

**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION
RAIPUR**



Chhattisgarh State Power Distribution Co. Ltd.		P. No. 64/2016(T)
Chhattisgarh State Power Transmission Co. Ltd		P. No. 65/2016(T)
Chhattisgarh State Power Generation Co. Ltd.		P. No. 66/2016(T)
Chhattisgarh State Load Dispatch Centre		P. No. 67/2016(T)

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

In the matter of –

1. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) for final true up for FY 2015-16 and determination of Tariff for FY 2017-18;
2. Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) for final true up for FY 2015-16;
3. Chhattisgarh State Power Generation Company Ltd. (CSPGCL) for final true up for FY 2015-16;
4. Chhattisgarh State Load Dispatch Centre (CSLDC) for final true up for FY 2015-16.

ORDER

(Passed on 31.03.2017)

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 '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 final true up for FY 2015-16, and determination of tariff for FY 2017-18, (ii) Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) for approval of final true up for FY 2015-16 and determination of tariff for FY 2017-18, (iii) Chhattisgarh State Power Generation Company Ltd. (CSPGCL) for approval of final true up for FY 2015-16, and (iv) Chhattisgarh State Load Dispatch Centre (CSLDC) for approval of final true up for FY 2015-16.
3. This Order is passed under the provisions of Section 32(3), Section 45 and 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, CSPGCL, and CSLDC, after having considered all the information and documents filed 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 hearing held by the Commission.
4. The Petitions were made available on the website of the Commission as well as the Petitioners and were also made 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 08.02.2017, 09.02.2017, and 10.02.2017. The Commission also convened a

meeting with Members of the State Advisory Committee on 20.01.2017 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 final true up for FY 2015-16 for CSPDCL, CSPTCL, and CSPGCL in accordance with the provisions of the Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2012 (hereinafter referred as 'MYT Regulations, 2012'). For CSLDC, the final true up for FY 2015-16 has been undertaken in accordance with the Chhattisgarh State Electricity Regulatory Commission (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2012.
6. In the Multi-Year Tariff (MYT) Order passed on March 31 2016, the Commission had approved the ARR for the Control Period from FY 2016-17 to FY 2020-21 for CSPGCL, CSPTCL, CSLDC and CSPDCL, and the Tariff for FY 2016-17 for CSPDCL in accordance with the provisions of the MYT Regulations, 2015. For CSPDCL, only the total power purchase cost has been revised for FY 2017-18, based on the revised sales projections and energy requirement.
7. In the truing up of FY 2015-16, the Commission had observed that CSPDCL has not claimed the Revenue Gap of FY 2013-14 and to that extent CSPDCL has understated the Revenue Gap/(Surplus) for FY 2015-16. The Commission has adjusted the revenue gap/(surplus) of CSPGCL, CSPTCL and CSLDC for FY 2013-14 in their respective ARRs for FY 2015-16. After adjusting the gap/(surplus) of previous years, the resultant revenue gap/(surplus) of CSPGCL, CSPTCL and CSLDC for FY 2015-16 have been considered while computing cumulative gap/(surplus) to be allowed for CSPDCL for FY 2017-18.
8. After applying the holding cost on surplus of CSPTCL for FY 2015-16, the total surplus upto FY 2017-18 has been approved as Rs. 112.99 Crore. After applying the carrying cost on deficit of CSPGCL for FY 2015-16, the total gap upto FY 2017-18

has been approved as Rs. 301.55 Crore. The surplus for CSLDC including holding cost upto FY 2017-18, has been approved as Rs. 3.12 Crore.

9. The standalone deficit for CSPDCL for FY 2015-16 has been approved as Rs. 397.44 Crore. The Commission has also considered the amortization of Regulatory Asset of Rs. 760 Crore in FY 2017-18.
10. The combined revenue gap of CSPDCL, CSPTCL, CSPGCL, and CSLDC for FY 2015-16 along with carrying cost has been considered in the ARR of CSPDCL for FY 2017-18. The cumulative revenue gap approved for CSPDCL for FY 2017-18 is Rs. 90.90 Crore
11. For CSPGCL, the ARR for FY 2017-18 was approved in MYT Order 2016 dated March 31, 2016. There were various representations from the stakeholders regarding the VCA levied to the consumers. In view of this the Commission has decided to re-visit the FCA charges of CSPGCL excluding Marwa TPP. It is observed that there was a significant increase in the landed price of coal with respect to the estimated figure in the Tariff Order FY 2016-17. The Commission asked CSPGCL to submit notifications of CIL and Govt. of India regarding prices of coal and other applicable taxes. Based on the notifications submitted by CSPGCL and the actual GCV of the coal and actual cost of the landed price of coal, the energy charge has been re-estimated in this Order for FY 2017-18. The revised estimated energy charge rate has been used as an input to determine power purchase cost for CSPDCL for FY 2017-18. Further, the Commission directs CSPGCL to bill FCA on the basis of actual GCV and actual cost of coal in FY 2017-18. The Annual Fixed Cost (AFC) and Energy Charge rate for CSPGCL stations for FY 2017-18 has been approved by the Commission as under :-

Thermal Power Stations

Sl.	Particulars	Units	FY 2017-18				
			KTPS	HTPS	DSPM	KWTPP	Marwa
1	Annual Fixed Cost	Rs. Crore	328.62	504.86	492.86	713.29	1871.72*
2	Energy Charge Rate (ex-bus	Rs/kWh	1.927	1.487	1.545	1.264	1.20*

Sl.	Particulars	Units	FY 2017-18				
			KTPS	HTPS	DSPM	KWTPP	Marwa
	power plant basis)						
3	Contribution to P&G	Rs. Crore	50.59	52.37	8.60	8.47	19.13

*AFC and ECR for MARWA TPP is Provisional

Hydro Power Station (Hasdeo Bango)

Sl.	Particulars	Units	FY 2017-18
1	Approved ARR	Rs. Crore	25.00
2	Approved Net Generation	MU	271.26
3	Approved Tariff	Rs/kWh	0.922
4	Contribution to P&G	Rs. Crore	3.50

12. For CSPTCL, the Commission had determined ARR of Rs. 916.80 Crore for FY 2017-18 in MYT Order 2016 dated March 31, 2016. Transmission charge for FY 2017-18 shall be as under :-

Sl.	Particulars	Units	FY 2017-18
1	ARR for CSPTCL	Rs. Crore	916.80
2	Less: Past year cumulative revenue surplus	Rs. Crore	112.99
3	Net approved ARR	Rs. Crore	803.81
4	Monthly Transmission Charges for Medium and Long-term Open Access Consumers	Rs. Crore/month	66.98
5	Short-term Open Access Charges	Rs/kWh	0.2399

Further, Transmission losses at the rate of 3.22% for the energy scheduled for transmission at the point or points of injection shall be recoverable from open access customers.

13. For CSLDC, the Commission had determined ARR of Rs. 13.64 Crore for FY 2017-18 in MYT Order 2016 dated March 31, 2016.

14. CSPDCL has filed revised ARR for FY 2017-18 of Rs. 11,678.21Crore. The Commission after prudence check and due scrutiny has approved ARR at Rs. 12,183.62Crore, including the due FCA amount for December 2016 to March 2017.
15. It is noted that the State Government subsidy has not been taken into account while approving ARR of CSPDCL for FY 2017-18.
16. CSPDCL, in its Petition, has sought approval for cumulative surplus of Rs. 57.36Crore for FY 2017-18. However, as mentioned above, this cumulative surplus was overstated as CSPDCL had not considered the impact of the revenue gap/(surplus) of CSPTCL, CSPGCL, and CSLDC on account of final true-up for FY 2013-14 as approved in Tariff Order for FY 2015-16.
17. The Commission after prudence check and scrutiny has arrived at a cumulative revenue gap of Rs. 91.26 Crore for FY 2017-18 after adjusting the cumulative gap/(surplus) of CSPGCL, CSPTCL, and CSLDC, and amortization of Regulatory Asset of Rs. 760 Crore. Based on the above, the Commission has approved the revised Tariff Schedule.
18. The Commission has made the following changes in this Order as compared to the tariff categories approved in the previous Tariff Order:
 - a) The tariff for most of the consumer categories has been marginally increased in order to recover the approved revenue gap.
 - b) The tariffs for all consumer categories have been increased 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) 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 – LT Industry, 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).

- d) Based on CSPDCL's proposal the Commission has merged the part of existing HV-5: Low Load Factor Industries with HV-4: Steel Industries and HV-3: Other Industrial and General Purpose Non-Industrial based on load factor.
 - e) For consumers covered in TOD tariff, the Energy charges in the Peak Period to be billed at 115% instead of 130%. Similarly, during Non-Peak Period Energy charges to be billed at 90% instead of 75%.
 - f) Consumers under HV 4 category have been permitted to avail energy over and above 20% of their Contract Demand during off peak period. However, such additional energy consumed will not be considered while calculating their load factor.
 - g) 30% Load factor rebate has been given to Indian Railways on achieving load factor above 20%
 - h) Terms and Conditions for Start-up Power has been revised.
 - i) To promote cashless transaction, all banking charges/online payment charges through net banking or debit cards, have been waived off for consumers. Such charges shall be borne by CSPDCL.
 - j) For ready reference, the Tariff Schedule applicable in reference to this Order is appended herewith as **Schedule**.
19. The Order will be applicable from 1st April, 2017 and will remain in force till 31.03.2018 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.

Sd/-
(ARUN KUMAR SHARMA)
MEMBER

Sd/-
(NARAYAN SINGH)
CHAIRMAN

**CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION
RAIPUR**



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

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2. Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) for final true up for FY 2015-16;
3. Chhattisgarh State Power Generation Company Ltd. (CSPGCL) for final true up for FY 2015-16;
4. Chhattisgarh State Load Dispatch Centre (CSLDC) for final true up for FY 2015-16.

The Commission has issued order in the above petitions on 31/03/2017. In the order, few inadvertent typographical errors have been found on the face of record. Hence, the Commission hereby makes following corrections in the above order.

CORRIGENDUM ORDER

(Dated 13.04.2017)

1. In para 8 of the operative order, Rs. 112.99 Crore and Rs. 301.55 shall be read as Rs. 103.21 Crore and Rs. 329.80 respectively.
2. In para 10 of operative order, Rs. 90.90 Crore shall be read as Rs. 91.26 Crore.
3. The table given in Para 12 of operative order shall be replaced by the following table:

Sl.	Particulars	Units	FY 2017-18
1	ARR for CSPTCL	Rs. Crore	916.80
2	Less: Past year cumulative revenue surplus	Rs. Crore	103.21
3	Net approved ARR	Rs. Crore	813.59
4	Monthly Transmission Charges for Medium and Long-term Open Access Consumers	Rs. Crore/month	67.80
5	Short-term Open Access Charges	Rs/kWh	0.24

Sd/-
(ARUN KUMAR SHARMA)
MEMBER

Sd/-
(NARAYAN SINGH)
CHAIRMAN

LIST OF ABBREVIATIONS

Abbreviation	Description
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
CSPTCL	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
kVA	kilovolt-ampere
kW	kiloWatt

Abbreviation	Description
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

TABLE OF CONTENTS

1	<u>BACKGROUND AND BRIEF HISTORY</u>	<u>1</u>
1.1	BACKGROUND.....	1
1.2	THE ELECTRICITY ACT, 2003, TARIFF POLICY AND REGULATIONS	1
1.3	PROCEDURAL HISTORY	2
1.4	ADMISSION OF THE PETITION AND HEARING PROCESS	3
1.5	STATE ADVISORY COMMITTEE MEETING.....	4
2	<u>HEARING PROCESS, INCLUDING THE COMMENTS MADE BY VARIOUS STAKEHOLDERS, THE PETITIONERS' RESPONSES AND VIEWS OF THE COMMISSION</u>	<u>6</u>
2.1	OBJECTIONS ON PROVISIONAL TRUE-UP FOR FY 2015-16 OF CSPDCL.....	6
2.1.1	ISSUE OF PROVISIONAL BALANCE SHEET & MISMATCHED DATA	6
2.1.2	LACK OF INFORMATION ON BASIC FUNCTION OF TARIFF REFORMS.....	7
2.1.3	FLAWS AND ERRORS IN THE PREPARATION OF R-15.....	9
2.1.4	DISCREPANCY IN TOTAL SALES	9
2.1.5	DISCREPANCY IN SALES TO AGRICULTURE CATEGORY	10
2.1.6	DISCREPANCY IN REVENUE FROM ENERGY SALE	11
2.1.7	REVENUE DEFICIT OR SURPLUS	12
2.1.8	QUANTUM OF ASSESSED CASES AND FAULTY METERS	13
2.1.9	DISTRIBUTION LOSS AND INCENTIVE ON OVER ACHIEVEMENT OF APPROVED TARGETS.....	13
2.1.10	INTRA-STATE TRANSMISSION LOSS	14
2.1.11	EXTERNAL SUBSIDY FROM THE STATE GOVERNMENT	14
2.1.12	EXCESSIVE CONTRIBUTION TO PENSION AND GRATUITY FUND.....	15
2.1.13	NOTIONAL INTEREST ON SURPLUS CONSUMER SECURITY DEPOSIT	15
2.1.14	DISCREPANCY IN POWER PURCHASE COST	16
2.1.15	ISSUE OF VCA CHARGES	18
2.1.16	OTHER DISCREPANCIES.....	19
2.2	OBJECTIONS ON PROPOSALS FOR ANNUAL REVENUE REQUIREMENT FOR FY 2017-18 OF CSPDCL	20
2.2.1	RETAIL TARIFF FOR LV 5 INDUSTRIES	20
2.2.2	POWER PURCHASE AGREEMENT BETWEEN NTPC LARA AND CSPDCL	21
2.2.3	TARIFF FOR HV-7 START-UP POWER	22
2.2.4	HV-3 SEASONAL HT INDUSTRIES- CHHATTISGARH RICE BRAN OIL ASSOCIATION.....	23
2.2.5	HV-2, HV-3 AND HV-4- SAIL, BHILAI.....	24
2.2.6	COVERAGE OF CO-LOCATED CPP CONSUMERS AND STANDBY CHARGES- SHREE CEMENT	25

2.2.7	TARIFF FOR ZERO WASTE CENTRE COMPOST UNIT	26
2.2.8	TARIFF FOR WOVEN SACKS MANUFACTURING - CHHATTISGARH WOVEN SACKS PRODUCERS' ASSOCIATION	26
2.2.9	SOUTH EAST CENTRAL RAILWAYS	27
2.2.10	NON DOMESTIC CONSUMER LT- BHARTI INFRATEL LTD	28
2.2.11	PUBLIC LIGHTING AND WATER WORKS	30
2.2.12	MISCELLANEOUS OBJECTIONS	32
2.3	OBJECTIONS ON PROVISIONAL TRUE-UP FOR FY 2015-16 OF CSPGCL.....	34
2.3.1	DISCREPANCY IN TOTAL ENERGY SALE AND REVENUE OF CSPGCL FROM ENERGY SALE.....	34
2.3.2	DISCREPANCY IN EMPLOYEE COST	34
2.3.3	EXCESSIVE CONTRIBUTION TO PENSION AND GRATUITY FUND.....	34
2.3.4	DISCREPANCY IN INTEREST COST	35
2.3.5	DISCREPANCY IN NON-TARIFF INCOME	35
2.3.6	LOW PLANT AVAILABILITY FACTOR	36
2.3.7	DISCREPANCY IN TOTAL PURCHASE COST OF COAL	36
2.3.8	DISCREPANCY IN GCV OF COAL PURCHASED	36
2.3.9	EXCESSIVE FUEL COST ADJUSTMENT (FCA) CHARGES.....	37
2.3.10	HIGHER ENERGY CHARGE RATE.....	37
2.4	OBJECTIONS ON PROVISIONAL TRUE-UP FOR FY 2015-16: CSPTCL	40
2.4.1	DISCREPANCY IN REVENUE OF CSPTCL FROM TRANSMISSION.....	40
2.4.2	DISCREPANCY IN EMPLOYEE COST	40
2.4.3	DISCREPANCY IN REPAIR AND MAINTENANCE COST AND ADMINISTRATIVE AND GENERAL COST	40
2.4.4	EXCESSIVE CONTRIBUTION TO PENSION AND GRATUITY FUND.....	41
2.4.5	DISCREPANCY IN INTEREST COST	41
2.4.6	DISCREPANCY IN NON-TARIFF INCOME	41
2.5	MISCELLANEOUS ISSUES	42
2.5.1	REVENUE FROM OPEN ACCESS.....	42
3	<u>TRUE UP FOR CSPGCL'S STATIONS FOR FY 2015-16</u>	<u>44</u>
3.1	NORMS OF OPERATION	44
3.2	NORMATIVE ANNUAL PLANT AVAILABILITY FACTOR	44
3.3	AUXILIARY ENERGY CONSUMPTION	51
3.4	GROSS GENERATION AND NET GENERATION	52
3.5	GROSS STATION HEAT RATE (GSHR).....	53
3.6	SPECIFIC FUEL OIL CONSUMPTION (SFC)	54
3.7	TRANSIT AND HANDLING LOSSES	55
3.8	CALORIFIC VALUE OF FUELS	55
3.9	FUEL PRICES	56
3.10	FUEL COST	56

3.11	CAPITAL COST AND ADDITIONAL CAPITALISATION	57
3.12	MEANS OF FINANCE FOR ADDITIONAL CAPITALISATION	58
3.13	ANNUAL FIXED COST (AFC).....	59
3.14	DEPRECIATION	60
3.15	RETURN ON EQUITY.....	62
3.16	INTEREST AND FINANCE CHARGES	63
3.17	O&M EXPENSES.....	64
3.18	INTEREST ON WORKING CAPITAL (IoWC)	67
3.19	PENSION AND GRATUITY CONTRIBUTION	67
3.20	NON-TARIFF INCOME.....	68
3.21	PRIOR PERIOD ITEMS	70
3.22	OTHER CHARGES	71
3.23	ARR FOR FY 2015-16	71
3.24	REVENUE FROM SALE OF POWER	73
3.25	SHARING OF GAINS AND LOSSES FOR FY 2015-16	73
3.26	IMPACT OF HON'BLE APTEL JUDGMENT DATED MARCH 30, 2016 ON APPEAL NO. 238 OF 2014	77
3.27	IMPACT OF DEVIATION SETTLEMENT MECHANISM (DSM) CHARGES FOR FY 2014-15	79
3.28	IMPACT OF DEVIATION SETTLEMENT MECHANISM (DSM) CHARGES FOR FY 2015-16	84
3.29	SUMMARY OF TRUE-UP FOR FY 2015-16	85
3.30	PROVISIONAL AFC FOR MARWA TPP FOR FY 2017-18	86
4	<u>FINAL TRUE UP FOR CSPTCL FOR FY 2015-16.....</u>	<u>89</u>
4.1	TRANSMISSION SYSTEM OF CSPTCL.....	89
4.2	AGGREGATE REVENUE REQUIREMENT FOR FY 2015-16.....	89
4.2.1	ANNUAL CHARGES FOR INTRA-STATE TRANSMISSION NETWORK	89
4.2.2	OPERATION AND MAINTENANCE (O&M) EXPENSES.....	90
4.2.3	CONTRIBUTION TO PENSION AND GRATUITY FUND.....	93
4.2.4	GROSS FIXED ASSETS AND MEANS OF FINANCE	93
4.2.5	DEPRECIATION	96
4.2.6	INTEREST ON LOAN	97
4.2.7	RETURN ON EQUITY (RoE) AND INCOME TAX.....	98
4.2.8	INTEREST ON WORKING CAPITAL (IoWC).....	100
4.2.9	PRIOR PERIOD EXPENSES/(INCOME)/OTHER DEBITS	100
4.2.10	NON-TARIFF INCOME	102
4.3	INCENTIVE FOR LOWER TRANSMISSION LOSS IN FY 2015-16	102
4.3.1	AGGREGATE REVENUE REQUIREMENT.....	104
4.4	REVENUE FROM TRANSMISSION CHARGES	104
4.5	REVENUE GAP/(SURPLUS) FOR FY 2015-16	105

4.6	DETERMINATION OF TRANSMISSION TARIFF FOR FY 2017-18 FOR CSPTCL.....	106
4.6.1	SHORT-TERM OPEN ACCESS CHARGES	106
5	<u>TRUE UP FOR CSLDC FOR FY 2015-16.....</u>	107
5.1	BACKGROUND.....	107
5.2	ANNUAL CSLDC CHARGES	107
5.2.1	COMPONENTS OF ANNUAL CHARGES	107
5.2.2	OPERATION AND MAINTENANCE (O&M) EXPENSES	108
5.2.3	CONTRIBUTION TO PENSION FUND	109
5.2.4	GROSS FIXED ASSETS.....	110
5.2.5	MEANS OF FINANCE.....	110
5.2.6	DEPRECIATION	111
5.2.7	INTEREST ON LOAN CAPITAL	112
5.2.8	RETURN ON EQUITY (ROE).....	113
5.2.9	INTEREST ON WORKING CAPITAL (IOWC).....	113
5.2.10	NON-TARIFF INCOME	114
5.2.11	AGGREGATE REVENUE REQUIREMENT (ANNUAL SLDC CHARGES)	115
5.3	REVENUE FROM CSLDC CHARGES.....	115
5.4	REVENUE GAP/(SURPLUS) FOR FY 2015-16	116
5.5	ACCORDINGLY, THE REVENUE SURPLUS OF RS. 3.12 CRORE FOR FY 2015-16 HAS BEEN ADJUSTED IN THE ARR OF CSPDCL FOR FY 2017-18.	117
5.6	PAYMENT OF CARRYING COST ARISING DUE TO NON-COMPLIANCE OF ORDER OF COMMISSION BY SLDC ...	117
6	<u>FINAL TRUE UP FOR FY 2015-16 FOR CSPDCL</u>	121
6.1	CONSUMER CATEGORY-WISE ENERGY SALES FOR FY 2015-16.....	121
6.2	DISTRIBUTION LOSS AND ENERGY BALANCE.....	123
6.3	POWER PURCHASE COST FOR FY 2015-16	127
6.4	OPERATION AND MAINTENANCE (O&M) EXPENSES	133
6.5	GFA FOR FY 2015-16	136
6.6	DEPRECIATION	138
6.7	INTEREST ON LOAN CAPITAL.....	139
6.8	INTEREST ON WORKING CAPITAL (IOWC).....	141
6.9	INTEREST ON CONSUMER SECURITY DEPOSIT	142
6.10	RETURN ON EQUITY (ROE).....	143
6.11	INCOME TAX	143
6.12	PRIOR PERIOD (INCOME)/EXPENSES.....	143
6.13	PROVISION FOR BAD AND DOUBTFUL DEBTS	144

6.14	NON-TARIFF INCOME.....	145
6.15	AGGREGATE REVENUE REQUIREMENT (ARR).....	145
6.16	REVENUE FROM SALE OF POWER	147
6.17	REVENUE GAP/(SURPLUS)	148
7	<u>REVISED ENERGY CHARGES FOR CSPGCL FOR FY 2017-18</u>	<u>151</u>
7.1	DETERMINATION OF REVISED ENERGY CHARGES	151
7.2	STATUTORY AND OTHER CHARGES FOR FY 2017-18	152
7.3	BILLING FOR FY 2017-18	153
8	<u>REVISED ARR FOR FY 2017-18</u>	<u>154</u>
8.1	SALES PROJECTIONS	154
8.1.1	OVERALL SALES	165
8.2	ENERGY LOSSES & ENERGY BALANCE	165
8.3	POWER PURCHASE EXPENSES	167
8.3.1	SUMMARY OF POWER PURCHASE COST	174
8.4	REVISED ARR FOR FY 2017-18	177
8.5	REVENUE AT EXISTING TARIFF.....	178
8.6	STANDALONE REVENUE GAP/(SURPLUS)	178
9	<u>CUMULATIVE REVENUE GAP/(SURPLUS)</u>	<u>180</u>
9.1	CUMULATIVE REVENUE GAP/(SURPLUS)	180
10	<u>TARIFF PRINCIPLES AND TARIFF DESIGN</u>	<u>183</u>
10.1	VOLTAGE WISE COST OF SUPPLY (VCOS).....	183
10.2	TARIFF PROPOSAL	187
10.2.1	HV-3 OTHER INDUSTRIAL AND GENERAL PURPOSE NON-INDUSTRIAL	187
10.2.2	HV-4: STEEL INDUSTRIES.....	187
10.2.3	ADDITIONAL CHARGE FOR EXCEEDING CONTRACT DEMAND	189
10.3	LT CATEGORIES	190
10.4	HV CATEGORIES	191
10.5	CATEGORY-SPECIFIC CHANGES.....	193
10.5.1	WHEELING CHARGES.....	194
10.5.2	REVENUE AT APPROVED TARIFF	195
10.5.3	CROSS SUBSIDY	196

HV1: RAILWAY TRACTION.....	196
-----------------------------------	------------

HV2: MINES (COALS & OTHERS).....	196
---	------------

10.5.4 CROSS-SUBSIDY SURCHARGE	197
--------------------------------------	-----

11 TARIFF SCHEDULE FOR FY 2017-18	198
--	------------

11.1 TARIFF SCHEDULE FOR LOW VOLTAGE (LV) CONSUMERS	198
--	------------

11.1.1 LV-1: DOMESTIC.....	198
----------------------------	-----

11.1.2 LV-2: NON-DOMESTIC.....	199
--------------------------------	-----

11.1.3 LV-3: L.V. AGRICULTURE	200
-------------------------------------	-----

11.1.4 LV- 4: L.V. AGRICULTURE ALLIED ACTIVITIES	201
--	-----

11.1.5 LV-5: L.V. INDUSTRY	202
----------------------------------	-----

11.1.6 LV-6: PUBLIC UTILITIES	203
-------------------------------------	-----

11.1.7 LV-7: INFORMATION TECHNOLOGY INDUSTRIES	204
--	-----

11.1.8 LV 8: TEMPORARY SUPPLY.....	204
------------------------------------	-----

11.1.9 TERMS AND CONDITIONS OF L.V. TARIFF.....	205
---	-----

11.1.10 POWER FACTOR INCENTIVE AND SURCHARGE	206
--	-----

11.1.11 PROVISIONS OF BILLING IN CASE OF EXCESS SUPPLY	207
--	-----

11.2 TARIFF SCHEDULE FOR HIGH VOLTAGE (HV) CONSUMERS.....	211
--	------------

11.2.1 HV-1: RAILWAY TRACTION	211
-------------------------------------	-----

11.2.2 HV-2: MINES	212
--------------------------	-----

11.2.3 HV-3: OTHER INDUSTRIAL AND GENERAL PURPOSE NON-INDUSTRIAL	212
--	-----

11.2.4 HV-4: STEEL INDUSTRIES.....	213
------------------------------------	-----

11.2.5 HV-5: IRRIGATION & AGRICULTURE ALLIED ACTIVITIES, PUBLIC WATER WORKS.....	215
--	-----

11.2.6 HV-6: RESIDENTIAL	215
--------------------------------	-----

11.2.7 HV-7: START-UP POWER TARIFF	216
--	-----

11.2.8 HV-8: INDUSTRIES RELATED TO MANUFACTURING OF EQUIPMENT FOR POWER GENERATION FROM RENEWABLE ENERGY SOURCES	217
---	-----

11.2.9 HV-9: INFORMATION TECHNOLOGY INDUSTRIES	218
--	-----

11.2.10 TEMPORARY CONNECTION AT HV	218
--	-----

11.2.11 TIME OF DAY TARIFF	219
----------------------------------	-----

11.2.12 TERMS AND CONDITIONS OF HV TARIFF	220
---	-----

12 DIRECTIVES TO STATE POWER COMPANIES	227
---	------------

12.1 DIRECTIVES TO CSPGCL	227
--	------------

12.2 DIRECTIVES TO CSPTCL.....	227
---------------------------------------	------------

12.3	DIRECTIVES TO CSLDC	227
12.4	DIRECTIVES TO CSPDCL	228
<u>13</u>	<u>ANNEXURE 1</u>	<u>230</u>
13.1	LIST OF PERSONS WHO SUBMITTED WRITTEN SUBMISSIONS ON PETITION NO. 64/2016, 65/2016, 66/2016 AND 67/2016	230
<u>14</u>	<u>ANNEXURE 2</u>	<u>232</u>
14.1	LIST OF PERSONS WHO SUBMITTED COMMENTS DURING HEARING ON PETITION NO. 64/2016, 65/2016, 66/2016 AND 67/2016 DATED 8, 9 AND 10 FEBRUARY 2017.....	232

