Verma
21.	Shri M.A.Iqbal
22.	Indian Medical Association, Chhattisgarh
23.	Shri Radheshyam Sharma