LIST OF TABLES

TABLE 3-1: ACTUAL PLANT AVAILABILITY FACTOR FOR FY 2015-16	44
TABLE 3-2: APPROVED PLANT AVAILABILITY FACTOR FOR FY 2015-16	50
TABLE 3-3: ACTUAL AUXILIARY ENERGY CONSUMPTION FOR FY 2015-16 SUBMITTED BY CSPGCL.....	51
TABLE 3-4: APPROVED AUXILIARY ENERGY CONSUMPTION TRUE UP FOR FY 2015-16	52
TABLE 3-5: GROSS GENERATION AND NET GENERATION FOR FY 2015-16 (MU)	52
TABLE 3-6: NORMATIVE GROSS GENERATION AND NET GENERATION CONSIDERED IN TRUE UP OF FUEL COST FOR THERMAL GENERATING STATIONS FOR FY 2015-16.....	53
TABLE 3-7: ACTUAL GSHR FOR FY 2015-16 (KCAL/KWH)	53
TABLE 3-8: APPROVED GSHR IN TRUE UP FOR FY 2015-16 (KCAL/KWH)	54
TABLE 3-9: ACTUAL SFC FOR FY 2015-16 (ML/KWH)	54
TABLE 3-10: APPROVED SFOC IN TRUE UP FOR FY 2015-16 (KCAL/KWH)	54
TABLE 3-11: ACTUAL TRANSIT AND HANDLING LOSS FOR FY 2015-16.....	55
TABLE 3-12: APPROVED TRANSIT AND HANDLING LOSS IN TRUE UP FOR FY 2015-16	55
TABLE 3-13: CALORIFIC VALUES OF FUELS CONSIDERED IN TRUE UP FOR FY 2015-16	56
TABLE 3-14: FUEL PRICES CONSIDERED IN TRUE UP FOR FY 2015-16	56
TABLE 3-15: APPROVED FUEL COST IN TRUE UP FOR FY 2015-16	57
TABLE 3-16: APPROVED ADDITIONAL CAPITALISATION IN TRUE UP FOR FY 2015-16 (RS. CRORE)	58
TABLE 3-17: APPROVED MEANS OF FINANCE FOR EXISTING STATIONS IN TRUE UP FOR 2015-16	59
TABLE 3-18: APPROVED DEPRECIATION IN TRUE UP FOR FY 2015-16 (RS. CRORE)	61
TABLE 3-19: APPROVED DEPRECIATION FOR HTPS IN TRUE UP FOR FY 2015-16 (RS. CRORE)	61
TABLE 3-20: APPROVED ROE IN TRUE UP FOR FY 2015-16 (RS. CRORE).....	62
TABLE 3-21: APPROVED INTEREST AND FINANCE CHARGES IN TRUE UP FOR FY 2015-16 (RS. CRORE)	63
TABLE 3-22: APPROVED O&M EXPENSES IN TRUE UP FOR FY 2015-16 (RS. CRORE)	66
TABLE 3-23: IMPACT OF WAGE REVISION IN TRUE UP FOR FY 2015-16 (RS. CRORE)	66
TABLE 3-24: APPROVED IOWC IN TRUE UP FOR FY 2015-16 (RS. CRORE)	67
TABLE 3-25: APPROVED NON-TARIFF INCOME IN TRUE UP FOR FY 2015-16 (RS. CRORE).....	70
TABLE 3-26: APPROVED PRIOR PERIOD EXPENSES APPROVED IN TRUE UP FOR FY 2015-16.....	71
TABLE 3-27: APPROVED ARR FOR HTPS, KTPS AND DSPM, FOR FY 2015-16 (RS. CRORE).....	72
TABLE 3-28: APPROVED REVENUE IN TRUE UP FOR FY 2015-16 (RS. CRORE)	73
TABLE 3-29: SUMMARY OF TRUE UP FOR KTPS, HTPS AND DSPM FOR FY 2015-16	75
TABLE 3-30: IMPACT OF HON'BLE APTEL JUDGMENT IN APPEAL NO. 238 OF 2014 (RS. CRORE)	78
TABLE 3-31: DSM CHARGES WHICH SHOULD HAVE BEEN BILLED AS SUBMITTED BY CSPGCL (RS. CRORE)	82
TABLE 3-32: DSM CHARGES PAYABLE TO CSPGCL BY CSPDCL (RS. CRORE)	83
TABLE 3-33: DSM CHARGES PAYABLE BY CSPGCL TO CSPDCL (RS. CRORE)	83
TABLE 3-34: DSM CHARGES PAYABLE TO CSPGCL BY CSPDCL AND CSLDC WITH CARRYING COST (RS. CRORE) FOR THE PERIOD FROM OCT-14 TO DEC-14.....	83
TABLE 3-35: DSM CHARGES PAYABLE BY CSPGCL TO CSPDCL WITH CARRYING COST (RS. CRORE) FOR THE PERIOD FROM JAN-15 TO MAR-15.....	84
TABLE 3-36: DSM CHARGES PAYABLE BY CSPGCL TO CSPDCL (RS. CRORE)	84
TABLE 3-37: SUMMARY OF TRUE UP FOR FY 2015-16 FOR CSPGCL (RS. CRORE)	85
TABLE 3-38: CUMULATIVE REVENUE GAP AFTER TRUE UP FOR FY 2015-16 FOR CSPGCL	86

TABLE 3-39: PROVISIONAL AFC FOR MARWA TPP FOR FY 2017-18	87
TABLE 4.1-1: PHYSICAL STATUS OF TRANSMISSION SYSTEM OF CSPTCL AS ON MARCH 31, 2016	89
TABLE 4.2-1: NORMATIVE O&M EXPENSES CONSIDERED IN TRUE-UP FOR FY 2015-16	92
TABLE 4.2-2: APPROVED O&M EXPENSES FOR FY 2015-16	92
TABLE 4.2-3: SHARING OF GAIN/(LOSS) ON O&M EXPENSES APPROVED IN TRUE UP FOR FY 2015-16	92
TABLE 4.2-4: CAPITAL STRUCTURE FOR FY 2015-16 AS SUBMITTED BY CSPTCL	94
TABLE 4.2-5: GFA ADDITION AND MEANS OF FINANCE APPROVED IN TRUE UP FOR FY 2015-16	96
TABLE 4.2-6: DEPRECIATION APPROVED IN TRUE UP FOR FY 2015-16 (RS. CRORE)	97
TABLE 4.2-7: INTEREST AND FINANCE CHARGES APPROVED IN FINAL TRUE UP FOR FY 2015-16	98
TABLE 4.2-8: ROE APPROVED IN TRUE UP FOR FY 2015-16	99
TABLE 4.2-9: INCOME TAX FOR FY 2015-16	99
TABLE 4.2-10: IOWC APPROVED IN FINAL TRUE UP FOR FY 2015-16 (RS. CRORE)	100
TABLE 4.2-11: DETAILS OF PRIOR PERIOD (INCOME)/EXPENSES SUBMITTED BY CSPTCL	101
TABLE 4.2-12: NET PRIOR PERIOD EXPENSE/(INCOME) APPROVED BY THE COMMISSION IN TRUE UP FOR FY 2015-16	101
TABLE 4.3-1: TRANSMISSION LOSS FOR FY 2015-16 AS SUBMITTED BY CSPTCL	103
TABLE 4.3-2: INCENTIVE FOR LOWER TRANSMISSION LOSS FOR FY 2015-16 AS SUBMITTED BY CSPTCL	103
TABLE 4.3-3: ARR APPROVED IN TRUE UP FOR FY 2015-16 (RS. CRORE)	104
TABLE 4.4-1: REVENUE RECEIVED IN FY 2015-16 (RS. CRORE)	105
TABLE 4.4-2: REVENUE RECEIVED APPROVED IN FY 2015-16 (RS. CRORE)	105
TABLE 4.5-1: APPROVED REVENUE GAP/(SURPLUS) FOR FY 2015-16 (RS. CRORE)	105
TABLE 5.2-1: SHARING OF (GAIN)/LOSS IN O&M EXPENSES APPROVED IN TRUE UP FOR FY 2015-16 (RS. CRORE)	109
TABLE 5.2-2: DEPRECIATION APPROVED IN TRUE UP FOR FY 2015-16 (RS. CRORE)	111
TABLE 5.2-3: INTEREST ON LOAN APPROVED IN TRUE UP FOR FY 2015-16 (RS. CRORE)	112
TABLE 5.2-4: ROE APPROVED IN TRUE UP FOR FY 2015-16 (RS. CRORE)	113
TABLE 5.2-5: IOWC APPROVED IN THE TRUE UP FOR FY 2015-16 (RS. CRORE)	114
TABLE 5.2-6: ANNUAL CSLDC CHARGES APPROVED IN THE TRUE UP FOR FY 2015-16	115
TABLE 5.3-1: REVENUE RECEIVED APPROVED IN FY 2015-16 (RS. CRORE)	116
TABLE 5.4-1: REVENUE GAP/(SURPLUS) APPROVED BY THE COMMISSION FOR FY 2015-16	116
TABLE 6.1-1: APPROVED CONSUMER CATEGORY-WISE SALES IN TRUE UP FOR FY 2015-16 (MU)	122
TABLE 6.2-1: ENERGY BALANCE FOR FY 2015-16 AS SUBMITTED BY CSPDCL	123
TABLE 6.2-2: INCENTIVE FOR DISTRIBUTION LOSS FOR FY 2015-16 AS SUBMITTED BY CSPDCL	124
TABLE 6.2-3: APPROVED ENERGY BALANCE AND DISTRIBUTION LOSS FOR FY 2015-16	125
TABLE 6.3-1: APPROVED POWER PURCHASE COST FOR FY 2015-16	130
TABLE 6.4-1: REVISED NORMATIVE O&M EXPENSES FOR FY 2015-16 (RS. CRORE)	135
TABLE 6.4-2: ACTUAL O&M EXPENSES CONSIDERED IN TRUE UP FOR FY 2015-16 (RS. CRORE)	135
TABLE 6.4-3: SHARING OF LOSS IN O&M EXPENSES FOR FY 2015-16 (RS. CRORE)	136
TABLE 6.5-1: GFA FOR FY 2015-16 AS SUBMITTED BY CSPDCL (RS. CRORE)	137
TABLE 6.5-2: GFA APPROVED IN THE TRUE UP FOR FY 2015-16 (RS. CRORE)	138
TABLE 6.6-1: APPROVED DEPRECIATION FOR FY 2015-16 (RS. CRORE)	139
TABLE 6.7-1: APPROVED INTEREST EXPENSE FOR FY 2015-16 (RS. CRORE)	140
TABLE 6.8-1: APPROVED IOWC FOR FY 2015-16 (RS. CRORE)	141

TABLE 6.9-1: APPROVED INTEREST ON CSD FOR FY 2015-16 (RS. CRORE)	142
TABLE 6.10-1: APPROVED ROE FOR FY 2015-16 (RS. CRORE)	143
TABLE 6.12-1: PRIOR PERIOD EXPENSES FOR FY 2015-16 AS SUBMITTED BY CSPDCL (RS. CRORE)	144
TABLE 6.12-2: APPROVED PRIOR PERIOD EXPENSES FOR FY 2015-16 (RS. CRORE)	144
TABLE 6.14-1: APPROVED NON-TARIFF INCOME FOR FY 2015-16 (RS. CRORE)	145
TABLE 6.15-1: APPROVED ARR FOR FY 2015-16 (RS. CRORE)	146
TABLE 6.16-1: APPROVED REVENUE FOR FY 2015-16 (RS. CRORE)	148
TABLE 6.17-1: APPROVED REVENUE GAP/(SURPLUS) FOR FY 2015-16 (RS. CRORE)	149
TABLE 6.17-2: SUMMARY OF APPROVED ARR FOR THE CONTROL PERIOD FY 2013-14 TO FY 2015-16 (RS. CRORE)	149
TABLE 7.1-1: REVISED VARIABLE COST FOR CSPGCL STATIONS FOR FY 2017-18	151
TABLE 7.1-2: APPROVED COST FOR FY 2017-18	152
TABLE 8.1-1: CONSUMER CATEGORY-WISE SALES ESTIMATED BY THE COMMISSION FOR FY 2017-18 (MU) ...	165
TABLE 8.2-1: ENERGY BALANCE APPROVED BY THE COMMISSION FOR FY 2017-18	166
TABLE 8.3-1: POWER PURCHASE FROM CGS AS PROJECTED BY CSPDCL	168
TABLE 8.3-2: POWER PURCHASE FROM CSPGCL AS PROJECTED BY CSPDCL	169
TABLE 8.3-3: MINIMUM QUANTUM OF ELECTRICITY TO BE PROCURED THROUGH RENEWABLE SOURCES	170
TABLE 8.3-4: PURCHASE OF RPO IN FY 2017-18 AS PROJECTED BY CSPDCL	170
TABLE 8.3-5: CONCESSIONAL POWER PURCHASE AS PROJECTED BY CSPDCL	171
TABLE 8.3-6: POWER PURCHASE COST FOR FY 2017-18	175
TABLE 8.4-1: ARR APPROVED BY THE COMMISSION FOR FY 2017-18	177
TABLE 8.6-1: STANDALONE REVENUE GAP/(SURPLUS) APPROVED BY THE COMMISSION FOR FY 2017-18	179
TABLE 9.1-1: APPROVED CUMULATIVE REVENUE GAP/(SURPLUS)	181
TABLE 9.1-2: APPROVED AVERAGE COST OF SUPPLY FOR FY 2017-18	182
TABLE 10.1-1: VCOS FOR FY 2015-16 AS SUBMITTED BY CSPDCL	183
TABLE 10.1-2: VCOS FOR FY 2017-18 AS SUBMITTED BY CSPDCL	184
TABLE 10.1-3: VCOS FOR FY 2017-18 AS CALCULATED BY COMMISSION	186
TABLE 10.5-1: WHEELING CHARGES PROPOSED BY CSPDCL FOR FY 2017-18	195
TABLE 10.5-2: REVENUE IN FY 2017-18 AT TARIFFS APPROVED BY THE COMMISSION	195
TABLE 10.5-3: CROSS SUBSIDY WITH EXISTING AND APPROVED TARIFF (RS./KWH)	196

1 BACKGROUND AND BRIEF HISTORY

1.1 Background

The process of restructuring of the erstwhile Chhattisgarh State Electricity Board (CSEB) was initiated 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. As per the Rules, the erstwhile CSEB was unbundled into five independent Companies, i.e., 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 up 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 the tariff by the Commission and mandates that the tariff should progressively reflect 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 had 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, 2012 (hereinafter referred to as MYT Regulations, 2012). Based on the above said Regulations, the Commission had issued the MYT Order dated July 12, 2013 for CSPGCL, CSPTCL, and CSPDCL for the Control Period from FY 2013-14 to FY 2015-16. For CSLDC, the Commission had issued the Chhattisgarh State Electricity Regulatory Commission (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2012 (hereinafter referred to as SLDC Regulations, 2012). Based on the above said Regulations, the Commission had issued the MYT Order dated July 9, 2013 for CSLDC for the Control Period from FY 2013-14 to FY 2015-16.

The Commission had notified 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). Based on the above Regulations, the Commission had issued MYT Order dated March 31 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 3, 2016 for approval of true up for FY 2015-16, and retail tariff for FY 2017-18, which was registered as Petition No. 64 of 2016 (T). CSPTCL filed the Petition for approval of true up for FY 2015-16 and determination of Transmission Tariff for FY 2017-18 on December 6, 2016, registered as Petition No. 65 of 2016 (T). CSPGCL filed the petition for approval of true up for FY 2015-16 for Thermal Generation Stations and Hydro Electric Plants on December 2, 2016, registered as Petition No. 66 of 2016 (T). CSLDC filed the Petition for approval of final true up for FY 2015-16 on December 7, 2016, registered as Petition No. 67 of 2016(T).

In this Order, the Commission has undertaken the final true up for FY 2015-16 for CSPGCL, CSPTCL and CSPDCL in accordance with the provisions of the MYT Regulations, 2012 and determination of revised ARR and Tariff for CSPDCL for FY 2017-18. For CSLDC, the final true up for FY 2015-16 has been undertaken in accordance with the SLDC Regulations, 2012.

1.4 Admission of the Petition and Hearing Process

The Petitions filed by CSPGCL, CSPTCL, CSPDCL and CSLDC were registered on December 14, 2016.

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 Hitvada, Patrika, Central Chronicle, Haribhoomi, Nayi Duniya on December 22, 2016 and December 23, 2016 by the Petitioners. 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, Technical Validation Sessions (TVS) were held on January 6, 2017, January 7, 2017 and February 17, 2017 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
Patrika, Dainik Bhaskar, Ambika Vani, Dandkaranya Samachar, The Hitvada	January 18, 2017
Navbharat, Haribhoomi, Nayi Duniya, Deshbandhu, Central Chronicle	February 1, 2017

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 February 8, 9 and 10, 2017 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 Hearing is annexed as **Annexure 2**.

The issues raised by 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 on January 11, 2017 for their comments.

A meeting of the State Advisory Committee was convened on January 20, 2017 to discuss the Petitions and seek inputs from the Committee. The Companies gave a presentation 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 and following suggestions and objections were made/ raised and enumerate as below:

- i. Members questioned CSPDCL's proposal to supply electricity to railways below ACoS. Further, if railways is supplied electricity below ACoS then in that case who will bear the financial impact.
- ii. Status of Marwa TPP such as how much energy has been generated and how much has been sold from Marwah.
- iii. Members of SAC enquired from CSPGCL the following:
 - Can both units of Marwah generate 500 MW?
 - Whether feasibility has been explored to sale surplus power to other states?
 - If the projected generation from Marwah is not realised then who will bear the cost?
 - If cheaper power is available in IEX then what would be the choice? Will we buy from Marwah or through exchange?
- iv. On the Tariff Proposal submitted by CSPDCL, members submitted that there is no reason to increase the fixed charges for only HV2 category. In response CSPDCL submitted that the contribution from overall HV category should remain at same level and due to LF based tariff in HV3 and HV4, sales have increased in HV3 and HV4 category. Therefore, to keep the contribution same, fixed charges of HV2 has been increased.
- v. It was stated that no benefit of surplus power has been passed onto HV categories.
- vi. SAC Members asked CSPTCL to ensure that there is inter-state transfer of power.
- vii. Members questioned CSPGCL regarding shortage of coal and how it has affected its performance. In response, CSPGCL submitted that the target set by the

Commission is higher vis-à-vis FSA assurance given by CIL regarding quality of the coal. Therefore, members asked CSPGCL to pursue CIL for early commissioning of LDCC.

- viii. It was further submitted that there should not be any surcharge in the online payment of bills
- ix. At present agriculture subsidy is given for 3HP and 5HP however due to additional load booster, there is reduction in subsidy. Hence, the subsidy should be given upto 6 HP.

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

2.1 Objections on Provisional True-up for FY 2015-16 of CSPDCL

2.1.1 Issue of Provisional Balance Sheet & Mismatched Data

The objector submitted that:

- i. The True-up Petition filed by CSPDCL for FY 2015-16 is not supported by Statutory Audit Report, hence Final True-up cannot be carried by the Commission on the basis of Provisional Balance Sheet as per prevailing practice and Regulations.
- ii. Such Provisional True-up is useful just to draw the guiding principles and to have glimpses of the state of affairs in Power Generation, Transmission and Distribution and in absence of much reliability, any Revenue Surplus/(Deficit) cannot be passed on to the Retail Tariff of next years.
- iii. Moreover, Provisional True-up also cannot be carried efficiently and truly as information and data/actual results provided in the present Petitions vary significantly from the Provisional Balance Sheet, R-15 formats and other Petitions.
- iv. Hence Petitioners should be directed to submit Statuary Audit Report along with reliable data and information.

Petitioner's Reply

CSPDCL submitted that it has submitted the petition for True-up for FY 2015-16 and Tariff Proposal for FY 2017-18 based on MYT Regulations, 2012 and 2015 respectively. CSPDCL further added that the figures as mentioned in the Petition and Technical Formats of the Petition are as per Provisional Audit Accounts. There is no mismatch between the Petition and Provisional Audited Accounts. The Petitioner in its reply to data gaps as raised by Commission has submitted the final audited accounts on January 31, 2017.

Commission's view

The Commission had asked CSPDCL to submit the final audited accounts for FY 2015-16. CSPDCL had submitted the final audited accounts in response to the

additional information asked and the Commission has undertaken final true up for FY 2015-16 based on final audited accounts.

2.1.2 Lack of Information on Basic Function of Tariff Reforms

The objector submitted that for true up, CSPDCL has submitted category-wise number of consumers, their load and consumption but has not submitted 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 Electricity Act, 2003 and stressed by National Tariff Policy has to ensure implementation of following basic guiding principles:

- Licensees should be allowed with reasonable revenue for their satisfactory working, simultaneously ensuring competitiveness and efficiency
- Retail Tariff should be brought progressively within +/-20% of the Average Cost of Supply
- Cross Subsidies should be gradually reduced

With the availability of unreliable, suspicious, mismatched data and information presently submitted by the Licensees, do not truly permit to ensure all above basic guidelines. Hence Petitioners should be directed to submit reliable and matching data with references for a prudent True-up.

Petitioner's Reply

CSPDCL submitted that the detail tariff category and slab wise has already been provided in R15 formats and the Provisional Audited Accounts shows revenue received from HV, LV and through other Income. CSPDCL submitted the comparison of existing and proposed category wise cross subsidy as below:

S. No.	Particulars	FY 2017-18 (paisa/kWh and %)		
		Average Cost of Supply	At Existing Tariff	At Proposed Tariff
A	LV	532	96%	96%
1	Domestic Including BPL	532	85%	85%
2	Non-Domestic Normal	532	150%	150%
3	Non-Domestic Demand Based	532	176%	176%
4	Agriculture	532	84%	84%
5	Agriculture Allied Activities	532	128%	128%

S. No.	Particulars	FY 2017-18 (paisa/kWh and %)		
		Average Cost of Supply	At Existing Tariff	At Proposed Tariff
6	Industry	532	143%	143%
7	Public Utilities	532	108%	108%
8	IT Industries	532	0%	0%
9	Temporary	532	139%	139%
B	HV	532	132%	127%
1	Railway Traction	532	116%	79%
2	Mines	532	141%	143%
3	Other Industrial & General Purpose Non-Industrial	532	142%	142%
4	Steel Industries	532	124%	124%
5	Low Load Factor Industries	532	143%	143%
6	Irrigation & Agriculture Allied Activities, Public Water Works	532	135%	135%
7	Residential	532	127%	127%
8	Start Up Power (400/220/123/ 33/ 11 kV)	532	199%	199%
9	Industries related to manufacturing of equipment for power generation from renewable energy sources	532	72%	72%
10	IT Industry	532	0%	0%
11	Temporary	532	195%	195%
	Total	532	111%	111%

CSPDCL submitted that it has tried to reduce the cross-subsidization among various categories, in HV and overall a reduction of 5% and 1% respectively has been observed in line with NTP and EA, 2003 to reduce the cross subsidy. CSPDCL further added that the figures as mentioned in the Petition and Technical Formats of the Petition are as per Provisional Audited Accounts and there is no mismatch between two.

Commission's view

The Commission has analysed the Petition submitted and after scrutinizing the same, had asked CSPDCL to submit additional information as and when required. As regards the issue of discrepancy in R-15 and reduction in cross-subsidization, the same has been discussed in the relevant sections below.

2.1.3 Flaws and Errors in the preparation of R-15

The objector submitted that:

- i. It has been observed that there is no uniformity in the submission of CSPDCL with respect to R-15. LT R-15 is in consolidated annual format while HT R-15 is in monthly format so that it is very difficult to have an ‘Bird’s Eye-view’ (as stated by the Commission) to have an overall picture of distribution system. There are also several data-based and calculation errors due to which very purpose of preparing R-15 has been lost.
- ii. Computation of Net Adjusted Units (D) is wrong and also the computation of Final Units Sold.
- iii. There is a difference of Rs. 445 Crore between the revenue figures provided in R-15 and the value given in Tariff Order.
- iv. In the non-consolidated R-15 for HT Categories for May 2015, kVAh consumption is lower than kWh consumption which is not possible.
- v. CSPDCL is adopting a careless approach towards preparation of R-15, even when it is equipped with necessary software and infrastructure. Moreover, data in the present Petition do not match with R-15 which is a serious issue.

Petitioner’s Reply

CSPDCL submitted that the difference in Commission approved MU and Revenue in Tariff Order for FY 2015-16 and actual for FY 2015-16 is on account of consideration of different base period figures. CSPDCL added that the Commission while approving the sales and Revenue for FY 2015-16 in Tariff Order dated May 23, 2015, has considered the base figures for FY 2013-14 (True-up and actual) whereas the Petitioner in its current true up Petition for FY 2015-16 has considered the actual figures for FY 2015-16.

Commission’s view

The issue pertaining to the discrepancy in preparation of R-15 has been brought to the notice of the Petitioner. The Petitioner is henceforth directed to take due care while preparing the R-15.

2.1.4 Discrepancy in Total Sales

The objector submitted that:

- i. There is contradictory data for total quantum of energy sold by CSPDCL.
- ii. In the present Petition, CSPDCL has wrongly considered KVAH Sales to EHV and HV Categories instead of kWh sales while reporting Sales and doing Energy Balance

- iii. In the present Petition, CSPDCL has reported actual Sales to EHV Categories as 2,675.51MU whereas CSPTCL has, in its Petition, reported it to be only 2,236MU. In the additional submission, CSPDCL has stated as incorporation of BSP export and import drawl from CTU Grid to CG System which is against consumption recorded towards HT consumer M/s Praxair which has built its oxygen plant inside the premises of Bhilai Steel Plant.

Petitioner's Reply

CSPDCL submitted that the difference of 324.23 MU in sales to HV/EHV category is justified due to simultaneous existence of kVAh and kWh billing in HT/EHT Tariff during FY 2015-16 as start-up power tariff were notified on kWh basis. Therefore, gap in R-15 and Petition is indicative in nature with no commercial implications. The other consequential reasons are as follows:

- i. Unlike other HT/EHT consumers, accounting of electrical energy drawn by generating stations/captive generation/biomass for start-up power observed kWh pattern of billing which can be seen from entries in R-15.
- ii. Drawl of electricity for start-up power is at low power factor. There is a considerable gap between apparent watts and true watts depending upon utilization of power by the consumers.

CSPDCL submitted that the Commission had prescribed kVAh tariff for all HV category of consumers including start up consumers vide its Tariff Order dated April 30, 2016, hence aforesaid discrepancy has diminished during FY 2016-17.

Commission's view

A common Technical Validation Session (TVS) with CSPGCL, CSPTCL and CSPDCL was convened for reconciling the figures in the true up petitions for FY 2015-16, and sought detailed explanation for the differences in amounts reported in the Audited Accounts and respective Petitions. CSPGCL, CSPTCL, CSPDCL and CSLDC have given reconciliation for such numbers. Further, in this Order, all the numbers considered are from the final audited accounts, rather than the provisional accounts.

2.1.5 Discrepancy in Sales to Agriculture Category

The objector submitted that:

- i. CSPDCL has reported a huge deviation of 30% in Energy Sales to Agriculture Pumps from the Tariff Order
- ii. Load Factor of pump connection varies as per scheme and it is varying greatly from 41% to 138%. Deficiency of rainfall is not the logical reason why large

number of farmers under certain specific schemes are not using their pumps for irrigation while others are using it for more than 3 times.

- iii. As per data provided in LT R-15, 61% Agriculture Consumers are billed on their Assessed Consumption and about 7.2% Energy Meters are Defective/ Burnt. Henceforth, the above claimed consumption of Agriculture Consumers is highly suspicious.

Petitioner's Reply

CSPDCL submitted that the increase sale in agriculture category during FY 2015-16 is due to shortfall in monsoon by 16% to 24% in the State and the same shortfall can be verified from meteorological department. Most of the agricultural connections have zero diversity in its connected load and hence operation of agricultural load at 93% of average load factor is justified. Also, it is beyond dispute that security of energy meter installed in consumer premises is a liability of consumer. Energy meters in most of the agricultural connections are installations over temporary rafters wherein meter is influenced to external factors and such state of affairs can be verified independently.

Commission's Views

The R-15 submitted by CSPDCL has been examined and it is observed that the assessment of agricultural consumption does not appear to be realistic. The suggestion of the objector has been considered seriously and it is decided that a study shall be carried out for assessing the agricultural consumption.

2.1.6 Discrepancy in Revenue from Energy Sale

The objector submitted that:

- i. CSPDCL has not submitted R12 format for FY 2015-16 reporting category-wise revenue realization along with the present petition. But from the data available from R-15, there is found to be huge discrepancy in the figures of Revenue from Energy as given in audited accounts and as reported in R-15.
- ii. It is quite clear that the Revenue Realization is also being reported on lower side than actual in R-15 which requires thorough examination. The Revenue figures in R-15 are suppressed and the figures in the present Petition are further suppressed and are not supported by R-15 and Profit & Loss A/c in Balance Sheet.

Petitioner's Reply

CSPDCL submitted that the Audited Accounts are prepared as per Companies Act

and the same is vetted, finalized and commented if any by the Statutory Auditor and CAG.

Sr. No.	Particulars	Rs. Crore
1	Revenue LV	4089.95
2	Revenue HV	4832.71
3	Gross Revenue (LV+HV) as per audited accounts	8922.65
4	Less: NTI Adjusted under HV Revenue	17.71
5	Less: UI Income Adjusted under HV Revenue	17.90
6	Net Revenue (LV + HV) as per Petition	8887.04

Commission's Views

The Commission has analysed the submissions made by CSPDCL and has considered the revenue from energy sales as shown in the final audited accounts for FY 2015-16.

2.1.7 Revenue Deficit or Surplus

The objector submitted that:

- i. On page 24, para 5.60 of the present Petition, CSPDCL has claimed a Revenue Deficit of Rs.350.41 Cr.
- ii. Whereas in the next para 5.61 on the same page, CSPDCL has made final submission before the Commission as under:

“The Petitioner request the Hon’ble Commission to provisionally approve cumulative Revenue Surplus/(Deficit) of Rs.60.68 Crores as shown above to be carried forward to the next FY.”
- iii. Therefore, it is clear from the above said statements that the manipulation is not done in a perfect manner.

Petitioner's Reply

CSPDCL submitted that the revenue (deficit)/surplus of Rs. (350.51) is without considering State Government Subsidy of Rs.407.25 Crore received during the FY 2015-16 and holding cost of Rs.3.84 Crore as a result the net revenue (deficit)/surplus turns to Rs.60.68 Crore.

Commission's Views

The Commission has scrutinized the Petition submitted by CSPDCL and has observed that the revenue deficit of Rs. 350.31 Crore submitted by CSPDCL is a standalone revenue deficit for FY 2015-16. After considering the subsidy of Rs. 407.25 Crore given by the Govt. of Chhattisgarh, there is an overall revenue surplus of Rs. 60.69 Crore. Therefore, there is no manipulation in submission pertaining to revenue deficit/surplus as alleged by the objector.

2.1.8 Quantum of Assessed Cases and Faulty Meters

The objector submitted 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 in spite of several directives and orders from the Commission.

Petitioner's Reply

CSPDCL submitted that it has maintained percentage of stop defective meters as prescribed by the Commission and the replacement of stop defective meter depends upon several field constraints such as agricultural connections diversified and located at distant locations, prolonged lock premises, resistance of consumers towards replacement etc.

Commission's views

The Commission observes that the issue of assessed billing and defective meters have also been raised in the past. The percentage of stopped/defective meters as prescribed by the Commission in the past has been 2.5%. However, based on assessed sales from the R-15 submitted by CSPDCL, it appears that percentage of defective meters is more than 2.5% i.e. on an average percentage of defective meters is in the range of 4-5%. Further, assessed cases have been found to be in the range of 25-30%. Hence, the Commission has decided to not give incentive to CSPDCL on account of claim for lower Distribution Loss than the approved levels. The Commission has further discussed this issue in the truing up section of FY 2015-16. The Commission directs CSPDCL to ensure fast replacement of stopped/defective meters and reduction of assessed billing.

2.1.9 Distribution Loss and Incentive on Over Achievement of Approved Targets

The objector submitted that there are statistical and computational errors in the claim of Rs. 125.05 Crore of gains through distribution loss reduction. Moreover, large numbers of Assessed Billing and Defective Meters have made the claim of CSPDCL as suspicious. Therefore, the Commission should not approve Rs.125.05 Crore as incentive on account of overachievement of the energy loss as claimed by CSPDCL.

Petitioner's Reply

CSPDCL submitted that it has reduced distribution loss by 3.59% based on approved methodology by the Commission and losses approved in MYT Regulations, 2012, as a result there is an overachievement amount of Rs.250.10 Crore on account of reduction in distribution losses.

Commission's views

The Commission has discussed this issue while approving the true-up of CSPDCL for FY 2015-16 in subsequent chapter.

2.1.10 Intra-State Transmission Loss

The objector submitted that, in the present Petition, CSPDCL has taken Transmission Loss at 3.22% which is as per the approved level in the Tariff Order FY 2015-16. However, during the same time, its sister concern CSPTCL has reported Transmission Loss of only at 2.89% in its Petition and has claimed a substantial saving of 308.54MU amounting Rs.93.80 Crore at an average power purchase cost. Such quantum of 308.54MU is lost and should be added to the Distribution Loss.

Petitioner's Reply

CSPDCL submitted that it has considered CSPTCL losses as 3.22% as per its last true up issued by Commission for CSPTCL vide its Tariff Order dated April 30, 2016 and the same was considered by the Commission while approving the Intra-State Transmission losses for MYT Control Period from FY 2016-17 to FY 2020-21.

Commission's views

The Commission has discussed this issue while approving the true-up of CSPDCL for FY 2015-16 in subsequent chapter of the Order.

2.1.11 External Subsidy from the State Government

The objector submitted that while carrying TVS before passing Tariff Order for FY 2015-16, the Commission had ascertained an external subsidy from the State Government of Rs.450Crore and had decided Retail Tariff accordingly by giving relief to all consumers. While doing True-up, CSPDCL has reported that it has received only Rs.407.25Crore from the State Government as External Subsidy. No proper explanation and facts on above shortfall is submitted. It is now the responsibility of the Commission to remind the State Government to disburse balance amount of Rs.42.75Crore as External Subsidy and this balance amount of Rs.42.75Crore cannot be carried-forward to consumers for recovery while doing True-up exercise.

Petitioner's Reply

CSPDCL submitted that the Commission while issuing the Tariff Order for FY 2015-16 on May 23, 2015 has considered Rs.450 Crore on estimated basis which was estimated to be received during FY 2015-16 and the actual subsidy received was Rs. 407.25 Crore which again is based on actual.

Commission's views

While determining the tariff for FY 2015-16, the Commission had estimated a subsidy of Rs. 450 Crore from State Govt. However, against the same only Rs. 407.25 Crore were received by CSPDCL in FY 2015-16. However, in view of commercial implication, the Commission has taken into account entire subsidy of Rs. 450 Crore. Further, CSPDCL is advised to take up the matter with the State Govt. for release of balance amount of Rs. 42.75 Crore.

2.1.12 Excessive Contribution to Pension and Gratuity Fund

The objectors submitted that CSPDCL has claimed that the Commission had allowed contribution to Pension and Gratuity Fund as Rs.217.87Crore, while in the Provisional Balance Sheet, it has submitted the figure of Rs. 298.80 Crore and reported an actual of Rs. 701.18 Crore. The excess of Rs.483Crore is transferred from the available liquidity with the Company without seeking any permission from the Commission or even informing them in a transparent manner.

It was further submitted that the Petitioners are supposed to recover only current year's service cost from Pension & Gratuity in Tariff Order. However, it appears that they are recovering past years cost also. In view of the Official Memorandum and directives and Income tax rules, it was requested that the Commission should adjust the contributions to P&G fund at 30% of the salary (Basic + DA) with retrospective effect. From the MYT Order 2013, the amount should be calculated on salary (Basic + DA only) and the already paid contributions should be spread over the coming years until it matches 30% contribution per year. Until then no amount shall be provided for contribution in P&G fund for the Control Period.

Petitioner's Reply

CSPDCL submitted that it has contributed to P&G as per the Commission approved figures in MYT Order July 12, 2013 i.e., Rs.217.87 Crore. CSPDCL added that during FY 2015-16 the company has, apart from its contribution towards gratuity and pension fund as directed by the Commission, provided for Rs.483.31 Crore (Rs.1072.97 Crore) towards share of its deficit in the actual contribution vis-à-vis the estimated contribution.

Commission's views

The Commission has considered the contribution to P&G as per the approval given in the MYT Order dated April 30, 2016.

2.1.13 Notional Interest on Surplus Consumer Security Deposit

The objector submitted that by not allowing Notional Interest on surplus amount of

Security Deposit, consumers are going to lose about Rs.40-50Crore in FY 2015-16 merely on technical ground. It now depends upon the Commission to take justifiable action by examining the usage of such surplus.

The objector also submitted that the same lapse has been done in MYT Regulations 2015 and the same question will again arise while doing true-up for FY 2016-17. Therefore, it is prayed that suitable amendment in the Regulations be made to do justice with the consumers.

Petitioner's Reply

CSPDCL submitted that amending the MYT Regulations is within the purview of the Commission after considering the due diligence (hearing, comments from stakeholders etc.).

Commission's views

The issue of notional interest on excess working capital is sub-judice before the Hon'ble APTEL in Appeal No. 182 of 2016. Further, in this Order the Commission has taken the view as presented before the Hon'ble APTEL and it has been explained in subsequent section of this Order.

2.1.14 Discrepancy in Power Purchase Cost

The Objector submitted that there were the following discrepancies in Power Purchase Cost calculations:

- i. Trading Charges of Rs.20.45 Crore
- ii. Net Banking of 1,909.86MU
- iii. Delayed Payment Surcharge of Rs.87.36 Crore
- iv. Rebate of Rs.4.01 Crore on Power Purchase
- v. Reversal of Cross Subsidy Surcharge of Rs.84.82 Crore
- vi. Unrecovered FCA Charges of Rs.202.55 Crore
- vii. CSPDCL has projected lower purchase quantum from Central Generating Stations but has not provided any detailed justification in the Present Petition. It has mentioned only reference of various Websites.
- viii. The Cost of Power from Korba East Power Station of CSPGCL is very high (Rs. 3.93/unit) and the Retail Tariff has been increased due to this burden. It is a waste of available resources.
- ix. CSPDCL has not projected any Power Purchase from Marwa Thermal Power Plant of CSPGCL during FY17-18 and has stated that entire power shall be sold

to Telangana. No revenue is also considered on account of Marwa TPP and only revenue of Rs.0.07/unit on account of Trading Margin is considered. It is an accounting blunder as other actual expenses like Employee Expenses, Contribution to Pension & Gratuity Fund, Interest Cost etc. for Marwa TPP are accounted in the ARR of CSPGCL and are passed on to the Retail Consumers. In fact, all expenses of Marwa TPP should be separated, if only Trading Margin is accounted in the Revenue of CSPDCL.

- x. CSPDCL has projected a 23% increase in the Interstate Transmission Charges and has not submitted any reasons for it except a reference of a Website.
- xi. CSPDCL has projected lower realization (32%) on per unit basis for Sale of Surplus Power and has not submitted any detailed reasons for it except a reference of a Website.
- xii. Discrepancy in details submitted by CSPGCL, CSPTCL and CSPDCL as shown in the table below:

Power Station	Net Generation reported by CSPGCL (MU)	JMR Reading by CSPTCL (MU)	Power Purchase reported by CSPDCL (MU)
KTPS East	1,973.25	1,973.25	1,957.96
HTPS	5,227.28	5,226.63	5,194.10
DSPM	3,674.32	3,673.56	3,664.65
Korba West Ext	3,086.15	3,085.89	3,095.63
HasdeoBango	282.65		274.00
CSPGCL at 132kV		14,284.57	14,194.98
CSPGCL Thermal Generation	13,961.00		13,951.15
Cost of Power Purchase from CSPGCL	3,594.00 Cr. Petition4,159.70 Cr. P&L A/c		3,873.67 Cr
		Additional Submission by CSPDCL	Petition
Concessional Power		773.55	772.99
Cost of Concessional Power		149.69 Cr	161.84 Cr
Cost of Power from Renewable Sources		489.69 Cr	496.00 Cr
Cost of Power from IEX/PXIL/Traders		120.45 Cr	147.17 Cr

Power Station	Net Generation reported by CSPGCL (MU)	JMR Reading by CSPTCL (MU)	Power Purchase reported by CSPDCL (MU)
Cost of Power from CPP/IPP		40.91 Cr	41.55 Cr
Interstate Transmission Charge		227.04 Cr	224.13 Cr
Intrastate Transmission Charge		689.64 Cr	701.05 Cr
SLDC Charges		5.29 Cr	10.52 Cr
Net Banking Units		?	1,909.86
Total Power Purchase excl. UI		23,971.61	25,880.90

Petitioner's Reply

CSPDCL submitted that it has considered the Power Purchase cost as per the Provisional Audited Accounts as submitted to the Commission. CSPDCL added that it has tied up banking of power of 1909.86 MU (net) during FY 2015-16 and it has to return back during FY 2016-17 as per regulatory principles. CSPDCL submitted that in FY 2015-16 it has not considered the cost amounting to Rs.621.18 Crore while accounting for power purchase expenses in its present provisional true-up petition in line with the judgement of APTEL dated July 1, 2014 in Appeal No.220 of 2013.

CSPDCL further added that, it has reduced the Delayed Payment Surcharge from the Power Purchase Cost as in line with previous Tariff Order's so that delay on account of payment of bills is not passed on to the consumers.

Commission's views

The Commission has discussed the issue of power purchase in truing up section of FY 2015-16 for CSPDCL. Regarding the issue of reconciliation, as mentioned above, a common Technical Validation Session (TVS) with CSPGCL, CSPTCL and CSPDCL was convened for reconciling the figures in the true up petitions for FY 2015-16, and sought detailed explanation for the differences in amounts reported in the Audited Accounts and respective Petitions. CSPGCL, CSPTCL, CSPDCL and CSLDC have given reconciliation for such numbers. Further, in this Order, all the numbers considered are from the Audited Accounts, rather than the provisional Accounts.

2.1.15 Issue of VCA Charges

The Objector submitted that in the Tariff Order for FY 2015-16, the Commission had estimated an Average (Net) Power Purchase Cost of Rs.3.09 per unit for CSPDCL and had fixed the Retail Tariff accordingly. However, CSPDCL has submitted that its Average (Net) Power Purchase Cost during FY 2015-16 is found to be actually Rs.3.04 only. This indicates a case of refund to consumers on VCA account. But on

the other hand, CSPDCL has recovered VCA Charges of Rs.408.73 Crore from consumers during the year. Moreover, for the remaining VCA Charges of FY 2015-16, a provision of Rs.202.55 Crore is made in the ARR for FY 2016-17. Hence, total recovery of VCA is found to be Rs.611.28 Crore which also includes some part of VCA of FY 2014-15.

Petitioner's Reply

CSPDCL submitted that the Commission while issuing the Tariff Order for FY 2015-16 on May 23, 2015 has considered average power purchase cost at Rs.3.09/kWh which is based on actual and audited accounts.

Commission's views

The submission of the objector is baseless and far from the facts. The power purchase cost from CGS thermal power stations has increased to Rs. 2.77 per kWh from Rs. 2.45 per kWh approved in the Tariff order for FY 2015-16. Similarly, the power purchase cost from CSPGCL thermal power stations has increased. The overall reduction is on account of reduction in actual transmission charges vis-à-vis estimated charges in the Tariff Order. The power purchase cost for FY 2015-16 has been explained in the relevant section of this Order.

2.1.16 Other Discrepancies

The Objector submitted that there were discrepancies in

- i. Interest on Loan: Rs. 114.07 Crore as per F13 and Rs. 114.60 Crore as per F9
- ii. Wheeling Charges of Rs. 65.02 Crore in Pg. 22 and Rs 65.07 Crore in Balance Sheet.

Petitioner's Reply

CSPDCL submitted that the Interest on Loan is Rs.114.07 Crore as submitted in the Petition and its Technical formats and there is no discrepancy, while, the Wheeling Charges, Open Access and Cross Subsidy Charges and Non-Tariff Income as per audited accounts.

Commission's views

As stated above, a joint as well as one to one Technical Validation Sessions (TVS) were convened by the Commission to seek clarification on discrepancies and other issues. The Commission has analysed the replies submitted by CSPDCL after the TVS and accordingly based on final audited accounts for FY 2015-16 and replies given, the Commission has given its approval.

2.2 Objections on Proposals for Annual Revenue Requirement for FY 2017-18 of CSPDCL

2.2.1 Retail Tariff for LV 5 Industries

The objector has submitted that:

- i. The Average Billing Rate of LT Industries is on much higher side when compared with other States, therefore, Overall Electricity Tariff (Average Billing Rate- Rs/Unit) should be reduced and should be actually brought to Rs.5.72 per unit as envisaged by the Commission in its Tariff Order for FY 2016-17.
- ii. ABR for individual sub-categories should be determined and should be brought within +/- 20% from Average Cost of Supply.
- iii. Existing Demand Charges are on much higher side when compared to other States therefore, Demand Charges should be lowered to Rs.100/HP/Month.
- iv. It should be ensured that the Rebate of 5% on Energy Charges introduced by the Commission in FY 2016-17 is passed to all eligible consumers in Rural Area.
- v. Load Factor Incentives should be introduced in similar way 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.
- vi. Power Factor Incentive should be increased and should be made applicable step-wise on each percent improvement as available in Madhya Pradesh so that qualitative consumption of electricity will be encouraged.
- vii. Capping of LT Industrial Load should be increased from existing 100HP to 150HP like other States so that hurdle in expansion of such industries will be removed.
- viii. There should not be any Supply Affording Charges for enhancement of existing load.

Petitioner's Reply

CSPDCL submitted that the under scheme of Electricity Act 2003 the Commission is casted with authority to differentiate among the consumers on the basis of load factor, power factor, voltage, total consumption of electricity or time at which supply is required, nature of supply and purpose of supply during the process of tariff determination. Revenue to CSPDCL is based on this tariff so as to realize of its approved ARR. Accordingly, in the capacity of a distribution licensee, as such retail tariff determination being a prerogative of the Commission, thus, no separate comments are put.

CSPDCL submitted that it may kindly be taken on record that 3rd proviso under section 42(2) of Electricity Act 2003 duly amended in 2007 stipulates that cross subsidies within the tariff categories may have to be reduced gradually. CSPDCL added that it can be seen that average billing rate of LT and HT in petitioner's tariff proposal is 96% and 127% of ACoS respectively which indicates a reduction of 5% in HT ABR.

CSPDCL submitted that benefits of load factor have been proposed under clause 10.53 of the petition, further a load factor rebate upto a maximum limit of 15% of energy charges on entire energy consumption is also proposed. CSPDCL added that this unique privilege is proposed for consumer under this category who besides maintain a monthly load factor between 60% to 70% of contract demand and above.

As regards capping of LT Industrial Load, CSPDCL submitted that the matter does not hold any relevance to petitioner's Tariff Petition.

Commission's Views

The Commission has taken cognizance of the suggestion and this has been appropriately addressed in this Order taking into consideration the facts available on record.

2.2.2 Power Purchase Agreement between NTPC Lara and CSPDCL

The objector submitted that CSPDCL is duty-bound to take approval of the State Commission before entering into long-term PPA, even for the PPA's to be entered with the Central Generating Stations. PPA between NTPC- Lara and CSPDCL is still pending before the Commission under Petition no: 39/2014. Thus, CSPDCL power procurement from NTPC Lara cannot be considered under ARR. The objector further requested the Commission to look for an economic alternative to NTPC-Lara by sourcing power from including but not limited to Independent Power Producers within the State.

Petitioner's Reply

CSPDCL submitted that it has entered into Long Term PPA with NTPC for purchase of allocated capacity from LARA Super Power Thermal Plant on November 25, 2010. The terms and conditions of PPA are binding on CSPDCL as it does not carry an exit option. Further, termination of PPA at the behest of generator may cause additional liability to pay capacity charges till firm arrangement for CSPDCL share with alternative customer is tied up by the generator. Further, the Commission had considered power purchase from LARA STPP in CSPDCL's availability for the 3rd MYT Control Period in MYT Tariff Order April 30, 2016.

Commission's Views

The PPA between CSPDCL and NTPC Lara is pending before the Commission for approval in Petition No. 7 of 2017. The Commission will take an appropriate view while giving its approval. Regarding consideration of quantum and cost for purchase of power from NTPC Lara while determining the tariff for FY 2017-18, in this Order purchase of power from LARA STPP has been considered provisionally. However, the same shall not be construed as approval of PPA by the Commission.

2.2.3 Tariff for HV-7 Start-up Power

The objectors submitted that the power transformer continuously draws no load power from the grid during stoppage of the generator. However, this is considered as drawal of power beyond 30 minutes and is billed at Rs. 28/kVAh. This charge is too high considering average grid frequency of 49.7 Hz, the charges are Rs. 16.48/kWh. The present prevailing rate of temporary power supply for start-up purpose is Rs. 11.67/kWh.

The objectors submitted that CSPDCL has no mechanism to measure continuous drawl of power for less or more than 30 minutes. Even though the similar tariff has been prevailing for past three years, CSPDCL has been raising the bill at higher rate. Besides, it is not possible for any consumer to have conditions matching that of 30 minutes, therefore in such scenario there is no need to have two different rates. CSPDCL is taking advantage of the ambiguity, therefore either two different rates should be deleted or CSPDCL should provide data along with the bill to justify levying higher rate.

The objectors further submitted that with more drawl of power beyond 30 minutes should become a fraction and not multiple. Demand charges component should reduce with higher load factor. The current inverted tariff structure needs to be reviewed.

The objector submitted that in FY 2015-16, the Commission had fixed a single tariff of Rs. 11.50/kWh which included demand charge over and above the energy charge of Rs. 6.65/kVAh for start-up consumers. In FY 2016-17, the single part tariff was revised to Rs. 14/kVAh and energy charge was increased to Rs. 7.50/kVAh. This was not an equitable increase as $\text{Rs. } 11.5 \times 7.50 / 6.65 = \text{Rs. } 12.97/\text{kWh}$ when converted to kVAh should have been multiplied by power factor and not divided. Hence, an equitable increase would have meant $\text{Rs. } 12.97 \times 0.80 = \text{Rs. } 10.37/\text{kVAh}$ and not Rs. 14/kVAh. Therefore, the Commission should rectify the technical error with retrospective effect.

Petitioner's Reply

CSPDCL submitted that the Commission notified a separate tariff for start up power

vide its Tariff Order dated June 15, 2005 specifying different rates for inadvertent drawl by generator for 30 minutes and beyond subject to other restrictions. Being single part tariff, provision of demand charges is in built to consider the effect load factor and power factor in respect of load for start up purpose. Evidently this category does not carry any contract demand charges with licensee i.e. zero CD in principle recovery of demand charges which aim towards expenditure incurred by licensee towards network charges. Further, there is an obligation on distribution licensee to install a correct meter prior to supply in consumer premises. Correct meter has been specified by CEA under its Meter Regulation 2006. A plain reading reveals that CT/PT along with meter would be incompatible to read minimum 1% of primary load current. In light of this explanation any demand lower than demand proportionate to 1% of primary load current need not satisfy the aforesaid statutory provision.

Commission's Views

The Commission has taken cognizance of the suggestion and this has been appropriately addressed in this Order taking into consideration the facts available on record.

2.2.4 HV-3 Seasonal HT Industries- Chhattisgarh Rice Bran Oil Association

The objectors submitted that at present, following tariff is levied by CSPDCL to Other Industry and General Purpose Non-Industrial in the past Financial Years:

Supply Voltage	Demand Charge (Rs./kVA/month)	Energy Charge (Rs./kVAh)
220 kV	375	5.30
132 kV	375	5.35
33 kV (Load Factor>15%)	375	5.70
33 kV (Load Factor<=15%)	100	6.85
11 kV (Load Factor>15%)	375	6.05
11 kV (Load Factor<=15%)	100	7.25

The objector submitted that they should be placed under Seasonal Industries categories as they require energy only 4-5 months for their operations. The objectors have provided the examples of states like Madhya Pradesh, Punjab, Karnataka and Gujarat which have provided categories for Seasonal Demand Consumers.

Petitioner's Reply

CSPDCL submitted that tariff discrimination is allowed on the basis of load factor, power factor, voltage, geographical area etc. Further, determination of retail tariff

determination is prerogative of the Commission. CSPDCL clarified that creation of new tariff category may lead to multiplicity of tariff categories and lead to stage prior to first Tariff Order dated June 15, 2005. Hence, it has not proposed any new tariff category. Besides, conditions prevailing in other states do not apply to Chhattisgarh and hence it would not be appropriate to take consideration of the practical difficulties involved in their states regarding tariff determination.

Commission's Views

The objector's representation has been examined and based on their monthly consumption they cannot be termed as seasonal consumer.

2.2.5 HV-2, HV-3 and HV-4- SAIL, Bhilai

The objector submitted that upto June 2014, the energy rate was Rs. 3.70/kVAh. Vide Tariff Order dated June 12, 2014, it was increased to Rs. 4/kVAh (increase of 8.10%), vide Tariff Order dated May 23, 2015 and April 30, 2016 it was increased to Rs. 4.65/kVAh (increase of 16.25%) and Rs. 5.20/kVAh (increase of 11.8%) respectively. CSPDCL in its Tariff Proposal has proposed to reduce the tariff for railways, however for HV-2, HV-3 and HV-4 Steel Industries it has proposed the same tariff without considering the present crisis. The objector has also objected to the load factor based tariff for HV-4 Steel Industries consumers.

In view of financial losses in FY 2015-16 due to recession in steel industries, the objector has requested the Commission

- i. To reduce the energy rate for HV-2(33kV and 11kV), HV-3 (132 kV) and HV-4 (220 kV) in line with proposal for reduce rate for railways. SAIL BSP also proposes to reduce the energy charges for HV-2, HV-3 & HV-4 to support steel production and introduce load factor based tariff for HV-2 and HV-3.
- ii. Not to allow the Load Factor based Tariff for HV-4 (220 kV) Steel Industries consumers in line with HV-1 Tariff
- iii. To introduce Load Factor based Tariff for HV-2 (33kV and 11kV) and HV-3 (132 kV) consumers.

Petitioner's Reply

The Petitioner has submitted that the proposal to reduce its energy charges in line with the proposal for HV-1 Railways is not reasonable. The railways enjoy status of deemed licensee as per clarification dated May 6, 2014 issued by Ministry of Power, Govt. of India and privileged status granted by CERC through its Order dated November 11, 2015 in Petition No. 197/MP/2015 towards payment of cross subsidy surcharge. The Hon'ble APTEL vide its Order dated December 16, 2015 in

I.A.445/2015 had clarified over special tariff for traction load:

“The Indian railways has one of the largest networks in the world. This network is an essential part of the transport infrastructure in India. It is the backbone of Indian economy. It is therefore essential for IR to get reasonably priced power. If it is denied Open Access, it will be forced to procure more expensive power from the Distribution Licensee in the State which will ultimately adversely affect the general public.”

CSPDCL further submitted that the prayers under (ii) and (iii) are opposite and in contrast to each other and need no explanation as such applicant has not provided any reasons for that. It may kindly be appreciated that consumer load factor for a period is termed as ability and intensity of its plant employment i.e. relationship between amount of electricity actually used and amount which would have been used had the maximum demand consistent for every hour during that period. Fairly distribution licensee carries no control over usage of electricity. Accordingly load based tariff for power intensive categories such as HV-3 and HV-4 is technically and commercially justified.

Commission’s Views

The Commission has taken cognizance of the suggestion and this has been appropriately addressed in this Order taking into consideration the facts available on record.

2.2.6 Coverage of co-located CPP consumers and Standby charges- Shree Cement

The objector submitted that:

- i. From the Tariff Petition, it is not clear what tariff shall be applicable for consumers having co-located CPP (who have reduced contract demand to zero).
- ii. The category of ‘Standby Charge’ only applies to consumers drawing power through open access and does not cover consumers with co-located CPP. There is an undue differentiation in treatment to a category of consumers consuming power from co-located CPPs.

Petitioner’s Reply

CSPDCL submitted that under Clause 10.90 of it has not given any specific proposal of VCA, POC and Open Access charges but proposed to implement such charges as it may be determined by the Commission.

CSPDCL further submitted that the clarification to the query raised by the applicant at Sl. No. 13(h) under Open Access charges placed under head ‘Tariff Schedule for HV consumers’ in Tariff Order dated April 30, 2016. Further, standby charges is among

billing constituents a consumer availing Open Access in Transmission or Distribution system, as the case may be, and draws power from grid. Under such circumstances the query about CSPDCL consumers having co-located CPP and consuming their CPP power without seeking Open Access does not arise. In short, Open Access is payable for usage of licensees system of wires (grid) to carry self power for self use.

Commission's Views

The Order of the Commission are very clear and no further explanation needs to be addresses in this Order.

2.2.7 Tariff for zero waste centre compost unit

The Municipal corporation of Durg has submitted that they are undertaking construction of 'zero waste centre compost unit' under Swacch Bharat Mission. On the lines of categorization of public toilets under LV-1 Domestic category, 'zero waste centre compost unit' should also be categorised under LV-1 Domestic category.

Petitioner's Reply

CSPDCL submitted that at present 'zero waste centre compost unit' has been categorised under Non-Domestic category. Under the provisions of Section 62(3) of EA 2003, the Commission has powers to differentiate tariff. The present categorization of the above said consumer is in accordance with Tariff Policy, 2005, and acceding to the above states request would amount to differentiation. However, in view of Swacch Bharat Mission, categorizing 'zero waste centre compost under domestic category would be a positive step towards promotion of such Central and State Government schemes.

Commission's Views

The Commission has taken cognizance of the suggestion and this has been appropriately addressed in this Order taking into consideration the facts available on record.

2.2.8 Tariff for Woven Sacks Manufacturing - Chhattisgarh Woven Sacks Producers' Association

The objector submitted that Woven Sacks consume around 1200 units of power per metric ton, which is much more than power consumer by steel industries. Besides, by maintain high power factor and load factor, they are helping CSPDCL in maintaining the best balance in the grids. It was further submitted that woven sacks industry is in trouble and on the verge of collapse due to market conditions and high cost of production. Thus, Woven Sack Industry should be included in Power Intensive Units/ Steel Category and reduce the tariffs to Rs. 3.50-4.00/ unit.

Petitioner's Reply

CSPDCL submitted that it has submitted the tariff proposal in accordance with the approach adopted by the Commission in previous orders. It is pertinent to mention that under terms and conditions of tariff determination it is average cost of supply with cross subsidies that determine retail tariff structure. Average cost of supply reflects per unit expenditure approved by the Commission towards cost of generation, transmission, distribution and supply of electricity in its area of supply.

Commission's Views

The Commission has taken cognizance of the suggestion and this has been appropriately addressed in this Order taking into consideration the facts available on record.

2.2.9 South East Central Railways

The Objector submitted that:

- i. The traction tariff as proposed by CSPDCL should further be reduced at the level of Net Power Purchase cost of CSPDCL around Rs. 3.40/unit.
- ii. Traction tariff should be formulated as a single-part tariff based only on energy charges.
- iii. CSPDCL to grant NOC for Open Access for SECR so that they can take further action for power purchase at a nominal landed price of Rs. 3.64/ unit.
- iv. Non-Traction loads to be considered for the tariff: Public Utility and Traction under HV-1 instead of HV-3 for Other Industrial & General Purpose Non-Industrial.

Petitioner's Reply

CSPDCL submitted that request to NOC for Open Access is beyond the scope of this Petition. Further, the request to consider Non-Traction load under HV-1 category is against the philosophy of Section 62(6) of EA 2003, as such voltage, power factor and purpose of supply forms a basis to differentiate tariff. Needless to mention that non-traction load of railway, comprise of mixed nature i.e. residential, non-residential and industrial and accordingly notification of separate tariff for this purpose is justified. Prayer to further reduce the tariff proposed at the level of net power purchase cost of CSPDCL and formulating a single part tariff does not hold proper in light of following ground:

- i. Electricity supply to railways is utilized to run traction load as such its tariff is required to be determined under retail sale in accordance with the Tariff Regulations.

- ii. In addition to Tariff Regulations, guiding principle for determination of tariff exists in term of Tariff Policy that demonstrates retail tariff to remain within $\pm 20\%$ of Average Cost of Supply (ACOS). Instant proposal to bill HV-1 category at 79% of ACOS is within close to aforesaid limits.
- iii. Power Purchase Cost is major constituents of revenue requirement for supply business. Further small but other significant expenses such as O&M expenses, depreciation, interest and finance charges and return on equity are among prominent expenses to constitute ARR. Per unit value of ARR is termed as ACOS which regulates tariff. Hence, basis of net power purchase cost for determination of retail tariff does not hold proper.
- iv. Single part tariff formulation would be against the provision of Section 45-3(a) of EA 2003.

Commission's Views

Taking all the developments into consideration regarding Railways, the tariff for Railways as a consumer of CSPDCL has been rationalised.

2.2.10 Non Domestic Consumer LT- Bharti Infratel Ltd

The objector submitted that:

- i. Clause 10.23 of the Tariff Order about installation of Suitable Capacitor shall not be applicable to us as 50% sites don't have inductive load (AC supply is converted to DC Supply through rectifiers) and at remaining sites 0.9TRx2 ACs have been installed which have a combine inductance of less than 3HP motor. Still CSPDCL has billed Rs. 6 Lakh/Month capacitor surcharges as per Clause 10.23 without measuring actual Power Factor on meter. Therefore, there suitable changes should be made to Clause 10.23. Further, it should be made compulsory to bill on actual power factor in case surcharge is to billed. Power factor benefit should also be given as PF of 0.90 and above is maintained.
- ii. Since we are providing services at extreme interior areas like Dantewada & Jagdalpur (Naxalite Area) to facilitate connection to the outer world and it is requested to provide certain benefit in Tariff on the lines of other states such as Madhya Pradesh which provides a benefit of 10 paise/unit for benefitting the rural areas.
- iii. Telecom mobile to be excluded from Clause 10.30 of the Tariff Order and load assessment of telecom towers should to be done based on the actual DC meter readings only at the time of inspection.
- iv. Demand based tariff charges are higher than the normal tariff charged for non-

domestic consumers. Thus, the charges of demand based tariffs should be revised necessarily.

- v. Under Suo-Moto Petition No: 27/2016 (M) & CSERC's letter no: 04-CSEB/2016/1135 dated 30.06.2016, 100% work for extension was to be carried out by CSPDCL on the basis of 100% fee deposit within 90 days for new as well as existing load enhancement. However, it is noted that work not completed on time and deposit amount is also not refunded. Further, CSPDCL has also started levying excess MD charges penalty in monthly electricity bill for delay in load enhancement even after depositing 100% fee. The Commission is requested to give necessary directions to CSPDCL and also allow consumers to do extension work on their own cost.

Petitioner's Reply

CSPDCL has submitted that:

- i. Contention raised under this point are implication of power factor in term of incentive and surcharge for LV Non-domestic consumer having contract demand of 15 kW and above. Under the settled practice requirement of reactive power compensation is maximum at the point of its generation. Since reactive power is sources at load, a mechanism having commercial implication on consumer has been devised to attain an effective control and its implementation has improved the voltage profile of system. Accordingly, energy meters installed in consumer premises record the power factor depending upon usage of electricity under its full control. In light of this explanation power factor billing as per Clause 10.23 is justified.
- ii. Not only mobile services but many other agencies serve public in contended areas. Discrimination on such grounds for tariff determination is impermissible under electricity laws.
- iii. Supply to consumer is regulated by provisions of Supply Code and Terms & Conditions of agreement entered between the parties. Accordingly, provision under Clause 10.30 enables penalty billing in case consumer violates its contracted demand. This statutory provision in shape of Section 126 as "un-authorized use of electricity" is binding on all parties. In light if this explanation special privilege to applicant is impermissible.
- iv. That demand based tariff being an option available to NDLF consumer, its commercial viability to a single consumer would not be considered to be a ground for its revision because contract demand de-linked with connected load for this category. Consequently, penal provision for excess supply in case of

demand based tariff connection has been relaxed. Accordingly, commercial for both options i.e. normal consumers and Demand based consumers are different, yet applicant need not claim simultaneous benefit advantages for its benefit.

- v. Contention raised under this para is beyond the scope of Tariff Petition.

Commission's Views

The submissions made by the objector have been examined and it is observed that they have not made any such representation which needs to be addressed in this order.

2.2.11 Public Lighting and Water Works

The objector submitted that:

- i. Tariff for Street Lights and Water Works should be lower than the prevailing rates. In fact, for such public works, the Corporation should get 50% rebate.
- ii. The electricity tariffs for public toilets should be same as the tariff for Street Lights, as both are meant for public welfare.
- iii. Security deposit and additional security deposit should not be levied on service providers for street lights and water works.
- iv. The Commission had directed CSPDCL to install on/off timer panel for streetlights. However, till date, CSPDCL has not adhered to the directive given by the Commission. Besides, street lights are switched on before dusk and not switched off beyond dawn. This is causing wastage of electricity and despite being informed, no action is being taken by CSPDCL in this regard.
- v. No surcharges should be levied on Street Lights and Water works service providers.
- vi. Last year, the tariff was hiked by 27.5%, therefore, it should not be hiked this year especially for public welfare works.
- vii. Under the Corporation Act, CSPDCL pays Tax every year. However, in the Tariff Order dated June 12, 2014, the Commission allowed CSPDCL to recover any tax paid to the Corporation by levying additional charges on the installation through which the Local Body receives supply. The said charges are a burden on the Local Body; therefore, any clause in the Regulation, which enables recovery of tax, should be deleted.
- viii. When needed, CSPDCL is given land, which is under the jurisdiction of Municipal Corporation, free of cost. Therefore, CSPDCL should not increase the tariff for Municipal Corporation, which works for the welfare of people.
- ix. The Municipal Corporation constructs EWS colony for poor people under

different Government Schemes. This work is done for public welfare and not for any other professional use. However, as per Clause 4.5 (V and VI) of Supply Code 2011, CSPDCL charges System Strengthening Charges at the rate of Rs. 4600/kW if load exceeds 50 kW. Such charges are a burden on the Municipal Corporation, which works for public welfare.

- x. CSPDCL should provide connections to only those consumers who have 'No-Objection' certificates and adequate documentary proofs. This way encroachment and uncontrolled habitation can be controlled.

Petitioner's Reply

CSPDCL submitted that unlike Railways Act, 1989 or Atomic Energy Act, 1962 which prevail over EA 2003 in case of any inconsistency, Municipal Act, 1961 does not prevail over EA 2003 in case of any inconsistency. Therefore, due to supremacy of Tariff order issued by the Commission over Municipal Act, 1961, it is not appropriate to discuss over recovery of any tax paid to the Corporation by levying additional charges on the installation through which the Local Body receives supply

CSPDCL submitted that certain issues pertaining to security deposit is not related to Tariff Petition submitted. Further, other suggestions are pertaining to Tariff determination and power to determine tariff is given to the Commission under Section 62 of the Electricity Act, 2003. Therefore, CSPDCL requested the Commission to ensure that its approved ARR is recovered from the Retail Supply Tariff determined by the Commission.

Commission's Views

As per Section 62(3) of the Electricity Act, 2003:

(3) The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."

As per the mandate of the act, the retail tariffs are determined with a view to ensure recovery of the approved ARR, reduction of cross-subsidies, ensuring that no category is subject to a tariff shock, etc. The Commission has ensured that the tariff for Street lights and Public Water Works is in accordance with the spirit of the Act.

The comments against the charges levied as per the Supply Code cannot be addressed under this regulatory proceeding.

2.2.12 Miscellaneous objections

The other objectors submitted that can be observed from the Tariff Petition of CSPDCL

- i. It is proposed that CSPDCL will sell surplus power outside the state at Rs. 2.28 per unit, however the average rate of purchase of such power is Rs. 3.50 per unit. The proposal to sell expensive power at cheaper rate can be attributed to the mismanagement and it should be thoroughly investigated.
- ii. It is proposed to buy 16 Crore unit of electricity from bio-mass at Rs. 5.50 per unit. The State Commission determined the rate of Rs. 6 per unit for purchase from bio-mass in FY 2014-15, which means it must have increased manifold in FY 2017-18. Further, as per Regulations Bio-mass generators are supposed to file a Petition for determination of tariff, however the Commission is determining the tariff for bio-mass generators on suo-moto basis. Besides, if REC certificates are available at cheaper rates then why CSPDCL is buying expensive power from bio-mass generators. PPAs signed with bio-mass generators after notification of REC regulations should be annulled.
- iii. CSPDCL has bought 251 Crore units of electricity from the trading company at Rs. 1.90 per unit, which after considering Transmission Loss amounts to Rs. 2.45 per unit. When CSPDCL has surplus power from its tied-up sources then what is the need to buy power from trading company. It appears that this transaction is being undertaken only to keep the trading company in business.
- iv. CSPDCL has proposed to sell the surplus power from Marwa TPP to Telangana at 7 paisa trading margin and earn profit. However, if Telangana does not buy the power from Marwa then who will bear the cost? Marwa TPP is the most expensive power plant in India with the capital cost of Rs.10 Crore/MW. In such scenario, profit or loss from sale of power from Marwa should be de-linked from the tariff in Chhattisgarh.
- v. It is proposed to purchase excess power, in case of shortage, from short term sources at Rs. 3.50 per unit. However, generators like Jindal and others have proposed to sell non-firm power at the rate of Rs. 1.50 per unit. CSPDCL has bought such non-firm power at the rate of Rs. 3 per unit from FY 2000 to FY 2015, however now due to fear of audit, it is not buying. Now when the Commission has made a provision to buy such non-firm power then why CSPDCL has proposed to buy power from short term sources at Rs. 3.50 per unit. More than 50% load of CSPDCL is non-firm in nature, then why don't CSPDCL buy minimum 300 MW power when it is available at an average rate of Rs. 1.25 per unit.

Petitioner's Reply

CSPDCL submitted that:

- i. It has proposed to buy only 89.83 million units at Rs. 3.50 per kWh which is only 0.028% of total power purchase. 90% of the power requirement is met through long term ties-up sources at an average rate of less than Rs. 3 per kWh. Further demand supply of power is also dependent on technical requirement and weather conditions. Hence in view of such circumstances, short term purchase has been proposed at rate of Rs. 3.50 per kWh which was approved by the Commission in MYT Order 2016.
- ii. The purchase of non-conventional power is done in accordance with RPO regulations notified by the Commission. Based on past years data it can be seen that past years RPO requirement have not been met and the Commission has allowed the same to be met in future years. Hence, it can be understood that the Commission regulates the rate of purchase from non-conventional sources are regulated by the Commission in accordance with Section 86(1) of EA 2003.
- iii. The power bought from trading company is concessional power which is available only at variable cost. Further, CSPDCL and trading company has entered into a back to back arrangement under which no trading margin is charged, the benefit of which is being provided to the consumers of the State.
- iv. Based on back to back arrangement with CSPGCL, CSPDCL has entered into an agreement with Telangana DISCOMs to sell power at a trading margin. The onus of obtaining transmission connectivity and related costs is on Telangana DISCOMs. However, in accordance with EA 2003, National Electricity Policy and Tariff Policy, it is mandatory to get approval of the PPA with Telangana DISCOMs. Since CSPDCL would be earning a trading margin by selling power to Telangana DISCOMs, such agreement is beneficial to the consumers of Chhattisgarh. As regards. the capital cost of Marwa plant, CSPDCL is no position to answer as the same is being built by the generating company.
- v. As appeals on various grounds are pending before the Hon'ble High Court of Chhattisgarh and the Hon'ble APTEL, it would not be prudent to comment on power purchase from Jindal.

Commission's Views

The Commission has taken cognizance of the suggestion and this has been appropriately addressed in this Order taking into consideration the facts available on record.

2.3 Objections on Provisional True-up for FY 2015-16 of CSPGCL

2.3.1 Discrepancy in Total energy sale and revenue of CSPGCL from energy sale

The objector submitted that:

- i. There is contradictory data for Net Quantum of Energy generated by CSPGCL which gives rise to a difference of 52.22 MU.
- ii. There is mismatch of the data submitted by CSPGCL from other companies for individual power stations.
- iii. Net Thermal Generation of 38.82MU from 500MW Marwa TPP in FY 2015-16 is not accounted anywhere by CSPGCL for True-up.
- iv. There is found to be huge discrepancy in the figures of Revenue (excluding Water Charges, Delayed Payment Surcharge, SLDC Charges etc.) of CSPGCL from Energy Sale which is about Rs. 393 Crores
- v. The Commission had set FCA and VCA Account to Zero on April 1, 2016 by making a net provision of Rs.200Crore for remaining FCA and VCA in the Revenue from Retail Sale itself and decided the Retail Tariff accordingly. It is observed that on the said date, recovery of FCA and VCA for 5 months from November 2015 to March 2016 was merged into the Retail Tariff. But in its True-up Petition, CSPGCL has not accounted for such provision.
- vi. The Revenue Realization is being reported on much lower side than actual which requires thorough examination.

2.3.2 Discrepancy in Employee Cost

The objector submitted that:

- i. CSPGCL has submitted Total Employee Cost as Rs.522.03 Cr in its Balance Sheet in Note 9.2. This includes CHP and Coal Transportation Cost but excludes contribution to Pension and Gratuity Fund.
- ii. On the other hand, in Form 21 of the present Petition, CSPGCL has reported Net Employee Cost as Rs.425.38 Cr only which also includes CHP and Coal Transportation but excludes contribution to Pension and Gratuity Fund.

2.3.3 Excessive Contribution to Pension and Gratuity Fund

The Objector submitted that CSPGCL has submitted that the Commission had allowed contribution to Pension and Gratuity Fund as Rs.95.40Crore, therefore it has religiously contributed Rs.95.40 Crore to Pension and Gratuity Fund as per the provisional accounts. However, in Note 10 for Exceptional Items of the Provisional Balance Sheet, it has made excessive provision for above by Rs.532.90Crore (Total

Provision= 95.40 + 532.90 = Rs.628.30Crore). Elsewhere in the same Provisional Balance Sheet in Note 5.4 for Short Term Provisions, it has been reported that the provision for Pension and Gratuity Fund is Rs.130.83Crore, while in the Note 4 for Long Term Provisions, the same is provided as Rs.1,537.80 Cr.

For the contributions made in P&G fund, following explanation has been provided in the Provisional Balance Sheet:

“Accounting Policies : (q)(ii) the Company has contributed their share of pension and gratuity liability to the extent allowed by CSERC in its tariff petition. Moreover company also provides share of its deficit in the actual contribution vis-à-vis the stipulated contribution determined on the basis of actuarial valuation in its profit and loss account.”

On one hand, CSPGCL is reporting huge Revenue Deficit while on the other hand, huge amount of about Rs.533Crore is transferred from the available liquidity with the Company without seeking any permission from the Commission or even informing them in a transparent manner. Therefore, it is the Consumer who has to bear all negative impacts on the Generation Company due to liquidity crunch.

It was further submitted that the Petitioners are supposed to recover only current year's service cost from Pension & Gratuity in Tariff Order. However, it appears that they are recovering past years cost also. In view of the Official Memorandum and directives and Income tax rules, it was requested that the Commission should adjust the contributions to P&G fund should be at 30% of the salary (Basic + DA) with retrospective effect. From the MYT 2013, the amount should be calculated on salary (Basic + DA only) and the already paid contributions should be spread over the coming years until it matches 30% contribution per year. Until then no amount shall be provided for contribution in P&G fund for the Control Period.

2.3.4 Discrepancy in Interest Cost

The Objector submitted that:

- i. Interest cost submitted in Form 13A does not match with the Balance Sheet and there is a difference of Rs 6.08 Cr.
- ii. Bank Charges are on very much higher side during FY15-16 when compared with previous year.

2.3.5 Discrepancy in Non-Tariff Income

The Objector submitted that Non-Tariff Income is also suppressed in the present Petition from actual as reported in the Balance Sheet by Rs.16.37 Crore.

2.3.6 Low Plant Availability Factor

The Objector submitted that:

- i. Plant Availability Factor (PAF) has remained much lower in all thermal power stations during FY15-16 except DSPM.
- ii. Due to substantially lower generation (about 7.7%) at State Power Stations of CSPGCL, Distribution Company was forced to purchase electricity from costlier sources.
- iii. Retail Consumers has borne burden of costlier power purchased by CSPDCL from other sources, on the other hand, they have also borne the Fixed Cost of such power stations of CSPGCL which is not justifiable.

2.3.7 Discrepancy in Total Purchase Cost of Coal

The Objector submitted that:

- i. CSPGCL has mentioned Total actual cost as Rs.1,770.56 Crore in FORM 22, while, in balance sheet it shows Rs.1537.53 Crore, there is a difference of Rs.232.40 Crore for which no explanation has been provided. It is also submitted that 500 MW Marwa plant TPP has Net Generation of 38.82 MU during FY 2015-16 but its actual coal consumption has not been included anywhere in the true-up.
- ii. As regards higher Coal transportation cost at DSPM Power Plant, in petition CSPGCL claimed for coal transportation cost at DSPM in FORM 21 Rs.91.02 Crore and in FORM 15 the same is amounting to Rs.91.57 Crore. It is also observed that the Actual Coal Transportation cost at DSPM is also higher than the approved cost.

2.3.8 Discrepancy in GCV of coal purchased

The Objector submitted that:

- i. It is found that GCV actually accounted by CSPGCL is much lower than specified by SECL. CSPGCL has considered only Normative GCV which is much lower, hence, CSPGCL has recovered an unreasonably higher FCA from Retail Consumers during FY 2015-16.
- ii. Govt of India has linked the coal prices with its GCV and the prices are fixed accordingly, but contrary to this, CSPGCL is reporting lower GCV coal at higher price. It is also submitted that the Fuel Supply Agreement (FSA) with Coal Mines provides for provision of Third Party Sample Testing but CSPGCL has not submitted any such Test/Analysis report from an independent laboratory.

Station	Coal Consumed & Transit Loss(MT)	Difference (Rs/MT)	Difference in Cost (Rs. Cr)
Korba East	23,51,926	150	35.28
DSPM	28,51,652	90	25.66
HTPS	69,94,115	90	62.95
KW Ext.			
Total			124

CSPGCL should lodge a recovery claim before SECL for about Rs 124 Crore against poor quality of coal supplied and such amount should not be burdened on Retail Consumers by way of ARR.

- i. As regards GCV of coal stock at HTPS and Korba West Extension Power Stations, as per CSPGCL submission Coal stock is of inferior quality as compared to fresh supply, how is this possible in technical terms?
- ii. It is observed that Specific Coal Consumption in KW Ext. is much higher than Normative Operational Parameter although there is not much variation in the Gross Calorific Value (GCV) of Coal Consumed. It is submitted that Cost of Excessive Coal Consumption over Normative considering Actual GCV of Coal on account of operational failure or inefficiency cannot be recovered from Retail Consumers by way of Annual Revenue Requirement (ARR).
- iii. It is estimated that an excessive coal consumption of 143,455 MT of coal amounting Rs.19.30 Crore is claimed through ARR of korba West Extension Power Plant which should not be allowed.

2.3.9 Excessive Fuel Cost Adjustment (FCA) Charges

The Objector submitted that CSPGCL has incurred an excessive coal cost by Rs.22.55 Crore which is recoverable through FCA mechanism, but it is observed that, CSPGCL has recovered a huge sum of Rs.451.65 Crore against a small deficit of Rs.22.55 Crore by way of Fuel Cost Adjustment (FCA) Charges from retail consumers which is about 2003% of the actual.

2.3.10 Higher Energy Charge Rate

The Objector submitted that in Tariff Order for FY2015-16, the Commission had approved an Energy Charge Rate of Rs.0.825/per unit for Korba West Extension Power Plant, while, CSPGCL has charged an ECR of Rs.1.146 per unit from CSPDCL during FY 2015-16 which is finally loaded on Retail consumers by way of ARR. CSPGCL has done excessive recovery of Rs.99.37 Crore from Retail consumers.

Petitioner's Reply

The Petitioner has submitted that:

- i. In the previous true-up (which was first after introduction of ABT regime) the Commission had considered 'Net Generation' as "Actual net generation injected on the bus bar" (instead of scheduled generation). Accordingly, CSPGCL has shown net generation in its true-up Petition. As regards the difference in revenue appearing in P&L statement and as considered in the truing up Petition, the former is gross revenue which is inclusive of Delay payment surcharge, water charges, SLDC charges, recovery of past period deficit etc. Further, as per settled regulatory practice and philosophy for truing up, except for DSM charges, Water charges and SLDC charges none of those abovementioned heads are applicable. Submissions regarding DSM charges and Water & SLDC charges have been made in para 2.14-2.15 and para 5.73-5.75 respectively of the Petition. The revenue considered in the Petition is corresponding to the plants fixed charges, energy charges and FCA based on actual monthly (plant-wise) bills.
- ii. The objection submitted on the issue of P&G is prima facie in-admissible and it is pertinent to note that CSPGCL has deposited to the P&G trust exactly the same amount i.e. Rs. 95.40 Crore which was allowed by the Commission. The references in the objection is misleading, irrelevant and grossly inapplicable in the instant case. The OMs on which the objection has been carved refers to CPSEs while CSPGCL or for that matter erstwhile CSEB, is/was never a CPSE. The CSPEs follow defined contribution scheme, while CSEB/successor companies P&G trust caters to defined benefit scheme.
- iii. It is a highly misplaced concept that in the absence of CAG certification of audit report truing up cannot be undertaken. The allegation of unreliable, suspicious and unauthentic data is strongly refuted. The submitted balance sheet has been audited by the statutory auditors appointed by CAG and has already been submitted to CAG. It is a well settled principle that provisional accounts are always considered sufficient basis for true-up and in case the final accounts differ then the earlier true up is revisited in the form of final true up.
- iv. The balance sheet indicates the employee cost as whole whereas the instant Petition includes employee cost of for plants under consideration. Similar is the case with Non-Tariff Income. Further, the reasons for not considering some of the specific heads under NTI in Petition has been thoroughly explained in the Petition.

- v. The interest and finance charges as computed in the Petition is in accordance with the regulations on normative loan applying weighted average rate of interest. Hence, the objector has failed to consider the difference between the accounting loan as considered in books of accounts and regulatory loan.
- vi. As regards low PAF, CSPGCL has strived for achieving the optimum performance. However, there are some unfortunate and uncontrollable situations which at time affect performance. Detailed specific submission on uncontrollable reasons have been given in the Petition.
- vii. The coal in the present Petition has been submitted in accordance to well settled principle and practice, duly elucidated in previous Petitions/Orders and submitted in the instant Petition too. The fuel cost in accounts and regulatory filing follows two different paradigms. One follows the moving average principle, other follows landed cost method. Further, the balance sheet value is exclusive of a significant portion cost incurred on transportation. As it is settled principle that unless there exists a specific reason, the true up has to be in consonance with the methodology adopted in the Tariff Order, there is nothing wrong with cost of coal submitted in the Petition.
- viii. Terms and conditions of FSA with in Coal India are at approved at the highest level in Govt. of India and same is applicable for all power utilities. As per the FSA, the generating company is bound to make payment as per SECL bills. In case of grade up or slippage, a supplementary bill is issued by SECL based on coal analysis report of third party sampler adopted by SECL. For issue of credit not in favour of generating company, in SECL rests the delegation at higher level and thus it takes time. All credit notes are immediately passed on in the respective month's FCA. Hence it is incorrect to say CSPGCL has not accounted for lower grade. Further, it is pertinent to mention that GCV of coal as billed and GCV of coal as fired are two different parameters. The regulations refer to GCV as fired. Apart from the above, it is also submitted that the matter relating to third party sampling has been raised at the highest level and now in accordance to the SOP prescribed by GoI, third party sampling through Central Institute of Mining and Fuel Research (CIMFR) has been adopted. Regarding non inclusion of GCV in FCA, it is submitted that FCA billing has been done as per the framework issued by the Commission.
- ix. FCA is not a derivative of actual cost vis-à-vis normative cost, but a derivative of actual cost vis-à-vis actual recovery. In the FCA and true up both, the cost is compared against the revenue which is recovered through energy charge approved. For FCA, the Commission had decided a mechanism in the Order in

suo moto Petition No. 26/2012. FCA has been claimed by CSPGCL in accordance with the same.

- x. The objection is factually incorrect. The two part tariff and energy charge of Rs. 0.825 became applicable from with effect from June 1, 2015, while in the first two months of the financial year consolidated single part tariff of Rs. 2.71 per unit was applicable. The objector has compared the average of single part tariff regime and two part tariff regime with order value specified for the two part tariff regime.

Commission's Views

As stated above, a joint as well as one to one Technical Validation Sessions (TVS) were convened by the Commission to seek clarification on discrepancies and other issues. The Commission has analysed the replies submitted by CSPGCL after the TVS and accordingly based on final audited accounts for FY 2015-16 and replies given, the Commission has given its approval. The Commission has considered contribution to P&G in accordance with the approval given in the MYT Order dated March 31, 2016. The PAF, GCV, interest & finance charges have been considered as per the regulations.

2.4 Objections on Provisional True-up for FY 2015-16: CSPTCL

2.4.1 Discrepancy in Revenue of CSPTCL from Transmission

The Objector submitted that there is a difference in the figures of Revenue of CSPTCL from Transmission business amounting Rs.1.08 Crore.

2.4.2 Discrepancy in Employee Cost

The Objector submitted that CSPTCL has submitted that Net Employee Cost as Rs.148.24 Crore in its Balance Sheet in Note 41 excluding contribution to Pension and Gratuity Fund and Employee Cost of SLDC. On the other hand, in Form 21 of the present Petition, CSPTCL has reported Net Employee Cost as Rs.150.62 Crore. It is clearly indicates that present Petition is not supported by authentic data.

2.4.3 Discrepancy in Repair and Maintenance Cost and Administrative and General Cost

The Objector submitted that there is discrepancy in Net R&M cost as shown in Balance Sheet Note 9.3 including SLDC amounting Rs.30.68 Crore, Petition FORM 15 amounting Rs.30.68 Crore and in Petition at Page 22 where Net R&M cost is Rs.27.33 Crore. Similarly, that there is discrepancy in Net A&G cost in as shown in Balance Sheet Note 9.3 including SLDC amounting Rs.34.56 Crore, Petition FORM 14 amounting Rs.34.56 Crore and in Petition at Page 22 where Net A&G cost is Rs.35.80 Crore.

2.4.4 Excessive Contribution to Pension and Gratuity Fund

The Objector submitted that in the present petition CSPTCL has submitted that the Commission has allowed contribution to pension and gratuity fund as Rs.36.73 Crore including SLDC, while, in Note 9.1 and 41 of the Provisional Balance Sheet, it has made actual contribution as Rs.141.41Crore, thus an excessive contribution for above by Rs.104.68 Crore has been made. Elsewhere in the same Provisional Balance Sheet in Note 5.4 for Short Term Provisions, it has been reported that the provision for Pension and Gratuity Fund is Rs.50.37 Crore while in the Note 4 for Long Term Provisions, the same is provided as Rs.678.74 Crore. Therefore, on one hand, CSPTCL is reporting Revenue Deficit of Rs.43.54 Crore while on the other hand, excess amount of about Rs.105 Crore is transferred from the available liquidity with the Company without seeking any permission from the Commission. It is submitted that Retail consumer has to bear all negative impacts on the Electricity supply due to liquidity crunch.

It was further submitted that the Petitioners are supposed to recover only current year's service cost from Pension & Gratuity in Tariff Order. However, it appears that they are recovering past years cost also. In view of the Official Memorandum and directives and Income tax rules, it was requested that the Commission should adjust the contributions to P&G fund should be at 30% of the salary (Basic + DA) with retrospective effect. From the MYT 2013, the amount should be calculated on salary (Basic + DA only) and the already paid contributions should be spread over the coming years until it matches 30% contribution per year. Until then no amount shall be provided for contribution in P&G fund for the Control Period.

2.4.5 Discrepancy in Interest Cost

The Objector submitted that CSPTCL in Form 7 its Petition has shown interest cost as Rs.204.55 Crore. While the Balance Sheet Note 9.2 shows the amount as Rs.160.52 Crore, hence there is a difference of Rs.44.03 Crore. Further, the Provisional Balance Sheet under 9.2 provides for a Capitalization of Interest and Finance Charges as Rs.5.78 Crore which has not been provided in the petition.

2.4.6 Discrepancy in Non-Tariff Income

The Objector submitted that the Non-Tariff Income has been shown as Rs.12.26 Crore in the Petition, Balance Sheet Note 8.2 reflects an amount of Rs.13.33 Crore and Petition FORM S1 shows amount as Rs.13.37 Crore.

Petitioner's Reply

- i. CSPTCL submitted that the Balance Sheet for FY 2015-16 may kindly be referred to arrive at CSPTCL's income which indicates transmission charges as

Rs. 739.55 Crore and difference mentioned Rs. 1.08 Crore is SLDC related income.

- ii. The employee expenses are Rs. 150.62 Crore for FY 2015-16, the amount of Rs. 149.59 Crore is a typographical error under Table 14 on Page No. 17.
- iii. The Gross R&M cost expenses as per Balance Sheet note 9.3 is Rs. 30.68 Crore including SLDC charges of Rs. 3.35 Crore. The net R&M expenses only for CSPTCL is Rs. 27.33 Crore (Rs. 30.68 Crore – Rs. 3.35 Crore = Rs. 27.33 Crore). In Form 15, it is Rs. 30.68 Crore including SLDC and excluding capitalization which is Nil for R&M expenses.
- iv. The Gross A&G expenses as per Form 14 is Rs. 37.15 Crore (Rs. 35.80 Crore + Rs. 1.35 Crore = Rs. 37.15 Crore), the net A&G expenses only for CSPTCL is Rs. 35.80 Crore excluding SLDC charges of Rs. 1.35 Crore. In Form 14, it is Rs. 34.56 Crore (Rs. 37.15 Crore – Rs. 2.59 Crore = Rs. 34.56 Crore) as per Balance Sheet note 9.3 including SLDC due to reduction of capitalization which is Rs. 2.59 Crore for A&G expenses.
- v. CSPTCL clarified that the actual P&G contribution for FY 2015-16 is Rs. 36.73 Crore in accordance with the Regulations and as per Commission's Orders. The amount of Rs. 141.41 Crore is the provision created for P&G fund to follow the accrual method of accounting as per Companies Act.
- vi. Interest on loan has been derived for FY 2015-16 as per provisions contained in MYT Regulations, 2012 and the same amount is Rs. 204.55 Crore.
- vii. As regards Non-Tariff Income, Rs. 12.26 Crore is the income of SLDC as per Note 8.1 of Balance Sheet. Further as per Balance Sheet, Rs. 1.0796 Crore has been shown as SLDC related income. Hence, the total Non-Tariff income is Rs. 13.3680 Crore.

Commission's Views

The objection and observations of the respondents have been thoroughly examined and all the issues have been deliberated with petitioner and those have been appropriately addressed in the order.

2.5 Miscellaneous Issues

2.5.1 Revenue from Open Access

The objector submitted that at present CSPTCL's transmission lines at Raigarh, Barsur, Manendragarh, Bhilai and other high tension sub-stations are connected to the transmission network of neighbouring states. Such vast network of CSPTCL can be used to provide transmit electricity out of the state. Any revenue earned from this can be used to reduce tariff of consumers within the state.

Petitioner's Reply

The Petitioner submitted that CSPTCL is providing its network to be used under short term and medium term open access in accordance with the Commission's regulations. Further, till date the transmission company has earned Rs. 525.08 Crore as revenue from medium and short term access from FY 2011-12 to FY 2016-17 (upto Nov'16). The revenue earned by CSPTCL has been used by the Commission to provide relief to the consumers of the State.

Commission's Views

The Commission determines Short Term and Long Term Open Access rate in Tariff Orders. Further, the Commission always insists on separate information on revenue earned from STOA and LTOA and accordingly, revenue earned from open access consumers are used to provide relief to the consumers of the State.

3 TRUE UP FOR CSPGCL'S STATIONS FOR FY 2015-16

3.1 Norms of Operation

The MYT Regulations, 2012 specify the operational norms for the following performance parameters for generating stations:

- Plant Availability Factor
- Auxiliary Energy Consumption
- Gross Station Heat Rate
- Secondary Fuel Consumption
- Transit and handling losses

In the MYT Order 2013, the norms of operation for CSPGCL's stations for FY 2015-16 had been approved, except for KWTPP which was subsequently approved vide tariff order dt. 23.05.15. As against the same, CSPGCL submitted the actual operational parameters for all stations including KWTPP for FY 2015-16 along with the reasons for deviation in operational parameters as compared to that approved in the MYT Order 2013.

CSPGCL's submissions regarding the reasons for deviations in operational norms and the Commission's ruling on the same are elaborated in the following paragraphs.

3.2 Normative Annual Plant Availability Factor

CSPGCL's Submission

CSPGCL has submitted the actual Plant Availability Factor for its stations as compared to NAPAF approved by the Commission, as shown in the Table below:

Table 3-1: Actual Plant Availability Factor for FY 2015-16

Station	NAPAF	Actual PAF
KTPS	78.50%	57.18%
HTPS	83.00%	78.10%
DSPM	85.00%	92.28%
KWTPP	85.00%	75.52%

CSPGCL submitted that DSPM has performed better than the norms specified.

KTPS

The operational norms of KTPS need to be revisited due to various factors such as vintage, obsolescence, environment issues, etc., which is already the subject matter of Appeal No. 222 of 2015. In addition, during the year the coal supply from SECL was so low that even with normative SHR and auxiliary consumption, the plant could not have operated at more than 60.44% PLF. The Fuel Supply Agreement (FSA) allows Coal India to supply coal from any mine, still the demand could not be met. Further, 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 Calorific Value (CV) and blending becomes a must for safe operation of such an old plant. In this context, the relevant portion of one of the key findings of the Group formed by the Central Electricity Authority (CEA) on 2nd Aug 2010 is reproduced below:

“...the choice of blending methodology would vary from station to station and would depend on the facilities available in the coal handling plant, additional space available for creation of facilities etc. Facilities for blending would have to be created in the stations required to use blended coal, if not done already. The minimum facilities required would be facilities for unloading imported coal from Box-N wagons, maintaining separate stockpile for imported coal and arrangement for simultaneous feeding of imported coal from stockpile and indigenous coal from the track hopper or vice versa...”

As the existing plant does not have any such facility, it may need huge investments. With imminent closure, due to environmental concerns and blanket ban on even approved capital works by the Commission itself, there is practically nothing which CSPGCL could have done. Hence, CSPGCL requested the Commission for resetting the PAF norm to ‘maximum achievable level’.

HTPS and KWTPP

CSPGCL submitted that the Commission in its Tariff Order dated April 30, 2016 has held that:

“At present, the transportation of coal for KWTPP is being done through the same facilities available for HTPS. This operational difficulty for transportation of coal for KWTPP is likely to continue till the commissioning of new LDCC. In order dated September 22, 2015 it has been recognised that the delay in the commissioning of new LDCC is beyond the control of CSPGCL. In view of the above, there

appears to be merit in the submission of CSPGCL regarding the PAF of KWTPP for FY 2014-15. Hence, by exercising its power to relax under Regulation 77 of MYT Regulations, 2012, the actual PAF of 80.13% of KWTPP has been considered as normative PAF for FY 2014-15...”

CSPGCL further submitted that due to poor opening coal stock position in FY 2015-16 and use of common coal handling system, coal stock position remained at critical levels almost throughout the year. The present supply of coal for HTPS was highly inadequate to meet the normative parameters because of handling capability of LDCC in use (from TT3 to bunker).

The coal handling system in operation was designed keeping in view the requirements of HTPS only. However, there is operational requirement to balance the operations for both HTPS and KWTPP so as to avoid under loading of an individual station below threshold level. CSPGCL submitted that the coal handling plant for HTPS has outlived its useful life and has very low Annual Fixed Cost (AFC).

As regards KWTPP, CSPGCL submitted that KWTPP is equipped with state-of-the-art ash handling system, which is designed for more efficient and environment friendly discharge of ash. New technologies normally take their own time to overcome teething troubles, but in the longer run, new system pays off towards cleaner and greener environment. CSPGCL submitted that a lot of unforeseeable problems were encountered during the year, which limited the performance of the plant. The combined effect of uncontrollable coal shortage and unforeseeable constraint faced in ash disposal was reflected in outages/partial load operations, leading to lowering the PAF and increase in Station Heat Rate.

In view of the above, CSPGCL requested the Commission for resetting of PAF norms of KTPS and HTPS to maximum achievable PAF considering coal shortage and other constraints under Regulation 77 – “Power to relax” and Regulation 79 – “Power to remove difficulties” of the MYT Regulations, 2012. CSPGCL requested the Commission to consider the maximum achievable PAF of 60.44% for KTPS and 80.97% for HTPS.

Commission’s Views

The Commission has verified the actual availability of the Generating Stations for FY 2015-16 through SLDC’s certificate submitted by CSPGCL.

KTPS

As regards KTPS, the Commission notes that CSPGCL has filed Appeal No. 222 of 2015 on the above said issue before the Hon'ble APTEL. 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 Contract 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. Since, the matter is sub-judice before the Hon'ble APTEL, the Normative PAF has been considered as approved for KTPS in the MYT Order 2013.

HTPS and KWTPP

As regards commissioning of LDCC for KWTPP and HTPS, CSPGCL was asked to submit the expected date of commissioning, reason for delay in commissioning, operational benefit to KWTPP and HTPS from commissioning and efforts taken by CSPGCL for commissioning of LDCC within expected timeline.

CSPGCL submitted that the LDCC commissioning is dependent on the completion of bunker at SECL end. As per latest field reports, SECL may take 6-8 months to complete their system. CSPGCL has completed dry trial run of the conveyors from TT-3A to 13C and it is reasonably expected that after completion/readiness of coal bunker at SECL for feeding of coal, the trial operations and commissioning will be completed in 30-45 days. As submitted above, except for factors beyond CSPGCL's control, there is no delay in LDCC system. CSPGCL also submitted that the engineering of last phase of LDCC, i.e., coal bunker to TT 3A was initiated as soon as coordinates were confirmed by SECL. The present system is designed for coal feeding to 4 x 210 MW capacity only. The system is already 30 years old and needs renovation. For 1x500 MW KWTPP, a new LDCC is required, the cost of which is already included in the approved capital cost of Rs 3719 Crore. However, SECL has decided to abandon the old coal bunker due to its poor physical condition. If new LDCC would have been connected to old bunker, the same would have become redundant after commissioning of new bunker. Hence, to avoid duplicity of work and huge cost, new LDCC shall be commissioned with coal feeding from new bunker only. Till such time, coal is being managed through old system on best effort basis. Once the new bunker is commissioned, feeding from old bunker will be stopped completely. As already approved by the Commission, the old LDCC of HTPS shall also be transferred to the new bunker. Normally to ensure critical redundancy, design requires two parallel belts to feed one station. However, in the instant case, taking benefit of synergy, once new LDCC is fully commissioned, only three conveyors

(from coal bunker to TT3A) will carry coal for HTPS as well as KWTPP. From TT3 onwards, for HTPS, old system shall continue. Thus, with commissioning of new bunker and consequently the LDCC, cheap and reliable coal supply chain from SECL shall be established for a long time to come. With lowest transportation cost, the plant is expected to continue as the cheapest source of power to the State. DCPL (the technical consultant) and M/s Techpro (vendor) are both being pursued on daily basis. Permission for Railway crossing has also been taken up with SECR, Bilaspur. It is reasonably expected that the LDCC would be commissioned in the time frame stated above.

CSPGCL was asked to submit the methodology adopted/process followed for allocation of coal to KWTPP and HTPS through common facilities. CSPGCL submitted that to optimize the resource utilization and to meet emergency situations, some interchange arrangements have been provided. As due to non-completion of new bunker at SECL end, coal is being brought through the old LDCC stream, for the period under consideration the coal handling plant worked on integrated basis. For the purpose of billing, SECL notionally considers coal allocation to HTPS and KWTPP in the ratio of 67% and 33%, which is the ratio of ACQ to the two plants.

As regards unforeseeable problems in ash disposal during FY 2015-16, CSPGCL was asked to submit various problems faced and mitigation measures taken and quantification of the impact on operational and financial performance of the plant. CSPGCL submitted that the new plant has been designed with two systems for ash handling. The lean slurry system is a conventional system and is running normally. However, the new system is facing problems. The ash evacuation from the hoppers is a major problem and the following problems have been encountered:

- a) Ash removal is very slow. It results in high ash level in ESP hoppers and tripping of ESP fields, particularly first and second path of each pass. To avoid such tripping, Unit requires operation at partial load.
- b) Dry ash conveying lines are getting frequently pressurized and choked.
- c) Buffer hopper level becoming high frequently.
- d) Bag filters are getting damaged frequently.

CSPGCL has taken mitigation measures by running the Unit on partial load so that environment norms are complied with and ESP is kept operational all the time. Further, contingency arrangement has been made for conversion of dry system to wet system. CSPGCL has engaged services of M/s DCPL to ensure 100% ash disposal through the system. CSPGCL submitted that it has adopted a practice wherein

everyday, plant authorities prepare a report and list out the different reasons for generation lost with best estimate of generation loss due to any particular reason. On aggregate basis, the plant authorities have estimated total generation loss of approximately 398.80 MU on account of ash disposal system in KWTPP. The actual generation achieved was 3254.73 MU, which translates to PLF of 74.11%. Further, as per IEGC (Fourth Amendment), first and second proviso to sub-clause 3 of clause 6.3 B, for Unit loading between 65-74.99% the admissible percentage increase in SHR and AEC is capped at 4% and 0.35%. It is submitted that during the period under consideration, the actual SHR was 7.21% higher than normative, while actual AEC (at 5.18%) was still within the permissible range.

As regards the relaxation of PAF to KWTPP, the Commission in Order dated April 30, 2016 held as under:

“As regards KWTPP, CSPGCL submitted that during FY 2014-15, power stations across India suffered from coal shortages and the same has also been recognised by CERC explicitly in its MYT Regulations. The Commission is of view that fuel arrangement is the generator’s responsibility and generator can declare its capacity on the basis of fuel other than the linked/domestic fuel sources. However, it may also be noted that the arrangement of fuel from sources other than linked coal, for a pit head station like KWTPP, would negate its purpose of being located nearer to source.

At present, the transportation of coal for KWTPP is being done through the same facilities available for HTPS. This operational difficulty for transportation of coal for KWTPP is likely to continue till the commissioning of new LDCC. In Order dated September 22, 2015 it has been recognised that the delay in the commissioning of new LDCC is beyond the control of CSPGCL.

In view of the above, there appears to be merit in the submission of CSPGCL regarding the PAF of KWTPP for FY 2014-15. Hence, by exercising its power to relax under Regulation 77 of MYT Regulations, 2012, the actual PAF of 80.13% of KWTPP has been considered as normative PAF for FY 2014-15. However, it is clarified that the actual PAF has been allowed for KWTPP for FY 2014-15, in the interest of fairness, as a special case, and this shall not form precedence for KWTPP in future years and for the other generating Stations of

CSPGCL. However, any other matter will be considered, if any, on case to case basis and merit of the individual case.” (emphasis added)

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.

The PAF approved by the Commission for true-up of FY 2015-16 is shown in the following Table:

Table 3-2: Approved Plant Availability Factor for FY 2015-16

Station	NAPAF	Actual PAF	NAPAF Proposed by CSPGCL	Approved NAPAF
KTPS	78.50%	57.18%	60.44%	78.50%
HTPS	83.00%	78.10%	80.97%	81.00%
DSPM	85.00%	92.28%	85.00%	85.00%
KWTPP	85.00%	75.52%	*85.00%	81.00%

*** With pleading to allow appropriate relaxation limited to waiver of net losses**

3.3 Auxiliary Energy Consumption

CSPGCL's Submission

The Commission in the MYT Order 2013 has approved the auxiliary energy consumption for CSPGCL's stations, except KWTPP for FY 2015-16. As against the same, CSPGCL has submitted the actual auxiliary energy consumption for its stations as shown in the Table below:

Table 3-3: Actual auxiliary energy consumption for FY 2015-16 submitted by CSPGCL

Station	MYT Order 2013	Actual
KTPS	11.25%	12.30%
HTPS	9.70%	9.56%
DSPM	9.00%	7.75%
HBPS	1.00%	0.30%
KWTPP	6.00%	5.18%

CSPGCL submitted that all its stations have reported lower AEC as compared to the specified norms, except KTPS.

CSPGCL submitted that all these stations were subjected to Backing Down Instructions (BDIs) from SLDC, and the impact of backing down on auxiliary power consumption is without prejudice to the submissions, contentions and claims of CSPGCL in Appeal No. 222 of 2015. In line with the methodology adopted for current Petition, CSPGCL has not sought relaxation in operational parameters of KTPS.

Commission's Views

CSPGCL has filed Appeal No. 222 of 2015 before Hon'ble APTEL on the Auxiliary Consumption for KTPS approved in the Order dated May 23, 2015. Since, the matter is sub-judice before the Hon'ble APTEL, Auxiliary Consumption has been considered as approved for KTPS in the MYT Order 2013.

The actual auxiliary consumption for FY 2015-16 has been considered as submitted by CSPGCL for the purpose of sharing of efficiency gains and losses. Further, the normative auxiliary energy consumption for FY 2015-16 has been considered in the computation of normative net generation in the true-up for FY 2015-16, as shown in the Table below:

Table 3-4: Approved Auxiliary energy consumption true up for FY 2015-16

Station	MYT Order 2013	Actual	Normative considered for true up
KTPS	11.25%	12.30%	11.25%
HTPS	9.70%	9.56%	9.70%
DSPM	9.00%	7.75%	9.00%
HBPS	1.00%	0.30%	1.00%
KWTPP	-	5.18%	6.00%

3.4 Gross Generation and Net Generation

CSPGCL's Submission

The Commission, in the MYT Order 2013, had approved the gross generation and net generation for CSPGCL's stations for FY 2015-16, except KWTPP. As against the same, CSPGCL has submitted the actual gross generation and net generation for its stations as shown in the Table below:

Table 3-5: Gross Generation and Net Generation for FY 2015-16 (MU)

Station	MYT Order 2013		Actual	
	Gross Generation	Net Generation	Gross Generation	Net Generation
KTPS	3,033.99	2,692.67	2,249.99	1,973.25
HTPS	6,124.20	5,530.16	5,780.01	5,227.28
DSPM	3,733.20	3,397.21	3,983.09	3,674.32
HBPS	274.00	271.26	283.498	282.653
KWTPP	3,733.20	3509.21	3254.729	3,086.15
Total	16,898.59	15,400.51	15,551.31	14,243.65

Commission's Views

The Commission notes that 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 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 has been treated separately. The Commission has considered the actual PAF and actual Net generation as submitted by CSPGCL for the purpose of sharing of efficiency gains and losses.

Further, the normative auxiliary energy consumption for FY 2015-16 has been considered in the computation of normative net generation in the true-up for FY 2015-16, as shown in the Table below:

Table 3-6: Normative gross generation and net generation considered in true up of fuel cost for thermal generating stations for FY 2015-16

Station	Normative considered for true up of fuel cost for FY 2015-16	
	Gross Generation (MU)	Net Generation (MU)
KTPS	3,033.99	2,692.67
HTPS	5,976.63	5,396.90
DSPM	3,733.20	3,397.21
KWTPP	3,557.52	3,344.07
Total	16,301.35	14,830.85

3.5 Gross Station Heat Rate (GSHR)

CSPGCL's Submission

CSPGCL has submitted the actual GSHR vis-à-vis normative GSHR approved for its stations as shown in the Table below:

Table 3-7: Actual GSHR for FY 2015-16 (kcal/kWh)

Station	MYT Order 2013	Actual
KTPS	3,110	3,198.60
HTPS	2,650	2,655.34
DSPM	2,500	2,465.28
KWTPP	2,424	2,598.70

CSPGCL submitted that DSPM has performed better than the specified norms, 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 BDIs from SLDC and the impact of backing down on Station Heat Rate is without prejudice to the submissions, contentions and claims of CSPGCL in the Appeal No. 222 of 2015.

Commission's Views

The normative GSHR for KWTPP and other Stations as submitted by CSPGCL in the true up for FY 2015-16 have been considered, as the same is in accordance with the design parameters specified in the MYT Regulations, 2012. The actual GSHR for FY

2015-16 has been considered for the purpose of sharing of efficiency gains and losses. Further, the normative GSHR for FY 2015-16 has been considered, for computation of normative fuel cost for FY 2015-16, as shown in the Table below:

Table 3-8: Approved GSHR in true up for FY 2015-16 (kcal/kWh)

Station	MYT Order 2013	Actual	Normative considered for true up
KTPS	3,110	3,198.60	3,110
HTPS	2,650	2,655.34	2,650
DSPM	2,500	2,465.28	2,500
KWTPP	2,424	2,598.70	2,424

3.6 Specific Fuel Oil Consumption (SFC)

CSPGCL's Submission

CSPGCL has submitted the actual SFC vis-à-vis normative SFC approved for its stations as shown in the Table below:

Table 3-9: Actual SFC for FY 2015-16 (ml/kWh)

Station	MYT Order 2013	Actual
KTPS	2.00	1.50
HTPS	1.00	0.61
DSPM	1.00	0.25
KWTPP	1.00	0.71

Commission's Views

For the purpose of sharing of efficiency gains/losses, actual SFC for FY 2015-16 has been considered vis-a-vis normative SFC considered for computation of normative fuel cost, as shown in the Table below:

Table 3-10: Approved SFOC in true up for FY 2015-16 (kcal/kWh)

Station	MYT Order 2013	Actual	Normative considered for true up
KTPS	2.00	1.50	2.00
HTPS	1.00	0.61	1.00
DSPM	1.00	0.25	1.00
KWTPP	1.00	0.71	1.00

3.7 Transit and Handling losses

CSPGCL's Submission

CSPGCL has achieved lower transit loss as compared to the normative transit loss approved by the Commission for FY 2015-16. CSPGCL has submitted the actual transit loss vis-à-vis normative transit loss approved for its stations as shown in the Table below:

Table 3-11: Actual transit and handling loss for FY 2015-16

Station	MYT Order 2013	Actual
KTPS	1.15%	1.14%
HTPS	0.30%	0.26%
DSPM	0.30%	0.28%
KWTPP	0.30%	0.26%

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 0.30% has been considered for DSPM treating it as a pithead station as considered in the MYT Order 2013.

The actual transit loss for FY 2015-16 has been considered as submitted by CSPGCL for the purpose of sharing of efficiency gains and losses. Further, the normative transit loss for FY 2015-16 has been considered for computation of normative fuel cost for FY 2015-16, as shown in the Table below:

Table 3-12: Approved Transit and handling loss in true up for FY 2015-16

Station	MYT Order 2013	Actual	Normative considered in true up
KTPS	1.15%	1.14%	1.15%
HTPS	0.30%	0.26%	0.30%
DSPM	0.30%	0.28%	0.30%
KWTPP	0.30%	0.26%	0.30%

3.8 Calorific Value of Fuels

CSPGCL's submission

CSPGCL submitted the actual calorific value of fuels for its thermal power stations for FY 2015-16.

Commission's Views

The details of month-wise Gross Calorific Value (GCV) for each Generating Station for FY 2015-16 were scrutinised. The calorific values of fuels for FY 2015-16 have been considered as submitted by CSPGCL; the same is shown in the Table given below:

Table 3-13: Calorific Values of fuels considered in true up for FY 2015-16

Station	Coal (kcal/kg)		Secondary Fuel Oil (kcal/L)	
	Actual	Approved after true up	Actual	Approved after true up
KTPS	3,080.85	3,080.85	10,000	10,000
HTPS	3,406.33	3,406.33	10,000	10,000
DSPM	3,449.20	3,449.20	10,000	10,000
KWTPP	3,400.59	3,400.59	10,000	10,000

3.9 Fuel Prices

CSPGCL's submission

CSPGCL submitted the actual fuel prices for its thermal power stations for FY 2015-16.

Commission's Views

The actual prices of Secondary Fuel Oil for FY 2015-16 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 2015-16. The fuel prices considered in true up for FY 2015-16 are shown in the Table below:

Table 3-14: Fuel prices considered in true up for FY 2015-16

Station	Coal (Rs./MT)		Secondary Fuel Oil (Rs./kL)	
	Actual	Normative Approved	Actual	Normative (for Working Capital Computation)
KTPS	1470.37	1470.54	32,384.74	29,392.21
HTPS	1345.18	1345.75	39,907.12	27,867.59
DSPM	1724.14	1724.52	40,027.41	26,206.64
KWTPP	1345.18	1345.75	39,907.12	27,867.59

3.10 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 2015-16, as shown in the Table given below:

Table 3-15: Approved Fuel Cost in true up for FY 2015-16

Station	Actual					Normative Approved after true up				
	Cost of Coal (Rs. Crore)	Cost of Oil (Rs. Crore)	Total (Rs. Crore)	Net Generation (MU)	Fuel cost per unit (Rs./k Wh)	Cost of Coal (Rs. Crore)	Cost of Oil (Rs. Crore)	Total (Rs. Crore)	Net Generation (MU)	Fuel cost per unit (Rs./k Wh)
KTPS	341.87	10.91	352.78	1,973.25	1.79	447.49	19.65	467.14	2,692.67	1.73
HTPS	604.70	14.13	618.83	5,227.28	1.18	623.36	23.85	647.21	5,396.90	1.20
DSPM	490.33	4.05	494.39	3,674.32	1.35	464.76	14.94	479.70	3,397.21	1.41
KWTTP	333.66	9.26	342.92	3,086.15	1.11	339.86	14.20	354.05	3,344.07	1.06
Total	1,770.56	38.36	1,808.92	13,961.00	1.30	1,875.47	72.64	1,948.10	14,830.85	1.31

3.11 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 2014-15 as approved in True-up Order dated March 31, 2016. The additional capitalization during the year has been considered as per annual accounts for FY 2015-16. 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, CSPGCL has attempted to segregate the capital expenses considered in the books of accounts as R&M expenses.

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

As regards KWTTP, post preparation of accounts, CSPGCL has noticed that due to migration of the accounting software, correction entry in the GFA is required, which has been accepted for rectification in the accounts of FY 2016-17. However, for present Petition, it has reduced the additional capitalization by Rs. 90.12 Crore for FY 2015-16.

Commission's Views

The station-wise additional capitalisation submitted by CSPGCL and additional capitalisation incurred as per the audited accounts for FY 2015-16 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 audited accounts of FY 2015-16.

The capitalisation of KWTPP has been scrutinized in line with the capital expenditure approved in Order dated September 22, 2015 and it was found that the additional capitalisation of Rs. 260.70 Crore for KWTPP is in order.

As regards the correction entry in GFA relating to migration of accounting software, the Commission has accepted the submission of CSPGCL and reduced the additional capitalisation for FY 2015-16 by Rs. 90.12 Crore. Accordingly, the additional capitalisation of Rs. 170.58 Crore has been considered for KWTPP for FY 2015-16.

The additional capitalisation approved in the true up for FY 2015-16 is shown in the Table given below:

Table 3-16: Approved Additional Capitalisation in true up for FY 2015-16 (Rs. Crore)

Station	MYT Order 2013	CSPGCL Petition	Approved after true up
KTPS	3.76	0.45	0.45
HTPS	14.25	15.91	15.91
DSPM	1.54	0.00	0.00
HBPS	0.00	0.001	0.001
KWTPP	0.00	170.58	170.58
Total	19.55	186.94	186.93

3.12 Means of finance for additional capitalisation

CSPGCL's submission

CSPGCL submitted that the means of finance for additional capitalisation has been considered in the normative debt:equity ratio of 70:30 in accordance with the provisions of the MYT Regulations, 2012.

Commission's Views

As regards the funding of additional capitalisation, CSPGCL submitted that no further loans were drawn during the year for KTPS, HTPS and DSPM, however, loan drawal during the year for KWTPP was Rs. 70.15 Crore. The Commission has considered the normative debt:equity ratio of 70:30 in accordance with CSERC MYT Regulations, 2012. The equity in excess of 30% of capitalisation has been considered as normative loan. The means of finance for additional capitalisation for FY 2015-16 is approved as shown in the following Table:

**Table 3-17: Approved Means of Finance for existing stations in true up for 2015-16
(Rs. Crore)**

Station	CSPGCL Petition			Approved after true up		
	Equity	Debt	Total	Equity	Debt	Total
KTPS	0.13	0.31	0.45	0.13	0.31	0.45
HTPS	4.77	11.14	15.91	4.77	11.14	15.91
DSPM	0.00	0.00	0.00	0.00	0.00	0.00
HBPS	0.000	0.001	0.001	0.000	0.001	0.001
KWTPP	51.27	119.40	170.58	51.27	119.40	170.58
Total	56.08	130.85	186.93	56.08	130.85	186.93

3.13 Annual Fixed Cost (AFC)

Regulation 35 of the MYT Regulations, 2012 specifies as under:

“35. Annual Fixed Charges

35.1 The annual fixed cost (AFC) of a generating station shall consist of the following components –

- (a) Return on equity;*
- (b) Interest and finance charges;*
- (c) Depreciation;*
- (d) Interest on working capital;*
- (e) Operation and maintenance expenses;*

NOTE:

- 1. Non-Tariff Income as specified in the Regulation 38, shall be subtracted from the sum of above (a to e) to arrive at AFC.*
- 2. The SLDC charges shall be recovered in accordance with applicable CSERC (Fees and charges of SLDC) Regulations specified from time to time.*
- 3. Pension & Gratuity Fund Contribution shall be recoverable in equal monthly instalments as may be determined by the Commission in the Tariff Order.*
- 4. The Statutory Taxes and Duties shall be recoverable on reimbursement basis, as per actual.*

Provided that Depreciation, Interest and finance charges on Loan Capital, Interest on Working Capital and Return on Equity for Thermal and Hydro Generating Stations shall be allowed in accordance with the provisions specified in Chapter 3 of these Regulations.

3.14 Depreciation

CSPGCL's submission

CSPGCL submitted that the depreciation for DSPM and KTPS has been computed by applying 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 MYT Regulations, 2012.

As regards the depreciation for HTPS, CSPGCL has computed the average depreciation rate on assets added after April 1, 2010 as per MYT Regulations, 2012, while the depreciation for assets capitalized before April 1, 2010 have been calculated as the product of amount capitalized and depreciation rate.

CSPGCL submitted that it has considered the actual depreciation for KWTPP as per the audited accounts of FY 2015-16, duly accounting for the impact of Capital cost approved by the Commission vide Order dated September 22, 2015.

CSPGCL has computed the depreciation for Hasdeo Bango 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.

Commission's Views

The Depreciation for FY 2015-16 was approved in the MYT Order 2013 based on the provisional true up for FY 2011-12. Thereafter, the final true up for FY 2011-12 and FY 2012-13 were carried out vide Order dated June 12, 2014 and for FY 2014-15 vide Order dated March 31, 2016.

CSPGCL has clarified that no asset has been retired during FY 2015-16 as per audited accounts pertaining to the plants under consideration for true-up.

For KTPS, the Commission has considered the weighted average depreciation rate of 5.52% based on scheduled rates specified in the MYT Regulations, 2012. The Commission has computed the depreciation for KTPS in line with the approach adopted in previous True-up Order. The Commission has also considered the reversal of depreciation of Rs. 0.19 against reversal of capitalisation as submitted by CSPGCL.

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, 2012. The depreciation for DSPM and HBPS has been considered as per Regulation 24 of MYT Regulations, 2012.

In case of KWTPP, the depreciation rate has been considered based on the actual depreciation reported in the audited accounts for FY 2015-16, which has been applied on the revised opening GFA and asset addition during the year approved in this Order.

The depreciation approved in the true up for FY 2015-16 is shown in the Table given below:

Table 3-18: Approved Depreciation in true up for FY 2015-16 (Rs. Crore)

Particulars	Approved after true up			
	KTPS	DSPM TPS	Hasdeo Bango	KWTPP
Opening GFA	667.87	2,333.70	109.90	3,391.39
Additional Capitalization	0.45	0.00	0.00	170.58
Closing GFA	668.32	2,333.70	109.90	3,561.97
Average GFA	668.09	2,333.70	109.90	3,476.68
Average Rate of Depreciation	5.52%	5.49%		5.30%
Depreciation	30.17	128.08	2.65	184.11

As regards HTPS, the Commission has considered the methodology in line with Hon'ble APTEL Judgement dated March 30, 2016 in Appeal No. 238 of 2014.

As proposed by CSPGCL in its Petition, the Commission, while allowing the depreciation for HTPS has considered the depreciation of Rs. 23.38 Crore as allowed in MYT Order. However, the consequential impact of the same has been deducted while computing the Impact of ATE Judgement in Appeal No. 238 of 2014 in subsequent Section of this Order. The Commission has considered the depreciation for HTPS as shown in the following Table:

Table 3-19: Approved Depreciation for HTPS in true up for FY 2015-16 (Rs. Crore)

Particulars	HTPS
Opening GFA	1,091.97
For assets up to FY 2009-10, yearly depreciation as per Tariff Order dated June 12, 2014 for five years	23.38
For assets added after FY 2009-10	
Opening additional capitalization for FY 2015-16	332.39
Additional Capitalization during FY 2015-16	15.91
Closing capitalization up to FY 2015-16	348.30
Depreciation rate	5.34%
Depreciation charged for assets added after FY 2009-10	18.17
Total depreciation for FY 2015-16	41.55

3.15 Return on Equity

CSPGCL's Submission

CSPGCL has computed Return on Equity (RoE) as per Regulation 22 of the MYT Regulations, 2012. 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 2015-16. Since, no actual income tax has been paid during FY 2015-16, no grossing up with applicable tax rate has been considered. Further, CSPGCL submitted that in case of any income tax liability for FY 2015-16 raised by the income tax authorities during the final assessment, the same may be allowed in the future true up Orders.

Commission's Views

The RoE for 2015-16 has been approved in the MYT Order 2013 based on the provisional True up for FY 2011-12. Thereafter, the final true up for FY 2011-12 and FY 2012-13 was carried out vide Order dated June 12, 2014 and for FY 2014-15 vide Order dated March 31, 2016.

For existing stations, the closing equity approved in True up for FY 2014-15 in Order dated March 31, 2016, has been considered as the opening equity for FY 2015-16.

Further, the equity portion of the additional capitalisation in FY 2015-16 has been considered as approved in above paragraph. The RoE for FY 2015-16 has been computed by considering the average of opening equity and closing equity for FY 2015-16.

As the Income Tax paid as per Audited accounts for FY 2015-16 is zero, 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, 2012. As regards the prayer of CSPGCL to allow the income tax liability for FY 2015-16 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 appropriate time.

Table 3-20: Approved RoE in true up for FY 2015-16 (Rs. Crore)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP
Permissible Equity in Opening GFA	206.95	356.01	694.89	37.68	559.41
Equity addition during the year	0.13	4.77	0.00	0.00	51.17
Permissible Equity in Closing	207.08	360.78	694.89	37.68	610.58

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP
GFA					
Average Permissible Equity during the year	207.02	358.40	694.89	37.68	585.00
Rate of return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	32.09	55.55	107.71	5.84	90.67

3.16 Interest and Finance Charges

CSPGCL's Submission

CSPGCL submitted that the Interest and finance charges for FY 2015-16 have been computed as per Regulation 23 of the MYT Regulations, 2012. 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.

Commission's Views

The interest and finance charges for FY 2015-16 have been approved in the MYT Order 2013 based on the provisional true up for FY 2011-12. Thereafter, the final true up for FY 2011-12 and FY 2012-13 were carried out vide Order dated June 12, 2014 and for FY 2014-15 vide Order dated March 31, 2016.

For existing stations, the closing loan balances approved in True up for FY 2014-15 in the Order dated March 31, 2016, have been considered as the opening loan balances for FY 2015-16.

The debt portion of the additional capitalisation in FY 2015-16 has been considered as approved in above paragraph. The allowable depreciation for the year has been considered as the normative repayment for the year. The actual weighted average interest rate as on April 1, 2015 has been re-computed as per annual audited accounts for FY 2015-16 and documentary evidences submitted by CSPGCL.

The interest and finance charges approved in true up for FY 2015-16 are shown in the Table below:

Table 3-21: Approved Interest and finance charges in true up for FY 2015-16 (Rs. Crore)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP
Opening Net Normative Loan	127.17	131.13	882.18	13.03	2579.25
Repayment during the period	30.17	41.55	128.08	2.65	184.11

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP
Debt Addition during the year	0.31	11.14	0.00	0.00	119.40
Closing Net Normative Loan	97.31	100.72	754.10	10.38	2514.54
Average Net Normative Loan during the year	112.24	115.92	818.14	11.70	2546.90
Weighted Average Interest Rate	11.59%	11.88%	12.25%	12.81%	13.00%
Interest Expense for the Period	13.01	13.77	100.22	1.50	331.10
Financing and Other Charges	0.13	0.15	0.09	0.00	0.09
Total Interest Expenses	13.14	13.92	100.31	1.50	331.19

3.17 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 40 of the MYT Regulations, 2012.

Further, CSPGCL submitted that as per the methodology adopted in earlier Orders, the cost incurred on coal transport has been reduced from the O&M expenses and added to the fuel cost. Similarly, the productivity incentive has not been considered as part of employee expenses. CSPGCL submitted that actual leave encashment during FY 2015-16 has been considered as a part of employee cost within O&M expenses. Further, the additional capitalization against works similar to those considered by the Commission as R&M expense in the previous Order, have been transferred from Capitalization to O&M head.

CSPGCL further submitted that as per the Regulations, the MYT order has not considered the contribution to the pension trust as part of O&M expenses and CSPGCL has followed the same approach.

CSPGCL has computed the normative O&M expenses in the similar manner as approved in the Order dated March 31, 2016 and for the purpose of normalization of O&M expenses for FY 2015-16, the weighted average WPI- CPI inflation has been considered as 2.39%. The normative O&M expenses for DSPM and KWTPP have been computed as per Regulation 40.2 of MYT Regulations, 2012 normalizing the same with actual weighted average rate of inflation.

Commission's Views

Regulation 40 of the MYT Regulations, 2012 specifies as under:

"40. OPERATION AND MAINTENANCE EXPENSES

40.1 Thermal Generating Station:

(a) Operation and Maintenance (O&M) expenses for generating Company shall include:

I. Employee costs;

II. Administrative and General Expenses

III. Repairs and Maintenance

(b) The Operation and Maintenance expenses, excluding water charges, pension fund contribution and impact of pay revision arrears for the base year i.e. FY 2012-13, shall be derived on the basis of the normalized average of the actual Operation and Maintenance expenses excluding water charges, pension fund contribution and impact of pay revision arrears available in the audited/un audited accounts for the previous three (3) years immediately preceding the base year FY 2012-13, subject to prudence check by the Commission.

(c) The normalization shall be done by applying weighted average inflation at the rate of 60% weightage to actual variation in CPI and 40% weightage to actual variation in WPI on year to year basis. The average of normalized net present value for 2009-10, 2010-11 and 2011-12, shall then be used to project base year value for 2012-13. The base year value so arrived, shall be escalated by the above inflation rate to estimate the O&M expense (excluding impact of pay revision, if any) for each year of the control period.

At the time of true up, the O&M cost shall be considered after taking into account the actual inflation instead of projected inflation for that period. Provided that water charges shall be pass through in tariff on reimbursement basis:

Provided further that impact of pay revision (including arrears) shall be allowed on actual during the true-up as per audited/unaudited accounts, subject to prudence check and any other factor considered appropriate by the Commission."

The station-wise normative O&M expenses for FY 2015-16 has been re-computed, considering approved Normative O&M expenses for FY 2014-15 approved in Order dated March 31, 2016 and actual inflation in FY 2015-16 over FY 2014-15. The CPI and WPI data has been verified and the escalation rate has accordingly been considered as 2.39% for FY 2015-16.

Further, the actual O&M expenses have been verified with audited accounts for FY 2015-16. It is noted that CSPGCL has considered the additional capitalisation of Rs. 0.86 Crore, transferred from the capitalisation to O&M expenses, based on the

methodology adopted in previous Orders. These expenses have been considered as a part of O&M expenses.

The O&M expenses approved in the true up for FY 2015-16 are as shown in the Table given below:

Table 3-22: Approved O&M expenses in true up for FY 2015-16 (Rs. Crore)

Station	Normative O&M expenses			Actual O&M expenses	
	MYT Order 2013	CSPGCL Petition	Approved	CSPGCL Petition	Approved
KTPS	232.60	219.48	219.48	194.73	194.73
HTPS	303.38	270.12	270.12	252.46	252.46
DSPM	139.39	124.04	124.04	117.01	117.01
HBPS	14.80	13.52	13.52	10.02	10.02
KWTPP	98.66	87.77	87.77	64.01	64.01
Total	788.93	714.92	714.92	638.23	638.23

As regards the Impact of Pay/Wage revision, the first proviso to Regulation 40.1(c) of the CSERC MYT Regulations, 2012 specifies as under:

“Provided further that impact of pay revision (including arrears) shall be allowed on actual during the true-up as per audited /unaudited accounts, subject to prudence check and any other factor considered appropriate by the Commission”

The Commission has scrutinised the Station-wise details from CSPGCL for actual payment made towards impact of wage revision. The Commission observes that CSPGCL has made actual payment of Rs. 20.06 Crore towards arrears against provision for FY 2014-15 and Rs. 23.43 Crore for FY 2015-16. The Commission has not considered the impact of wage revision of Rs. 4.15 Crore for Marwa. For approving the impact of wage revision, the Commission has adhered to its philosophy adopted in earlier Tariff Orders and allowed impact of wage revision on actual basis. No provisioning has been allowed for true-up purposes. Accordingly, the Commission has allowed the impact of wage revision for true-up for FY 2015-16 as shown in the following Table:

Table 3-23: Impact of Wage revision in true up for FY 2015-16 (Rs. Crore)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP
Impact of Wage revision	12.53	17.32	5.58	0.20	3.71

3.18 Interest on Working Capital (IoWC)

CSPGCL's Submission

CSPGCL submitted that the IoWC for FY 2015-16 has been computed in accordance with Regulation 25 of the MYT Regulations, 2012, considering the interest rate equal to the applicable Base Rate of State Bank of India as on April 1, 2015 plus 350 basis points i.e., 13.50%

Commission's Views

The IoWC has been computed in accordance with Regulation 25 of the MYT Regulations, 2012. The rate of interest has been considered as 13.50% (SBI Base Rate as on April 1, 2015 plus 350 basis points), in accordance with Regulation 25.3 of CSERC MYT Regulations, 2012.

It is noted that for computing the working capital requirement for DSPM, CSPGCL has considered cost of coal for 1.5 months by assuming DSPM as a non-pit head station. In the Tariff Order dated May 23, 2015 for True-up for FY 2013-14, DSPM has been considered as a pithead station, and one month cost of coal has been considered. CSPGCL has filed an Appeal against this issue before Hon'ble APTEL in Appeal No. 222 of 2015. Since, the matter is sub-judice before the Hon'ble APTEL, IoWC for DSPM has been considered as per the approach adopted in previous Order.

The IoWC approved in the MYT Order 2013, as submitted by CSPGCL, and approved in the true up for FY 2015-16 is shown in the Table given below:

Table 3-24: Approved IoWC in true up for FY 2015-16 (Rs. Crore)

Station	MYT Order 2013	CSPGCL Petition	Approved after true up
KTPS	19.62	21.53	21.45
HTPS	28.37	30.04	29.75
DSPM	19.75	24.12	21.42
HBPS	0.79	0.71	0.71
KWTPP	18.19	19.44	19.20
Total	86.72	95.84	92.54

3.19 Pension and Gratuity Contribution

CSPGCL's Submission

CSPGCL submitted that as per MYT Order 2013 dated July 12, 2013, CSPGCL's share of Pension and Gratuity contribution for FY 2015-16 was determined as Rs.

95.40 Crore. Plant-wise contribution for HTPS, KTPS, DSPM and Hasdeo Bango was also approved in the MYT Order 2013 which was lower than the Rs. 95.40 Crore share allocated to CSPGCL. Further, the allocation for KWTPP was also not available in MYT Order 2013. In view of this, CSPGCL has reallocated the contribution to P&G Contribution among its plants proportionate to their capacity.

Commission's Views

The actual pension fund contribution of Rs. 95.40 Crore has been approved for CSPGCL for FY 2015-16 and allocated to the Generating Stations, including KWTPP, in the same proportion as allocated by CSPGCL.

3.20 Non-Tariff Income

CSPGCL's Submission

CSPGCL submitted the Non-Tariff Income as per Regulation 38 read with Regulation 35 of CSERC MYT Regulations, 2012 for FY 2015-16 for its existing Stations. Delayed Payment Surcharge has not been taken into account while determining the Non-Tariff Income for FY 2015-16. 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.

As regards income from penalties, CSPGCL has not considered penalty charges levied and recovered under miscellaneous income as a part of Non-Tariff Income. CSPGCL submitted that the penalty and demurrage charges paid is not being considered under O&M Expenses. Hence, as a natural corollary, the penalties recovered from the vendors also do not qualify for consideration of True-up.

As regards income from Other Business, CSPGCL submitted that since plant specific ARR was allowed for FY 2015-16, the income/expenses beyond the existing Stations has not been factored in the present Petition. CSPGCL has executed the lease deed on October 29, 2015 with Surguja Rail Corridor Private Limited (SRCPL). The Ministry of Coal, Government of India has allotted coal blocks to various private, public and government companies in the Hasdeo-Arand coal fields, which are located in greenfield area. As the area does not have rail infrastructure for off take and transport of coal from these coal blocks, Government of Chhattisgarh desired to get a rail infrastructure system [Common Rail Corridor (CRC)] developed to evacuate the coal jointly with all the project proponents. The acquisition proceedings under the L.A. Act were completed and awards passed for 284.311 Hectares land till April 2015 under the LA Act, and thereafter, the name of CSPGCL was mutated in the land records and the possession of the acquired lands were handed over to CSPGCL. As on

date, none of the plants under true-up has got any linkage with the SRCPL project. At present, CSPGCL has no grant of access in the proposed rail corridor for its existing as well as upcoming plants.

CSPGCL has not claimed any expense against SRCPL project in the present Petition or in the previous Tariff / True up Petitions or Business Plan/ CIP. SRCPL shall bear all cost of development. Further, in accordance to the lease agreement SRCPL has to pay certain charges to CSPGCL.

Further, during the true-up period, the receipts from SRCPL were not used by CSPGCL for its existing business and have been kept as separate FDRs 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 derived from sources. Hence, CSPGCL requested the Commission that this income should not be considered as the part of Non-Tariff Income.

Commission's Views

Actual station-wise Non-Tariff Income as per the books of accounts has been considered in true up for FY 2015-16. Delayed Payment Surcharge has not been considered under Non-Tariff Income for FY 2015-16.

As regards the income from Penalties, CSPGCL submitted that out of the total of Rs. 6.24 Crore towards income from penalties and other receipts, Rs. 1.91 Crore specifically pertains to penalties. Out of the balance Other receipts of Rs. 4.27 Crore, Rs. 1.17 Crore pertains to recovery against HCSD system KTPS, Rs. 0.52 Crore for HCSD system HTPS and Rs. 0.16 Crore pertains to GT at HTPS. The Commission has not considered the income from Other receipts for KTPS and HTPS, which have already been accounted in de-capitalisation. The Commission has considered the income of Rs. 1.91 Crore towards penalties.

As regards the income from other business, the Commission has gone through a copy of the Lease Agreement dated October 29, 2015 between CSPGCL and SRCPL submitted by CSPGCL. The Commission notes that CSPGCL has received total income of Rs. 21.23 Crore from SRCPL against lease deed. Out of this income, amount of Rs. 19.02 Crore has been kept as FDR after deducting the Service Tax paid of Rs. 1.66 Crore and Income Tax TDS of Rs. 0.55 Crore.

The Commission notes that Regulation 38.1 of the MYT Regulations, 2012 specifies that any income incidental to the business of the Generating Company shall constitute Non-Tariff Income. As regards the income received from SRCPL, the Commission notes that at this stage the income received from SPCPL 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. However, the Commission directs CSPGCL to submit the treatment of income received, directives of Government of Chhattisgarh, use of facility by any existing plants, etc., in the next True-up/Tariff Petition. The Commission may take appropriate view in the next True-up/Tariff Petition.

The Non-Tariff Income approved in the MYT Order 2013, as submitted by CSPGCL and approved in the true up for FY 2015-16 is shown in the Table below:

Table 3-25: Approved Non-Tariff Income in true up for FY 2015-16 (Rs. Crore)

Station	MYT Order 2013	CSPGCL Petition	Approved after true up
KTPS	6.03	1.01	2.04
HTPS	7.44	2.35	3.23
DSPM	6.04	(0.80)	0.81
HBPS	1.42	0.00	0.00
KWTPP	3.10	9.17	10.38
Total	24.03	11.73	16.46

3.21 Prior Period items

CSPGCL's Submission

CSPGCL has considered the prior period (credits)/charges based in line with the approach adopted by the Commission in the previous Order. The prior period interest income /charges in the books of accounts have not been considered, as the same is computed and allowed on normative basis and is not related to Accounts. Similarly, fuel related expenses relating to previous year have not been considered, as fuel cost is computed differently and the same was approved accordingly during the respective true ups of the prior periods. Except for the above exclusions, CSPGCL has considered remaining prior period (credits)/ charges as per Audited Accounts for FY 2015-16. The prior period expenses against HO & CAU in audited accounts of FY 2015-16 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 items in accordance with the treatment considered in respective year's True-up Orders. As the expenses for prior period have already been tried up and for over/under achievement, the Commission has undertaken sharing in 50:50 ratio in earlier true-up Orders. Hence, 50% of the Prior Period expenses have been allowed in this true-up Order. The prior period expenses as submitted by CSPGCL has been accepted and approved, as shown in the Table below:

Table 3-26: Approved Prior Period Expenses approved in true up for FY 2015-16
(Rs. Crore)

Station	CSPGCL Petition	Approved after true up
KTPS	10.68	5.34
HTPS	18.20	9.10
DSPM	7.94	3.97
KWTPP	4.94	2.47
Total	41.76	20.88

3.22 Other Charges

CSPGCL's submission

CSPGCL submitted that the actual water charges for FY 2015-16 were Rs. 162.19 Crore, SLDC charges were Rs. 6.23 Crore, and Petition filing fees and publication expenses were Rs. 0.29 Crore for FY 2015-16. CSPGCL submitted that Water Charges and SLDC Charges has been recovered from CSPDCL and no deficit/(surplus) has been claimed for FY 2015-16.

Commission's Views

The Other Charges have been approved as submitted by CSPGCL in the true-up for FY 2015-16.

3.23 ARR for FY 2015-16

The summary of ARR approved after true-up for KTPS, HTPS, DSPM, HBPS and KWTPP for FY 2015-16 is shown in the following Table:

Table 3-27: Approved ARR for HTPS, KTPS and DSPM, for FY 2015-16 (Rs. Crore)

Particulars	KTPS			HTPS			DSPM			KWTPP			Hasdeo Bango		
	MYT Order 2013	CSPGCL Petition	Approved	MYT Order 2013	CSPGCL Petition	Approved	MYT Order 2013	CSPGCL Petition	Approved	MYT Order 2013	CSPGCL Petition	Approved	MYT Order 2013	CSPGCL Petition	Approved
Depreciation	29.84	30.17	30.17	43.47	41.55	41.55	117.78	128.08	128.08	170.80	184.11	184.11	2.82	2.65	2.65
Interest & Finance Charges	14.16	13.14	13.14	20.57	13.92	13.92	91.63	100.31	100.31	322.17	331.19	331.19	1.46	1.50	1.50
Return on Equity	40.94	32.09	32.09	75.80	55.55	55.55	129.52	107.71	107.71	79.34	90.67	90.67	7.59	5.85	5.84
O&M Expenses	232.60	194.73	194.73	303.48	252.46	252.46	139.39	117.01	117.01	98.66	64.01	64.01	14.80	10.02	10.02
Impact of Wage Revision	-	12.53	12.53	-	17.32	17.32	-	5.58	5.58	-	3.71	3.71	-	0.20	0.20
Interest on Working Capital	19.62	21.53	21.45	28.37	30.04	29.75	19.75	24.12	21.42	18.19	19.43	19.20	0.79	0.71	0.71
Less: Non-Tariff Income	6.03	1.01	2.04	7.44	2.35	3.23	6.04	(0.80)	0.81	3.10	9.17	10.38	1.42	-	-
Pension and Gratuity Contribution	10.58	17.49	17.49	20.20	33.39	33.39	12.03	19.88	19.88	-	19.88	19.88	2.89	4.77	4.77
Total Annual Capacity Charge	341.70	320.67	319.56	484.37	441.88	440.71	504.06	503.49	499.17	686.06	703.83	702.38	28.92	25.70	25.69
Cost of Coal	280.62	341.87	341.87	486.24	604.70	604.70	304.72	490.33	490.33	-	333.66	333.66	-	-	-
Cost of Oil	29.91	10.91	10.91	30.27	14.13	14.13	18.60	4.05	4.05	-	9.26	9.27	-	-	-
Total Energy Charges	310.53	352.78	352.78	516.51	618.83	618.83	323.32	494.39	494.39	289.51	342.92	342.93	-	-	-
Net prior period (income)/expenses	-	10.68	5.34	-	18.20	9.10	-	7.94	3.97	-	4.94	2.47	-	-	-
Aggregate Revenue Requirement	652.23	684.13	677.68	1,000.88	1,078.91	1,068.64	827.38	1,005.81	997.52	975.57	1,051.69	1,047.77	28.92	25.70	25.69

3.24 Revenue from Sale of Power

CSPGCL's Submission

CSPGCL submitted the revenue from sale of power for FY 2015-16 as Rs. 3593.75 Crore excluding the revenue of Rs. 162.19 Crore on account of water charges and SLDC charges of Rs. 6.23 Crore.

Commission's View

The Commission has considered the revenue from Fixed Charges and Energy Charges and revenue from FCA, as submitted by CSPGCL. The Commission has also considered revenue of Rs. 187.52 Crore on account of revenue gap for FY 2013-14 passed to through CSPDCL in the Tariff Order for FY 2015-16, and the same amount has also been added to the revenue requirement for FY 2015-16, as these are contra-entries.

The revenue from Sale of power considered by the Commission is as shown in the following table:

Table 3-28: Approved Revenue in true up for FY 2015-16 (Rs. Crore)

Particulars	CSPGCL Petition	Approved after true up
Revenue from Sale of Power	3,279.48	3,279.48
Revenue from FCA	314.27	314.27
Revenue on account of Revenue gap for FY 2013-14 passed to through CSPDCL in Tariff Order for FY 2015-16	-	187.52
Grand Total	3,593.75	3,781.27

3.25 Sharing of Gains and Losses for FY 2015-16

Regulation 11 of the MYT Regulations, 2012 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;*

...
(e) *Operation & Maintenance expenses”*

Further, Regulation 12 of the MYT Regulations, 2012 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, 2012 specifies as under:

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

The mechanism for sharing of aggregate net gain / loss on account of better/ under achievement in reference to the target set in tariff order for efficiency linked controllable items shall be passed on to the beneficiary / consumer(s) and the other one-half (or 50%) amount of gain/ loss shall be retained by the generating company or the licensee, as the case may be, over such period as may be stipulated in the Order of the Commission”.

CSPGCL’s Submission

CSPGCL submitted that Regulation 13 of the CSERC MYT Regulation 2012 specifies the method for sharing of gains and losses.

CSPGCL submitted that the combined reading of the Regulations 11 and 12 of the CSERC MYT Regulations, 2012 clear that the effect of uncontrollable factors shall be passed through and the availability of coal is not listed as controllable parameter. Thus, if arrangements have been made for procurement of coal and still the same could not materialise, for no wilful default at the end of CSPGCL, the same is covered as “uncontrollable”.

CSPGCL has sought relaxation in PAF norms for KTPS and HTPS for exercise of Regulations 77 and/or 79 of CSERC MYT Regulations, 2012 and accordingly computed the sharing of gains and losses for FY 2015-16.

Commission's View

As discussed in earlier Section of this Chapter, the Commission has not considered any relaxation in PAF norms for KTPS for FY 2015-16. Further, CSPGCL's contention that "the availability of coal is not listed as controllable parameter" is incorrect, as the Availability norms have been specified as it is a controllable parameter, and the definition of Availability requires not only machine/plant availability but availability with fuel such that the plant is available to generate power.

The sharing of gains and losses on account of controllable factors has been computed in accordance with the MYT Regulations, 2012, and the established methodology for sharing of gains and losses, as elaborated in the MYT Order 2013 and previous Tariff Order. The contribution to Pension & Gratuity Fund has been excluded from the calculations, and gains/losses have been shared in the ratio of 50:50 in accordance with the MYT Regulations, 2012.

The sharing of gains and losses after true up for FY 2015-16 for KTPS, HTPS, DSPM and KWTPP is shown in the Table below:

Table 3-29: Summary of true up for KTPS, HTPS and DSPM for FY 2015-16

Particulars	Units	FY 2015-16			
		KTPS	HTPS	DSPM	KWTPP
Fixed Charges @ NPAF					
Installed capacity	MW	440	840	500	500
NPAF as per MYT Regulations	%	78.50%	81.00%	85.00%	81.00%
Actual PAF achieved	%	57.18%	78.10%	92.28%	75.52%
Normative aux. consumption	%	11.25%	9.70%	9.00%	6.00%
Actual aux cons	%	12.30%	9.56%	7.75%	5.18%
Normative aux. consumption	MU	341.32	579.73	335.99	213.45
Actual aux cons	MU	276.74	552.73	308.77	168.58
Normative Net Generation	MU	2692.67	5396.90	3397.21	3344.07
Actual net generation	MU	1973.25	5227.28	3674.32	3086.15
Total generation available for Fuel Cost recovery	MU	1973.25	5227.28	3674.32	3086.15
Fixed Cost (norm-wise)					
Depreciation	Rs Cr	30.17	41.55	128.08	184.11
Interest on Loan and Finance Charges	Rs Cr	13.14	13.92	100.31	331.19
Return on Equity	Rs Cr	32.09	55.55	107.71	90.67
Interest on Working Capital	Rs Cr	21.45	29.75	21.42	19.20
O & M Expenses	Rs Cr	219.48	270.12	124.04	87.77
Less – Non-Tariff Income	Rs Cr	2.04	3.23	0.81	10.38

Particulars	Units	FY 2015-16			
		KTPS	HTPS	DSPM	KWTTP
Fixed Cost allowed on Normative Basis	Rs Cr	314.29	407.66	480.74	702.56
Fixed cost expenditure excluding O&M	Rs Cr	94.81	137.54	356.71	614.79
Normative Fixed Cost (Cr. Rs/% of PAF) excluding O&M	Rs Cr./%PAF	1.21	1.70	4.20	7.59
Pro-rata Fixed cost allowable from Actual PAF	Rs Cr	69.06	132.61	387.25	573.21
Fixed cost gain from normative cost	Rs Cr	(25.75)	(4.93)	30.55	(41.58)
Total Gain/(Loss)	Rs Cr	(41.72)			
O & M expenses					
Normative O&M Cost allowed	Rs Crore	219.48	270.12	124.04	87.77
Normative O&M Cost (Cr. Rs/% of PAF)	Rs Cr./%PAF	2.80	3.33	1.46	1.08
Pro-rata O&M cost allowable from actual PAF	Rs Crore	159.86	260.44	134.66	81.83
Actual O & M expenditure	Rs Crore	194.73	252.46	117.01	64.01
Difference of recovery and expenditure	Rs Cr	(34.87)	7.97	17.65	17.82
Total Gain/(Loss)	Rs Cr	8.58			
Secondary Fuel Cost					
Normative SFC	Rs Cr	19.65	23.85	14.94	14.20
Normative SF Cost derived from NPLF	Rs/kwh	0.07	0.04	0.04	0.04
Secondary fuel cost recovery from actual generation	Rs Cr	14.40	23.10	16.16	13.10
Actual SFC incurred	Rs Cr	10.91	14.13	4.05	9.26
Savings due to performance improvement	Rs Cr	3.49	8.97	12.11	3.84
Total Impact of Savings/Excess Expenditure due to SFC	Rs Cr	28.40			
Coal Cost (primary fuel)					
Normative Coal Cost	Rs Cr	447.49	638.75	464.76	339.86
Normative ECR (Coal)	Rs/kwh	1.66	1.16	1.37	1.02
Normative fuel cost on actual sent out	Rs Cr	327.93	603.77	502.67	313.64
Actual fuel cost	Rs Cr	341.87	604.70	490.33	333.66
Coal Cost Surplus/(deficit)	Rs Cr	(13.94)	(0.93)	12.34	(20.02)

Particulars	Units	FY 2015-16			
		KTPS	HTPS	DSPM	KWTPP
Total Impact of Savings/Excess Expenditure due to Coal	Rs Cr	(22.55)			
Total plant wise impact of gain/ loss	Rs Cr	(71.07)	11.08	72.64	(39.94)
Total Impact of Savings/Excess Expenditure	Rs Cr	(27.29)			
Gains/(Losses) for Hasdeo Bango of FY 2015-16	Rs Cr	3.50			
Net total Impact Savings/(Excess Expenditure)	Rs Cr	(23.79)			
Net applicable Gain/(Loss) to CSPGCL on 50:50 basis	Rs Cr	(11.89)			

From the above table, it is seen that CSPGCL has incurred loss of Rs. 23.79 Crore. As per the provisions of the Regulations, 50% of this loss has to be retained by CSPGCL and remaining 50% will be passed on to the consumers of the State.

3.26 Impact of Hon'ble APTEL Judgment dated March 30, 2016 on Appeal No. 238 of 2014

CSPGCL's Submission

CSPGCL submitted that Hon'ble APTEL in its Judgment dated March 30, 2016 in Appeal No. 238 of 2014 regarding the matter of depreciation of HTPS held as under:

"...The matter is remanded back to the State Commission to compute the balance depreciable amount after adjusting the cumulative amount from the 90% asset value of HTPS Thermal Station in two years i.e. FY 2010-11 and FY 2011-12"

Taking the cognizance of the above Hon'ble APTEL Judgment, the Commission in the detailed Tariff Order dated April 30, 2016 held as under:

"In this order, the methodology adopted in earlier orders has been considered in computing the depreciation of KTPS and HTPS. However, the Commission further notes that Hon'ble APTEL has passed a Judgment on March 30, 2016 in Appeal No. 238 of 2014 on this issue. The Judgment of the Hon'ble APTEL shall be complied and depreciation allowed in this order shall be reviewed."

In view of the above, CSPGCL has computed the depreciation of on the assets before April 1, 2010 by spreading the remaining depreciation over balance useful life. The depreciation for the assets added on and after April 1, 2010 has been computed by

applying schedule rates specified in the Regulations. Accordingly, CSPGCL has submitted the depreciation of FY 2010-11 and FY 2011-12 and its impact on other components along with carrying cost.

Commission's View

In view of the Hon'ble APTEL in its Judgment dated March 30, 2016 in Appeal No. 238 of 2014, the Commission has spread the balance depreciable value of Rs. 137.42 Crore for assets added before April 1, 2010 in two years, i.e., FY 2010-11 and FY 2011-12.

The Commission has computed the impact of Hon'ble APTEL Judgement in Appeal No. 238 of 2014 as shown in the following Table:

Table 3-30: Impact of Hon'ble APTEL Judgment in Appeal No. 238 of 2014 (Rs. Crore)

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Opening GFA	759.58	759.58				
Less: Value of Land Under Freehold	1.09	1.09				
Opening Accumulated Depreciation	545.23	613.94				
90% of Gross Block Excluding Land	682.65	682.65				
Amount remaining to be depreciated	137.42	68.71				
Remaining Life	2.00	1.00				
Depreciation allowable as per Hon'ble APTEL Judgement	68.71	68.71	-	-	-	-
Depreciation approved by the Commission	20.51	23.38	23.38	23.38	23.38	23.38
Difference of Depreciation claimed	48.20	45.33	(23.38)	(23.38)	(23.38)	(23.38)
Impact on Interest Charges						
Rate of Interest on Regulatory Loan (%)	8.51%	10.57%	10.73%	11.42%	11.62%	11.88%
Interest and Finance Charges	(2.05)	(2.40)	1.25	1.33	1.36	1.39
Impact on IoWC						
Rate of Interest for IoWC	11.75%	11.75%	11.75%	13.20%	13.50%	13.50%
IoWC	0.92	0.86	(0.44)	(0.50)	(0.51)	(0.51)
Total ARR	47.07	43.79	(22.57)	(22.54)	(22.53)	(22.50)
Sharing of Gains and Losses						
Normative Generation (MU)	5,490.84	5,505.88	5,490.84	5,515.05	5,515.05	5,396.90

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Actual Generation (MU)	6,054.67	5,841.88	5,806.29	5,515.05	5,550.02	5,227.28
Fixed Cost recovery for actual Generation	51.90	46.46	(23.86)	(22.54)	(22.67)	(21.79)
Gain or Loss due to depreciation	2.42	1.34	(0.65)	-	(0.07)	0.35
Total Claim on account of Hon'ble APTEL Judgement	49.49	45.13	(23.22)	(22.54)	(22.60)	(22.14)

The Commission has computed the cumulative impact after considering the carrying / (holding cost) till FY 2017-18 (half year). The Commission has computed the cumulative Revenue Gap of **Rs. 66.39** Crore on account of impact of Hon'ble APTEL Judgement in Appeal No. 238 of 2014, and the same has been considered to be recovered in FY 2017-18.

3.27 Impact of Deviation Settlement Mechanism (DSM) Charges for FY 2014-15

Intra-State ABT for procurement of power from CSPGCL thermal power station was introduced from October 1, 2014. According to the notified Regulations and the Order of the Commission, the deviation from the schedule was required to be governed by CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014. The DSM bills were required to be prepared by CSLDC. The bills raised by CSLDC from October 2014 to December 2014 were disputed, hence, no monetary transactions were done. For the period from January to March 2015, there was no dispute. According to the bills raised by CSLDC for the period October to December 2014, an amount of Rs. 8.27 Crore was to be paid by CSPGCL to CSPDCL, whereas according to CSPGCL it was required to receive Rs. 2.90 Crore from CSPDCL.

The billing modality adopted by CSLDC for over-injections (+) 12% was also disputed by a power developer namely, Arasmeta Captive Power Company Limited, which filed Petition No. 6 of 2015 (D) before the Commission. The case was disposed of through an order dated May 7, 2015. In the Order, the Commission held that the billing modality followed by CSLDC was not correct and needs to be rectified. The Commission also directed CSLDC to implement its Order without any discrimination among sellers and buyers and the modality shall be made applicable to all such cases in the State. In view of the Order given by the Commission in Petition No. 6 of 2015 (D), CSLDC was required to rectify the Deviation Charges bills for CSPGCL. CSLDC did not comply with the Order of the Commission and filed an appeal before the Hon'ble APTEL in Appeal No. 219 of 2015. Even though there was no stay on the operation of the Order of the Commission by the Hon'ble APTEL,

CSLDC preferred not to comply with the Order of the Commission. It is because of this fact that while truing up for FY 2014-15, impact due to Deviation Charges bills could not be factored in for CSPGCL.

The Hon'ble APTEL passed the Order in Appeal No. 219 of 2015 on December 5, 2016. In its Judgment, the Hon'ble APTEL upheld the Order of the Commission, and ruled as under:

"11.

ix) We are of the considered opinion that deviation settlement mechanism is predominantly significant to facilitate the grid discipline and grid security and it has been yielding good outcome through DSM Regulations ever since its implementation.

x) The amendment issued in respect of Annexure II was in fact to bring out the right spirit of the Main Regulations.

xi) When there is Substantive Regulation and as an offshoot of these Substantial Regulations, a methodology for computation of the commercial settlements is considered to the extent it is in tune with the Substantive Regulations. We have also observed that the Central Commission has rightly issued an amendment to bring in the consistency in line with its Substantive Regulations of the DSM Regulations. If such an interpretation as contemplated by the Appellant is considered, a generator would not generate electricity and supply to the grid to help the grid frequency as any such injection would be penalized rather than being incentivized. The provisions in the Annexure are only in aid of the parent Regulations and cannot override the main provisions of the Regulations. We do not have any doubt in our mind that in line with the spirit and the intention of the Main Regulations which would facilitate grid discipline and grid security, the error so alleged in the Annexure II of the DSM Regulations by the Appellant which was subsequently rectified through amendment is only considered to be an inadvertent error. The main intention to ensure grid discipline and grid security is abundantly clear in the Substantive Regulations and any application which is in contradiction with the spirit and intention intended in this Substantive Regulations which in this case is Annexure II has to be in line with the spirit of the Substantive Regulations, irrespective of the error in Annexure – II as alleged by the Appellant and this has been rightly contemplated by the WRPC while computing billing deviation charges.

xii) The amended provision of the Annexure does nothing but removes an error, or contradiction in the earlier Annexure, which was contradictory to the parent provision. As submitted hereinabove, even if the earlier provision is to be applied without any amendment, the Annexure cannot be read alone, but has to be in the context of and subject to the main controlling provision. The intent and object of the Regulations also support the plain language of Regulation 5.

xiii) In our view, the amendment issued subsequently to DSM Regulations is only to rectify the inadvertent error and the same has been rightly made effective from 17.02.2014 from the date of issuance of Principal Regulations by the State Commission in its Impugned Order. We do not observe any infirmity in the Impugned Order.”

In view of the Judgment of the Hon’ble APTEL and to ensure its compliance, during TVS, CSLDC was asked to submit revised correct bills for CSPGCL, so that the impending truing up of FY 2014-15 can be completed. CSLDC was asked by letter dated January 10, 2017 to submit the correct UI bills in respect of CSPGCL. Similarly, CSPGCL was also asked to submit the revised bill according to their calculations for the period October to December 2014.

CSLDC through letter dated January 17, 2017 stated that the correct DSM bills would have an impact on the end users and citing this reason they did not submit the revised correct bills. CSLDC was again asked through letter dated March 7, 2015, to submit the revised correct bills, however, it did not submit the revised bills again.

Meanwhile, CSPGCL vide letter dated March 22, 2017, submitted the bills according to their calculations for the period October to December 2014, according to which an amount of Rs. 2.90 Crore was required to be paid by CSPDCL to CSPGCL. A copy of the letter received from CSPGCL was forwarded to CSLDC and CSPDCL seeking their comments. In response to this, CSLDC submitted that they have filed an appeal before the Hon’ble Supreme Court, so status quo may be maintained till the Order is passed by the Hon’ble Supreme Court. It is pertinent to note that no stay order has been granted by the Apex Court on the Judgment of the Hon’ble APTEL.

Clause 5.3.7 of National Electricity Policy prescribes that the spirit of the provisions of the Act is to ensure independent system operations through NLDC, RLDC and SLDC. The Forum of Regulators (FOR) Working Report on Open Access – Theory & Practice has recommended that as the SLDCs have allegedly acted in partial manner in granting Open Access, there by violating the provisions of EA 2003 for non-discriminatory treatment of Open Access transactions, there is a need to ensure functional independence of SLDC operations. A report of the Committee constituted by Ministry of Power for ring fencing of SLDC also recommends ensuring independent system operations. In the above mentioned FOR Report, it has been recommended that for ensuring functional independence the concerned State Governments needs to ensure that SLDC should not be directly or indirectly reporting to any other power sector entity such as Distribution Licensee or Trading Licensee. In this case despite the repeated directions of the Commission, CSLDC did not submit the revised UI bills stating that it will have an impact on end users, which is not in

accordance with the spirit of independent system operations mandated in the EA 2003.

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 from October to December 2014, the liability occurs on CSPDCL to pay CSPGCL 50% of total amount, i.e., 50% of Rs. 2.90 Crore.

Table 3-31: DSM Charges which should have been billed as submitted by CSPGCL (Rs. Crore)

Month	Rs.
Oct 2014	1,72,14,677
Nov 2014	19,02,108
Dec 2014	98,95,988
Total	2,90,12,773

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.

Illustration:

Suppose CSLDC raises total monthly bills for SOC and MOC charges of Rs. 50 Lakh in the month of April 2017 and Rs. 52 Lakh in the month of May 2017 for CSPGCL. CSPGCL shall pay to CSLDC Rs. 32.5 Lakh (Rs. 50 Lakh – Rs. 17.5 Lakh) against the bill raised for April 2017 and Rs. 34.5 Lakh (Rs. 52 Lakh – Rs. 17.5 Lakh) against the bill raised for May 2017. However, while claiming the bills from CSPDCL, CSPGCL shall claim an entire amount of Rs. 50 Lakh and Rs. 52 Lakh for April and May 2017, respectively.

Accordingly, the Commission has considered the DSM charges payable to CSPGCL by CSPDCL as shown in the following Table:

Table 3-32: DSM Charges payable to CSPGCL by CSPDCL (Rs. Crore)

Particulars	Total claim	50% of claim
October to December 2014	2.90	1.45

Table 3-33: DSM Charges payable by CSPGCL to CSPDCL (Rs. Crore)

Particulars	Total claim	50% of claim
January to March 2015	1.49	0.75

Table 3-34: DSM Charges payable to CSPGCL by CSPDCL and CSLDC with carrying cost (Rs. Crore) for the period from Oct-14 to Dec-14

Particulars	FY 2014-15	FY 2015-16	FY 2016-17
Opening claim	-	(1.48)	(1.67)
Standalone claim addition during the year	(1.45)	-	-
Closing claim	(1.45)	(1.48)	(1.67)
Average claim	(0.73)	(1.48)	(1.67)
Interest rate (%)	13.50%	13.04%	12.80%
Carrying cost	(0.02)	(0.19)	(0.21)
Grand Total	(1.48)	(1.67)	(1.88)

Table 3-35: DSM Charges payable by CSPGCL to CSPDCL with carrying cost (Rs. Crore) for the period from Jan-15 to Mar-15

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Opening claim	-	0.76	0.86	0.97
Standalone claim addition during the year	0.75	-	-	-
Closing claim	0.75	0.76	0.86	0.97
Average claim	0.37	0.76	0.86	0.97
Interest rate (%)	13.50%	13.04%	12.80%	12.80%
Carrying cost	0.01	0.10	0.11	0.06
Grand Total	0.76	0.86	0.97	1.03

In order to reduce the burden of carrying cost on consumers, the Commission has calculated carrying cost only up to FY 2016-17 on Deviation charges from October to December 2014.

After considering the carrying cost, the Commission has computed the total DSM Charges of Rs. (1.88) Crore to be received by CSPGCL from CSPDCL and CSLDC for the period from October to December 2014 and Rs. 1.03 Crore payable by CSPGCL to CSPDCL for the period January to March 2015. However, as stated above, only Rs. (1.53) Crore has to be paid by CSPDCL to CSPGCL for the period from Oct-14 to Dec-14. The remaining Rs. (0.35) Crore (Rs. 1.88 Crore – Rs. 1.53 Crore) will be deducted from the bills raised by CSLDC towards SOC and MOC charges for CSPGCL based on illustration shown above. The shortfall in recovery of Rs. 0.35 Crore towards CSLDC bills, which has resulted due to non-compliance of the Order of the Commission, shall be borne by CSLDC and its impact shall not be passed on to the end consumers.

3.28 Impact of Deviation Settlement Mechanism (DSM) Charges for FY 2015-16

The settlement on account of DSM is required to be done for FY 2015-16. During the TVS, CSPGCL was directed to submit the details of DSM Charges and accordingly, CSPGCL submitted the calculations of monthly DSM charges for FY 2015-16. In line with the approach taken by the Commission for truing up of DSM charges for FY 2014-15, the Commission has trued-up DSM charges for FY 2015-16.

Table 3-36: DSM Charges payable by CSPGCL to CSPDCL (Rs. Crore)

Particulars	Actual	CSPGCL Petition	Approved after true up
DSM Charges for FY 2015-16	14.09	7.05	7.05

After considering the carrying/(holding) cost till mid of FY 2017-18, the Commission has computed the total DSM Charges of Rs. 9.01 Crore payable by CSPGCL to CSPDCL. These Charges have been adjusted with the cumulative revenue gap to be passed on to CSPDCL in the Tariff for FY 2017-18

3.29 Summary of True-up for FY 2015-16

The summary of Final True-up for CSPGCL for FY 2015-16 is shown in the following Table:

Table 3-37: Summary of True up for FY 2015-16 for CSPGCL (Rs. Crore)

Particulars	CSPGCL Petition	Approved after true up
ARR for KTPS	684.13	677.68
ARR for HTPS	1,078.91	1,068.64
ARR for DSPM TPS	1,005.81	997.52
ARR for KWTPP	1,051.69	1,047.77
ARR for Hasdeo Bango	25.70	25.69
Total ARR for Generating Stations of CSPGCL	3,846.24	3,817.31
Sharing of Gain/(Losses) for FY 2015-16	0.00	(11.89)
Net Gap/(surplus) in Water Charges	0.00	0.00
Net Gap/(surplus) in SLDC Charges	0.00	0.00
Petition Filing Fee	0.29	0.29
Revenue Gap/(Surplus) for FY 2013-14 passed through to CSPDCL in FY 2015-16	-	187.52
Total ARR for FY 2015-16	3,846.53	3,993.23
Revenue from Sale of Power	3,593.75	3,781.27
ARR Gap/(Surplus) for FY 15-16	252.78	211.96

After applying the carrying cost for 2 years, i.e., from mid-point of FY 2015-16 to mid-point of FY 2017-18 on this revenue gap of Rs. 211.96 Crore, the total amount that is required to be factored in the revenue requirement of CSPDCL for FY 2017-18 works out to Rs. 271.57 Crore.

After considering the additional Revenue Gap/(Surplus) on account of Impact of Hon'ble APTEL Judgement in Appeal No. 238 of 2014 and Impact of DSM Charges,

the cumulative revenue gap works out as shown in the following Table:

Table 3-38: Cumulative Revenue Gap after True up for FY 2015-16 for CSPGCL (Rs. Crore)

Particulars	Approved after true up
ARR Gap/(surplus) for FY 2015-16	271.57
Impact of Hon'ble APTEL Judgment in Appeal No. 238 of 2014	66.39
Impact of DSM Charges for FY 2014-15 (Oct to Dec)	1.88
Impact of DSM Charges for FY 2014-15 (Jan to March)	-1.03
Impact of DSM Charges for FY 2015-16	-9.01
Grand Total	329.80

This cumulative amount of Rs. 329.80 Crore has been added to the ARR of CSPDCL for FY 2017-18. However, as stated above CSPDCL shall pay only Rs. 329.45 Crore as remaining Rs. 0.35 Crore will be borne by CSLDC. CSPDCL shall pay this amount to CSPGCL in FY 2017-18 in twelve equal monthly instalments, i.e., Rs. 27.45 Crore per month.

3.30 Provisional AFC for Marwa TPP for FY 2017-18

The Commission in its MYT Order dated 31.03.2016 in P No 17/2016 filed by CSPGCL, for Marwa TPP, had allowed a provisional single-part tariff of Rs 3.90/kWh, wherein the Energy Charge was considered @ 1.20 per kWh and fixed cost component was considered as Rs 2.70 per kWh. During TVS, CSPGCL informed that the earlier approved capital cost of Rs 8692 Crore is under upward revision. Presently, the Commission is not inclined to consider any adhoc increase for the purpose of provisional tariff. CSPGCL has been directed to file a revised Petition based on audited figures for FY 2016-17. CSPGCL submitted that the updated Petition based on audited figures for FY 2016-17 shall be filed along with the true up of FY 2016-17. Leave is granted for the same.

Further, CSPGCL has also prayed for Two-part billing. As the plant has achieved commercial operation during FY 2016-17, in compliance of spirit of the Regulations, it is logical to have two-part billing in FY 2017-18. Subject to prudence check at the time of filing of updated Petition, the Commission allows AFC for FY 2017-18 as follows;

- i. Capital Cost: Provisionally, for the purpose of this Order, the capital cost has been considered as Rs. 8692 Crore with debt equity ratio of 90:10.

- ii. RoE: RoE has been allowed @15.5% as same has been considered for all other plants of CSPGCL, without grossing up for the Income Tax. Tax, if any, shall be considered at the time of true up.
- iii. Interest on loan: As loan for KWTPP and Marwa TPP have been taken from same source, interest rate on loan has been considered at the same rate which has been adopted in the MYT Order dated 31.03.2016 for KWTPP, which is 13%.
- iv. O&M Cost: As Marwa TPP and KWTPP are covered by the same norm/ Regulations, the O&M cost (including impact of IR) has been considered at the same rate as has been allowed for KWTPP.
- v. Working capital: Normative working capital has been considered as per Regulations and the interest on working capital has been considered at the same rate which has been allowed for all other plants.
- vi. Depreciation: In the previous petition, CSPGCL prayed for depreciation @6%. The Commission is not inclined to consider the same at this stage. Considering that coal transport infrastructure (rail) for Marwa TPP is somewhat similar to DSPM TPS, depreciation is provisionally considered at the same rate which has been allowed for DSPM TPS on the MYT order, i.e., 5.5%.

Considering the above parameters, component-wise break up of fixed charge is as under:

Table 3-39: Provisional AFC for Marwa TPP for FY 2017-18

Particulars	Amount (Rs. Crore)
Return on Equity	134.73
Depreciation	478.06
Interest on Long Term Loan	974.59
O&M expenses, including impact of wage Revision (Interim Relief)	215.68
Interest on Working Capital	68.66
Total Fixed Cost	1871.72

Pension and Gratuity Trust Contribution, which as per Regulations is a separate line item, has already been assigned to different plants (including Marwa TPP) in the MYT Order (Table 9.5-33). The same is retained without any change, at Rs. 19.13 Crore.

Based on True up of FY 2015-16, upward revision of Energy Charge Rate (ECR) has been considered for other plants, however, as True up data for FY 2015-16 is not available / applicable for Marwa TPP, the Commission is not considering resetting of ECR for this plant and the ECR allowed in the MYT Order of Rs 1.20 per kWh shall continue. FCA on the same shall be applicable on actual landed cost of coal & actual GCV of coal as fired as per methodology allowed by the Commission and considering the base data allowed in the MYT order. The variation in secondary fuel oil GCV and Cost shall be considered at time of truing up for the respective year.

In view of the above, the Commission provisionally allows AFC of Rs. 1871.72 Crore to be billed in accordance to Regulation 41. It may be apposite to note that as applicable for all other plants of CSPGCL, the above AFC does not comprise of contribution to P&G Fund, SLDC charges, water charges and other statutory charges. CSPGCL shall raise the amount approved towards contribution to P&G Fund in twelve equal monthly instalments in its monthly bill. SLDC charges, water charges, start-up power and other statutory charges shall be claimed on reimbursement basis. Deviations from schedule shall also continue to be governed by the deviation settlement mechanism as applicable.

4 FINAL TRUE UP FOR CSPTCL FOR FY 2015-16

4.1 Transmission System of CSPTCL

The physical status of transmission system of CSPTCL as on March 31, 2016, as submitted by CSPTCL is shown in the Table below:

Table 4.1-1: Physical Status of Transmission System of CSPTCL as on March 31, 2016

Particulars	Units	As on March 31, 2016
A. EHV Transmission Lines		
400 kV	ckt. km.	1827.06
220 kV	ckt. km.	3431.49
132 kV	ckt. km.	5688.92
+/-100 kV HVDC	ckt. km.	360
Total	ckt. km.	11307.47
B. EHV Substations		
400 kV	No.	2
220 kV	No.	20
132 kV	No.	71
+/-100 kV HVDC	No.	1
Total	No.	94
C. Transformation Capacity of EHV Substations		
400/220 kV	MVA	1575
220/132 kV	MVA	6190
132/33kV	MVA	6370
+/-100 kV HVDC	MVA	243
Total	MVA	14378

4.2 Aggregate Revenue Requirement for FY 2015-16

4.2.1 Annual Charges for Intra-State Transmission Network

Regulation 47.1 of the MYT Regulations, 2012 specifies as under:

“47.1 Aggregate Revenue Requirement of transmission licensee shall comprise the following components, viz.

- (a) Return on Equity (ROE)*
- (b) Interest and finance charges;*
- (c) Depreciation;*
- (d) Operation and maintenance expenses;*
- (e) Interest on working capital;*

Less:

- (f) Non-Tariff Income;*

NOTE:

1. *Non-Tariff Income as specified in the Regulation 50, shall be subtracted from the sum of above (a to e) to arrive at AFC.*
2. *Pension & Gratuity Fund Contribution shall be recoverable in equal monthly installments as may be determined by the Commission in the Tariff order.*
3. *The Statutory Taxes and Duties shall be recoverable on reimbursement basis, as per actual.”*

4.2.2 Operation and Maintenance (O&M) expenses

CSPTCL’s submission

CSPTCL submitted that in the MYT Order dated July 12, 2013, the Commission had approved the normative O&M expenses of Rs. 211.28 Crore for FY 2015-16. As against the same, the actual O&M expenses for CSPTCL for FY 2015-16 are Rs. 188.88 Crore [excluding Pension & Gratuity (P&G) and Impact of Wage revision, but including Capitalization of O&M expenses]. CSPTCL requested the Commission to approve the O&M expenses of Rs. 188.88 Crore in the true up for FY 2015-16.

CSPTCL submitted that there was an interim wage relief impact as per CSPHCL Order No. 1792 dated July 23, 2015 at 7.5% to the working officers and employees of power companies with effect from April 1, 2014 with applicable DA and HRA. The total arrears on account of Wage Revision (Interim Relief) for the period from April 1, 2014 to June 30, 2015 were to be passed on to employees in 15 equal instalments effective from month of July, 2015. CSPTCL has actually paid Interim Relief from July 1, 2015 to March 31, 2016 amounting to Rs. 15.23 Crore (excluding the amount paid to SLDC). This Interim Relief is a part of actual employee expenses, apart from the provision of Rs. 4.68 Crore made separately towards Interim relief from April 1, 2015 to June 30, 2015.

As regards the normative O&M expenses, CSPTCL has considered the Gross Normative O&M expenses of Rs. 200.82 Crore, as approved by the Commission for FY 2014-15 in the Tariff Order dated April 30, 2016 as base O&M expenses for FY 2015-16 and arrived at normative net O&M expenses of Rs. 180.74 Crore after adding inflation of 2.39% and deducting the O&M capitalisation of Rs. 24.88 Crore. CSPTCL requested the Commission to approve Rs. 4.07 Crore on account of sharing of loss on O&M expenses for FY 2015-16.

Commission’s View

Regulation 47.5 of the MYT Regulations, 2012 specifies as under:

“47.5 Operation and Maintenance expenses

47.5.1 Operation and Maintenance (O&M) expenses for Transmission licensee shall include:

I. Employee costs;

II. Administrative and General expenses

III. Repairs and Maintenance

(a) The Operation and Maintenance expenses, excluding pension fund contribution and impact of pay revision arrears for the base year i.e. FY 2012-13, shall be derived on the basis of the normalized average of the actual Operation and Maintenance expenses excluding pension fund contribution and impact of pay revision arrears available in the audited/un audited accounts for the previous three (3) years immediately preceding the base year FY 2012-13, subject to prudence check by the Commission.

(b) The normalization shall be done by applying weighted average inflation at the rate of 60% weightage to actual variation in CPI and 40% weightage to actual variation in WPI on year to year basis. The average of normalized net present value for 2009-10, 2010- 11 and 2011-12, shall then be used to project base year value for 2012-13. The base year value so arrived, shall be escalated by the above inflation rate to estimate the O&M expense (excluding impact of pay revision, if any) for each year of the control period.

At the time of true up, the O&M cost shall be considered after taking into account the actual inflation instead of projected inflation for that period.

Provided further that impact of pay revision (including arrears), if any, shall be considered on during the true-up as per audited /unaudited accounts, subject to prudence check and any other factor considered appropriate by the Commission.

47.5.2 The additional O&M Expenses on account of new transmission lines/substations commissioned after March 31, 2013 shall be allowed by the Commission subject to prudence check at the time of truing up exercise."

In the MYT Order dated July 12, 2013, the Commission had approved normative O&M expense of Rs. 211.28 Crore for FY 2015-16 excluding contribution towards P&G fund. As per MYT Regulations, 2012, at the time of true-up, the O&M cost shall be considered after taking into account the actual inflation instead of projected inflation for that period. The actual CPI and WPI for FY 2015-16 were 6.29% and 2%, respectively. Therefore, overall inflation for FY 2015-16 works out to 2.39% (60% of CPI + 40% of WPI). The gross normative O&M expense of FY 2014-15, as approved by the Commission in Tariff Order dated March 31, 2016, have been escalated by the actual inflation rate of 2.39% for FY 2015-16 to arrive at the gross normative O&M expense for FY 2015-16, as shown in the Table below:

Table 4.2-1: Normative O&M expenses considered in True-up for FY 2015-16

(Rs. Crore)	
Particulars	Considered after True-up
Gross Normative O&M expense for FY 2014-15	200.82
Inflation Factor	2.39%
Gross Normative O&M expenses for FY 2015-16	205.62
Less: O&M expenses capitalised	24.88
Net Normative O&M expense	180.74

The Commission has considered the Employee expenses, A&G expenses and R&M expenses as per the audited annual accounts submitted by CSPTCL for FY 2015-16.

The actual O&M expenses claimed by CSPTCL and approved by the Commission after true-up are as given in the Table below:

Table 4.2-2: Approved O&M expenses for FY 2015-16

(Rs. Crore)		
Particulars	CSPTCL Petition	Approved after true-up
Employee Expenses	150.62	150.62
R&M and A&G Expenses	63.14	63.14
Gross O&M Expenses	213.76	213.76
Less: O&M Expenses capitalised	24.88	24.88
Net O&M Expenses	188.88	188.88

Further, as O&M expenses are a controllable factor in accordance with MYT Regulations, 2012, the Commission has computed the sharing of gain/(loss) on O&M expenses for FY 2015-16 as shown in the Table below:

Table 4.2-3: Sharing of gain/(loss) on O&M expenses approved in true up for FY 2015-16

(Rs. Crore)		
Particulars	CSPTCL Petition	Approved after true-up
Normative O&M expenses	180.74	180.74
Actual Net O&M Expenses (excluding Pension and Gratuity)	188.88	188.88
Total Gain/(loss)	(8.14)	(8.14)
CSPTCL's Share (1/2 of the Total Gain)	(4.07)	(4.07)

CSPTCL was asked to submit the computation of Interim relief separately for CSPTCL and SLDC and confirm that the amount of Interim Relief of Rs. 15.23 Crore was actually paid during FY 2015-16. The details submitted were duly scrutinised and the Commission approves the Interim relief of Rs. 15.23 Crore for FY 2015-16. Thus, the total O&M expenses approved in true up for FY 2015-16 is Rs. 200.04 Crore.

4.2.3 Contribution to Pension and Gratuity Fund

CSPTCL's submission

CSPTCL submitted that in the MYT Order, the Commission had approved the contribution to P&G fund for FY 2015-16 as Rs. 35.85 Crore. CSPTCL has considered the actual Contribution to P&G Fund of Rs. 35.85 Crore as per the audited accounts net of SLDC Contribution. CSPTCL requested the Commission to approve the contribution to P&G Fund for FY 2015-16 as submitted.

Commission's View

After scrutiny of the submissions of CSPTCL and the audited accounts of CSPTCL, the Commission has approved the contribution to P&G Fund of Rs. 35.85 Crore in the true up for FY 2015-16.

4.2.4 Gross Fixed Assets and Means of Finance

CSPTCL's submission

CSPTCL submitted that in the MYT Order, the Commission 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 2015-16 has been determined based on the following:

- a. Closing CWIP of Rs. 564.47 Crore (net of CSLDC of Rs. 1.37 Crore) has been considered as per the audited accounts for FY 2015-16.
- b. The actual loan addition of Rs. 175.19 Crore has been considered as per the audited accounts for FY 2015-16.
- c. Addition in consumer contribution has been considered as nil as per the audited accounts for FY 2015-16.
- d. Equity addition has been considered as Rs. 130.80 Crore for FY 2015-16.
- e. GFA addition of Rs. 306.14 Crore (net of GFA addition for CSLDC) has been considered as per the audited accounts for FY 2015-16.
- f. Assets generated on account of consumer contribution have been taken as Nil, its value being considered as Rs. 1 only as per accounting standard.

The capital structure for FY 2015-16 as submitted by CSPTCL is shown in the Table below:

Table 4.2-4: Capital Structure for FY 2015-16 as submitted by CSPTCL

(Rs. Crore)		
Particulars	MYT Order 2013	CSPTCL Petition
Gross Fixed Assets (GFA)		
Opening GFA	3724.62	3348.88
Opening CWIP	388.71	564.63
Opening Capex	4113.32	3913.51
Capitalisation during the year	195.34	306.14
Closing GFA	3919.95	3655.02
Closing CWIP	493.42	564.47
Closing Capex	4413.37	4219.50
Grants and Consumer Contribution		
Opening Grants and Consumer Contribution	95.96	101.56
Consumer Contribution/Grants during the Year	-	-
Closing Grants and Consumer Contribution	95.96	101.56
Consumer Contribution in opening GFA	86.89	46.06
Consumer Contribution in closing GFA	86.89	46.06
Loan Borrowed		
Opening borrowed loan	2851.98	1969.43
Loan borrowed during the year	156.27	175.19
Closing borrowed loan	3008.25	2144.62
Borrowed loan in opening GFA	2381.72	2077.83
Borrowed loan in closing GFA	2539.65	2322.74
Equity		
Opening Equity	1165.38	1842.52
Addition during the year	143.78	130.80
Closing Equity	1309.16	1973.32
Equity in opening GFA	1256.01	1224.99
Equity in closing GFA	1295.07	1286.22

Particulars	MYT Order 2013	CSPTCL Petition
Average Gross Equity during the year	1275.54	1255.61
Permissible Equity		
Permissible Equity in opening GFA	916.30	847.87
Permissible Equity in closing GFA	955.36	909.10
Average Gross Permissible Equity during the Year	935.83	878.48
Normative Loan		
Opening Normative Loan	339.71	377.12
Closing Normative Loan	339.71	377.12
Average Normative Loan	339.71	377.12

CSPTCL submitted the debt: equity ratio of 80:20 for the GFA addition during FY 2015-16. Accordingly, the equity amount for FY 2015-16 is submitted as Rs. 61.23 Crore and debt amount as Rs. 244.91 Crore.

Commission's View

The Commission observed that the combined opening GFA (for regulatory purpose) for CSPTCL and CSLDC for FY 2015-16 is higher by Rs. 2.49 Crore than opening GFA shown in Audited Accounts for FY 2015-16. The Commission in its Tariff Order dated July 13, 2013 had approved the Closing GFA of Rs. 1223.66 Crore for FY 2009-10, which includes GFA of CSLDC. However, the closing GFA for FY 2009-10 was shown as Rs. 1222.34 Crore in audited accounts. The asset register was not finalised by CSPTCL at that time. Further, the said closing GFA of Rs. 1223.66 Crore for FY 2009-10 was bifurcated into Rs. 1209.58 Crore for CSPTCL and Rs. 14.08 Crore for CSLDC and considered as Opening GFA for FY 2010-11. The same GFA balances were carried forward by the Commission for truing up for FY 2013-14 in the Tariff Order for FY 2015-16 dated May 23, 2015.

Subsequently, after finalisation of asset register, the CSPTCL in Review Petition 02/2015 (T) on Tariff Order for FY 2015-16 submitted the revised Opening GFA for CSPTCL for FY 2013-14. The Commission in Review Order dated February 5, 2016 approved the revised Opening GFA for FY 2013-14 as submitted by CSPTCL as Rs. 2510.72 Crore. The opening GFA for CSLDC for FY 2013-14 also had to be correspondingly revised to Rs. 14.08 Crore. However, since the scope of Review Petition was limited, the Commission had not revised Opening GFA for CSLDC in the same Review Order. The Commission in its Tariff Order dated March 31, 2016

has inadvertently considered the Opening GFA of Rs. 16.58 Crore for CSLDC for FY 2014-15, for truing up purpose. The Commission now corrects the opening GFA for CSLDC for FY 2013-14 as Rs. 14.08 Crore and approves the Opening GFA of Rs. 14.08 Crore for FY 2015-16, since, there was no capitalisation during FY 2013-14 and FY 2014-15. The Commission has not considered any impact for FY 2014-15, which had already been allowed to CSPTCL and CSLDC in Tariff Order dated March 31, 2016.

The Commission has considered the capitalisation for FY 2015-16 as submitted by CSPTCL, which is based on the audited accounts. The Commission has considered no grants for funding of capitalisation. The debt: equity ratio of 80:20 as submitted by CSPTCL has been considered. The GFA addition and means of finance approved in the true up for FY 2015-16 is as shown in the Table below:

Table 4.2-5: GFA addition and Means of Finance approved in true up for FY 2015-16 (Rs. Crore)

Particulars	CSPTCL Petition	Approved after true-up
GFA addition in FY 2015-16	306.14	306.14
Means of Finance		
Consumer Contribution	0.00	0.00
Equity	61.23	61.23
Debt	244.91	244.91

4.2.5 Depreciation

CSPTCL's submission

CSPTCL computed the depreciation for FY 2015-16 in accordance with the provisions of the MYT Regulations, 2012 and the methodology considered by the Commission in the past Tariff Orders. CSPTCL has considered the depreciation based on weighted average depreciation rate of 5.25%. CSPTCL has not considered the depreciation on the assets funded by Consumer Contribution and depreciation on fully depreciated assets. CSPTCL requested the Commission to approve the depreciation of Rs. 161.74 Crore in the true up for FY 2015-16.

Commission's View

In accordance with the approval given in true up for FY 2014-15, the closing GFA for FY 2014-15 has been considered as the opening GFA for FY 2015-16. The GFA addition for FY 2015-16 has been considered as approved by the Commission. The closing value of Consumer Contribution for FY 2014-15 as approved in the true up

for FY 2014-15, has been considered as the opening value of Consumer Contribution for FY 2015-16, and the Consumer Contribution in GFA addition for FY 2015-16 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, 2012, has been considered. Based on the details of fully depreciated assets submitted by CSPTCL, the Commission has computed the depreciation of Rs. 19.79 Crore on fully depreciated assets till FY 2015-16. The depreciation approved in true up for FY 2015-16 is as shown in the Table below:

Table 4.2-6: Depreciation approved in true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPTCL Petition	Approved after true-up
Opening GFA	3848.04	3348.88	3348.88
Additional Capitalisation during the Year	317.43	306.14	306.14
Closing GFA	4165.47	3655.02	3655.02
Average GFA for the year	4006.75	3501.95	3501.95
Depreciation @ 5.25% as per applicable Regulations (A)	210.61	183.95	183.95
Opening Consumer Contribution	86.89	46.06	46.06
Addition of Consumer Contribution during the year	0.00	0.00	0.00
Closing Consumer Contribution	86.89	46.06	46.06
Average Consumer Contribution	86.89	46.06	46.06
Less: Depreciation @ 5.25% on Consumer Contribution on live assets (B)	2.75	2.42	2.42
Less: Depreciation on Fully Depreciated Assets (C)	11.89	19.79	19.79
Net Depreciation (A-B-C)	195.98	161.74	161.73

4.2.6 Interest on loan

CSPTCL's submission

CSPTCL submitted that it has calculated interest on loan as per Regulation 23 of the MYT Regulations, 2012. CSPTCL has considered the closing loan balance for FY 2014-15 as approved in the MYT Order dated April, 30, 2016 as the opening loan balance for FY 2015-16 for true-up. The actual debt component of GFA addition in

FY 2015-16 has been considered as the loan addition during the year. The allowable depreciation as per annual accounts for the year has been considered as the normative repayment for FY 2015-16. The actual weighted average interest rate of 11.82% has been considered for computation of interest expenses. CSPTCL requested the Commission to approve the interest on loan of Rs. 204.55 Crore for FY 2015-16.

Commission's view

The Commission has considered the closing normative loan for FY 2014-15 as approved in the Order dated March 31, 2016 as the opening normative loan for FY 2015-16. The addition of normative loan has been considered as approved by the Commission based on actual capitalisation. The repayment has been considered equal to net depreciation approved by the Commission for FY 2015-16.

For computation of weighted average rate of interest, the Commission has considered the actual loan details and applicable rate of interest as per the audited accounts, after scrutiny of the documentary evidences submitted by CSPTCL. The Commission notes that CSPTCL has computed the weighted average rate of interest for the whole year, however, Regulation 23.5 of MYT Regulations, 2012 requires computation of the weighted average rate of interest based on actual loan portfolio at the beginning of the year. The Commission has computed the weighted average rate of interest of 11.86% as per the provisions of the MYT Regulations, 2012. The interest on loan approved in true up for FY 2015-16 is as shown in the Table below:

Table 4.2-7: Interest and finance charges approved in final true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPTCL Petition	Approved after true-up
Total Opening Net Loan	1950.99	1689.52	1689.53
Repayment during the period	195.98	161.74	161.73
Additional Capitalization of Borrowed Loan during the year	157.93	244.91	244.91
Total Closing Net Loan	1912.94	1772.70	1772.71
Average Loan during the year	1931.96	1731.11	1731.12
Wt. Avg. Interest Rate	11.70%	11.82%	11.86%
Interest Expenses	226.04	204.55	205.35

4.2.7 Return on Equity (RoE) and Income tax

CSPTCL's submission

CSPTCL submitted that it has filed the current Income Tax of Rs. 7.65 Crore as per

audited accounts. CSPTCL submitted that it has computed the Return on Equity as per Regulation 22 of MYT Regulations, 2012 using rate of return as 15.50% without grossing up of MAT rate of 20.9605% and Income Tax of Rs. 7.65 Crore has been claimed separately due to actual Income Tax paid during the year.

CSPTCL requested the Commission to approve the Return of Equity of Rs. 136.17 Crores for FY 2015-16. CSPTCL also requested the Commission to consider the similar approach for CSPTCL for computation of ROE by grossing up rate of return with MAT rate of 20.9605%, if adopted for CSPGCL and CSPDCL.

Commission's View

The closing equity of Rs. 847.87 Crore as approved in the true up for FY 2014-15 has been considered as the opening equity for FY 2015-16. Equity addition in FY 2015-16 has been considered as 20% of actual capitalisation of Rs. 306.14 Crore.

CSPTCL was asked to submit the Income Tax computation and documentary evidence for actual Income Tax paid for FY 2015-16. CSPTCL submitted the same. Hence, the Commission has approved the Income Tax for FY 2015-16 as Rs. 7.65 Crore and RoE for FY 2015-16 has been approved considering the base rate of RoE of 15.50%. The RoE as approved in accordance with the MYT Regulations, 2012, is shown in the Table below:

Table 4.2-8: RoE approved in true up for FY 2015-16

(Rs. Crore)

Particulars	MYT Order 2013	CSPTCL Petition	Approved after true-up
Permissible Equity in Opening GFA	916.30	847.87	847.87
Addition of permissible equity during the year	39.06	61.23	61.23
Permissible Equity in Closing GFA	955.36	909.10	909.10
Average Gross Permissible Equity during the Year	935.83	878.48	878.48
Rate of Return on Equity	19.377%	15.50%	15.50%
Return on Equity	181.33	136.17	136.17

Table 4.2-9: Income Tax for FY 2015-16

(Rs. Crore)

Particulars	CSPTCL Petition	Approved after true-up
Income Tax	7.65	7.65

4.2.8 Interest on Working Capital (IoWC)

CSPTCL's submission

CSPTCL has considered one month of the approved O&M Expenses, Maintenance spares at 15% of the approved O&M expenses, and receivables equivalent to one month of fixed cost for computing the Working Capital requirement. The interest rate of 13.50% [State Bank of India (SBI) Base Rate of 10% on April 1, 2015 plus 350 basis points] has been considered as per the MYT Regulations, 2012. CSPTCL requested the Commission to approve the IoWC of Rs. 15.07 Crore in the true up for FY 2015-16.

Commission's View

The Commission has computed the Working Capital requirement in accordance with Regulation 25 of the MYT Regulations, 2012. For computation of Working Capital requirement, the Commission has considered normative O&M expenses approved in this Order for FY 2015-16 and receivables based on the actual revenue billed by CSPTCL for FY 2015-16. The interest rate of 13.50%, which is the Base Rate of SBI as on April 1, 2015 plus 350 basis points, has been applied to arrive at the normative IoWC for truing up of FY 2015-16. The normative IoWC approved by the Commission in the true up for FY 2015-16, is shown in the Table below:

Table 4.2-10: IoWC approved in final true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPTCL Petition	Approved after true-up
Operation and Maintenance expenses for one Month	17.61	16.56	15.06
Maintenance spares at 15% of O&M Expenses	31.69	29.80	27.11
Receivables equivalent to 1 month of fixed cost	52.21	65.26	61.63
Total Working Capital requirement	101.51	111.62	103.80
Applicable Interest Rate (%)	13.20%	13.50%	13.50%
Interest on Working Capital	13.40	15.07	14.01

4.2.9 Prior period expenses/(income)/other debits

CSPTCL's submission

CSPTCL submitted that the net prior period income of Rs. 12.70 Crore for FY 2015-16 as per the audited accounts including the Prior period income of Rs. 12.82 Crore

and Prior Period expenses of Rs. 0.12 Crore for the purpose of true up for FY 2015-16.

Commission's View

In reply to specific query of the Commission, CSPTCL submitted the following details of each head of prior period (income)/expenses:

Table 4.2-11: Details of Prior Period (Income)/Expenses submitted by CSPTCL

Particulars	Prior period (income)/Expenses (Rs.)
Rental from Contractor of FY 2014-15 related to CSPTCL	(18,39,800)
CAG Audit para - Surcharge income was not booked in FY 2014-15 related to CSPTCL	(29,26,997)
Fabrication Expenses of FY 2014-15 related to CSPTCL	(4,66,45,877)
Transferred from SLDC Development Fund FY 2014-15	(7,63,54,332)
Other miscellaneous prior period income for FY 2014-15	(3,84,733)
Employee Expenses for FY 2014-15 related to CSPTCL	11,73,086

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

The prior period income included the amount pertaining to Surcharge income and amount transferred from SLDC Development Fund. Such expenses have not been allowed by the Commission in FY 2014-15, hence, income has not been considered for true-up.

The prior period expenses included the employee cost of Rs. 0.12 Crore for FY 2014-15. The Commission has approved sharing of gain for FY 2014-15 after true-up. Hence, the Commission has approved only 50% of the prior period employee expenses. Thus, the net prior period (income)/expenses approved in the truing up for FY 2015-16 after scrutiny of the audited accounts, is as shown in the Table below:

Table 4.2-12: Net prior period expense/(income) approved by the Commission in true up for FY 2015-16

(Rs. Crore)		
Particulars	CSPTCL Petition	Approved after true-up
Prior period Income		
(a) Transmission Charges Related to Previous Year	(12.82)	(4.89)
(b) Excess Interest Charged during previous year	-	-

Particulars	CSPTCL Petition	Approved after true-up
Sub-total	(12.82)	(4.89)
Prior period Expenses		
Employee Costs	0.12	0.06
Sub-total	0.12	0.06
Net Prior Period (Income) / Expenses	(12.70)	(4.83)

4.2.10 Non-Tariff Income

CSPTCL's submission

CSPTCL submitted that the Commission in the MYT Order, had approved the Non-Tariff Income of Rs. 28.95 Crore. As against the same, the actual Non-Tariff Income for FY 2015-16 as per the audited accounts is Rs. 12.17 Crore. CSPTCL requested the Commission to approve the Non-Tariff Income of Rs. 12.17 Crore in true up for FY 2015-16.

Commission's View

The Commission has scrutinised the details of income Rs. 7.80 Crore from Miscellaneous receipts under Non-Tariff Income head as submitted by CSPTCL. After reconciliation of Non-Tariff Income submitted by CSPTCL and CSLDC vis-à-vis Non-Tariff Income shown in the audited accounts, the Commission observes that CSPTCL has not considered '*Other Income related to SLDC*' of Rs. 1.08 Crore (Note 8.1 of Audited accounts). In view of this, the Commission has considered the total Non-Tariff Income of Rs. 14.45 Crore including Non-Tariff Income of Rs. 13.33 Crore for CSPTCL and Rs. 1.12 Crore for CSLDC based on Segment reporting as submitted in Note 41 of Audited accounts for FY 2015-16.

Hence, the Non-Tariff Income of Rs. 13.33 Crore has been approved for CSPTCL in the true up for FY 2015-16.

4.3 Incentive for lower transmission loss in FY 2015-16

CSPTCL's submission

CSPTCL submitted that the Commission in the MYT Order had approved the target loss level of 4.20% for FY 2015-16. The computation of actual loss level for FY 2015-16 as submitted by CSPTCL is shown in the Table below:

Table 4.3-1: Transmission Loss for FY 2015-16 as submitted by CSPTCL

Particulars	CSPTCL Petition
Total Energy injected into Transmission System at 132 kV & above MU)	23,630.36
Energy output from the Transmission System (MU)	
EHV Sales	2,236.23
Energy delivered to CSPDCL at 33 kV side Power Transformer	20,710.19
Net Energy delivered (MU)	22,946.43
Energy Loss (MU)	683.93
Transmission Loss (%)	2.89%

CSPTCL submitted that the MYT Regulations, 2012 provides for incentive for better performance. CSPTCL requested the Commission to approve the incentive for lower transmission loss considering the average power purchase cost for CSPDCL mentioned in its Petition for FY 2015-16, as shown in the following Table:

Table 4.3-2: Incentive for lower Transmission Loss for FY 2015-16 as submitted by CSPTCL

Particulars	CSPTCL Petition
Actual energy input to CSPDCL(MU)	23,630.36
Actual Transmission Loss (%)	2.89%
Transmission Loss (MU)	683.93
Normative Transmission Loss (%)	4.20%
Normative Transmission Loss (MU)	992.48
Energy saved (MU)	308.54
Average Power Purchase Cost as per CSPDCL Petition (Rs./kWh)	3.04
Gain on account of lower transmission loss (Rs. Crore)	93.80
Sharing of gains (Rs. Crore)	46.90

Commission's View

CSERC MYT Regulations, 2012 specifies the transmission loss as a controllable factor. The issue regarding incentive on transmission loss achievement was remanded by the Hon'ble APTEL for fresh consideration. After hearing the matter the case was disposed of and no incentive was granted in the Order. CSPTCL has further appealed before the Hon'ble APTEL and the matter is sub-judice. Therefore, the Commission prefers to continue with its earlier decision and no incentive shall be given till the matter is decided by the Hon'ble APTEL.

4.3.1 Aggregate Revenue Requirement

Based on the above, the ARR approved in the true up for FY 2015-16 is shown in the Table below:

Table 4.3-3: ARR approved in true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPTCL Petition	Approved after true-up
Employee Expenses	211.28	150.62	150.62
A&G Expenses		35.80	35.80
R&M Expenses		27.33	27.33
Terminal Benefits	35.85	35.85	35.85
Interim Wage Relief	-	15.23	15.23
Less: Capitalisation of expenses	-	(24.88)	(24.88)
Depreciation	195.98	161.74	161.73
Interest on Loan	226.04	204.55	205.35
Interest on Working Capital	13.40	15.07	14.01
Prior Period (Income)/ Expenses	-	(12.70)	(4.83)
Return on Equity	181.33	136.17	136.17
Gain/(Loss) on sharing of O&M Efficiency	-	(4.07)	(4.07)
Incentive on Transmission Loss	-	46.90	-
Income Tax	-	7.65	7.65
Aggregate Revenue Requirement	863.88	795.25	755.96
Less: Non-Tariff Income	28.95	12.17	13.33
Net ARR	834.93	783.09	742.63

4.4 Revenue from Transmission Charges

CSPTCL's submission

CSPTCL submitted that the revenue billed in FY 2015-16 is Rs. 739.55 Crore. CSPTCL requested the Commission to approve the same in the true up for FY 2015-16.

Commission's View

After scrutiny of the submissions of CSPTCL and the audited accounts, the revenue from transmission charges has been considered as Rs. 739.55 Crore in the true up for FY 2015-16.

Table 4.4-1: Revenue received in FY 2015-16 (Rs. Crore)

Particulars	Rs. Crore
CSPDCL	716.15
Short Term Open Access (Others)	23.40
Total	739.55

It is observed that CSPTCL has not considered the surplus revenue of Rs. 83.82 crore received on account of Revenue (Gap)/Surplus for FY 2013-14 passed through to CSPDCL in FY 2015-16. Hence, the Commission has added the amount of Revenue Surplus of Rs. 83.82 crore for FY 2013-14 that has been passed through to CSPDCL in FY 2015-16.

Table 4.4-2: Revenue received approved in FY 2015-16 (Rs. Crore)

Particulars	Rs. Crore
Revenue received	739.55
Revenue surplus for FY 2013-14	83.82
Total	823.37

4.5 Revenue Gap/(Surplus) for FY 2015-16

Based on the above, the Revenue Gap/(Surplus) as approved after true up for FY 2015-16 is shown in the Table below:

Table 4.5-1: Approved Revenue Gap/(Surplus) for FY 2015-16 (Rs. Crore)

Particulars	CSPTCL Petition	Approved after true-up
Net Aggregate Revenue Requirement	783.09	742.63
Income/Revenue	739.55	823.37
Standalone Revenue Gap/(Surplus)	43.54	(80.73)

Based on the approved numbers, the revenue surplus for CSPTCL works out to Rs. 80.73 Crore after true up of FY 2015-16, as against a revenue gap of Rs. 43.54 Crore submitted by CSPTCL in its Petition. After applying the carrying cost for 2 years, i.e., from mid-point of FY 2015-16 to mid-point of FY 2017-18 on this revenue surplus of Rs. 80.73 Crore, the net surplus amount for CSPTCL works out to Rs. 103.21 Crore, which has been adjusted in the revised ARR of CSPDCL for 2017-18.

4.6 Determination of Transmission Tariff for FY 2017-18 for CSPTCL

As per the MYT Regulations, 2015, for determination and recovery of transmission charges from the users of CSPTCL's system, the annual transmission cost (fixed cost) shall be recovered on a monthly basis as per the methodology specified in the Open Access Regulations.

The annual transmission charge for FY 2017-18 approved in the MYT Order dated July 12, 2013 is Rs. 916.80 Crore, and hence, monthly transmission charges are Rs. 67.80 Crore. According to Clause 33(1) of CSERC (Connectivity and Intra-State Open Access) Regulations, 2011, the transmission charges for the use of CSPTCL's system has to be shared by the long-term open access customers (including CSPDCL) and medium-term open access customers as per allotted capacity proportionately.

According to the CSERC (Connectivity and Intra-State Open Access) Regulations, 2011, the basis of sharing monthly transmission charge shall be the maximum demand in MW served by the CSPTCL's system in the previous financial year.

4.6.1 Short-Term Open Access Charges

The information provided by CSLDC reveals that for FY 2016-17, the maximum demand met by the State is 4500 MW. For estimating the energy input or energy to be handled by CSPTCL's system for FY 2017-18, the Commission has considered load factor of 85% on maximum demand met in FY 2016-17, which corresponds to 33507 MU.

Accordingly, it is estimated that 33507 MU may be handled by CSPTCL's system in FY 2017-18. Accordingly, the short-term Open Access (STOA) charges for FY 2017-18 work out to Rs. 0.24 per kWh.

5 TRUE UP FOR CSLDC FOR FY 2015-16

5.1 Background

The Annual Revenue Requirement for CSLDC for FY 2013-14 to FY 2015-16 was approved vide order dated July 12, 2013, in accordance with SLDC Regulations, 2012.

Regulation 5 of the SLDC Regulations, 2012 specifies as under:

“5. Truing up of annual fees and operating charges:

5.1 The CSLDC shall make a petition, in the formats approved by the Commission for carrying out truing up exercise by 30th November of the each year for the previous year.

....

5.3 The Commission shall carry out the annual truing up exercise. 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.

5.4 Where after the truing up, the fee & charges recovered if exceeds/falls short of the amount approved by the Commission under these regulations, the excess amount so recovered or shortfall 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.”

In accordance with Regulation 5.8 (a)(i)(1) of MYT Regulations 2015, CSLDC is required to file the Petition for true up for FY 2015-16. Therefore, CSLDC has filed the present Petition for final true-up of FY 2015-16.

The true-up for CSLDC for FY 2015-16 has been carried out in accordance with the SLDC Regulations, 2012.

5.2 Annual CSLDC Charges

5.2.1 Components of Annual Charges

Regulation 11 of the SLDC Regulations, 2012 specifies as under:

“11. Components of annual charges: The annual charges shall consist of the following components, namely:-

- (a) Return on equity;*
- (b) Interest on loan capital;*
- (c) Depreciation;*
- (d) Operation and maintenance expenses;*
- (e) Interest on working capital;*
- (f) Pension fund.”*

5.2.2 Operation and Maintenance (O&M) expenses

CSLDC's Submissions

CSLDC submitted that separate accounts are not being prepared for CSLDC and the asset transfer scheme between CSLDC and CSPTCL has not been notified. CSLDC submitted that the Commission while truing up of FY 2014-15 in its MYT Order dated April 30, 2016, has approved normative O&M expense of Rs. 7.50 Crore and CSLDC has escalated the same by 2.39% in accordance with SLDC Regulations, 2012, to arrive at the normative O&M expenses for FY 2015-16.

CSLDC has claimed the actual O&M expenses of Rs. 10.52 Crore as per Audited Accounts. CSLDC has considered the impact of Interim Relief as per Wage Advisory Committee Report dated January 29, 2015 to the tune of 15%. Total arrears on account of Interim Relief were to be passed on to employees in 15 equal instalments effective from January 1, 2014. Out of this, 7.5% of the Interim Relief has already been passed in FY 2014-15, the balance 7.5% is accounted in FY 2015-16 along with actual Interim Relief for FY 2015-16, i.e., Rs. 0.47 Crore (Total of Rs. 15.70 Crore minus Net Interim Relief of CSPTCL, i.e., Rs. 15.23 Crore).

Commission's Views

The Commission has computed the normative O&M expenses of Rs. 7.68 Crore for FY 2015-16 by escalating the approved normative O&M expenses of Rs. 7.50 crore for FY 2014-15 with the escalation rate of 2.39% computed in accordance with the SLDC Regulations, 2012.

CSLDC was asked to submit the computation of impact of Interim Relief separately for CSPTCL and CSLDC and details of actual arrears instalments paid to employees in FY 2015-16. The Commission has scrutinised the submission made by CSPTCL in this regard and has approved the Interim Relief of Rs. 0.47 Crore for CSLDC.

As regards A&G expenses for CSLDC, the CSLDC has submitted the documentary evidences for the AMC of GE SCADA and LTSA SCADA. The Commission has scrutinised and accepted the actual O&M Expenses of Rs. 10.52 Crore submitted based on audited accounts for FY 2015-16 for CSLDC.

Further, as O&M expenses are controllable, and the actual O&M expenses are higher than the normative O&M expenses, the Commission has carried out the sharing of (gain)/losses in O&M expenses as shown in the Table below:

**Table 5.2-1: Sharing of (gain)/loss in O&M expenses approved in true up for
FY 2015-16 (Rs. Crore)**

Particulars	CSLDC Petition	Approved after true up
Normative O&M expenses	7.68	7.68
Actual O&M Expenses, excluding interim wage relief	10.52	10.52
Total (Gain)/Loss	(2.84)	(2.84)
CSLDC's Share (1/2 of the Total Loss)	(1.42)	(1.42)

Thus, approved O&M expenses for true up of FY 2015-16 are Rs. 9.57 crore (7.68 + 1.42 + 0.47).

5.2.3 Contribution to Pension Fund

CSLDC's Submissions

CSLDC submitted that the pension fund of CSLDC employees has not been segregated from CSPTCL's pension fund. The portion of pension fund attributable to CSLDC has been worked out on pro-rata basis considering the employee strength as on April 1 of the preceding year. CSLDC requested the Commission to approve Rs. 0.88 Crore towards pension fund for FY 2015-16.

Commission's Views

Regulation 17 of the SLDC Regulations, 2012 specifies as under:

"17. Pension fund:

Pension fund: For meeting up the past unfunded liabilities of erstwhile CSEB/State Power Companies employees appointed before 1.1.2004, a pension and gratuity trust has been created and funding to the same has been allowed in the past Tariff Orders of the Commission. The contribution to the fund shall be decided by the Commission on the same manner as specified for the State Power Companies. Till the time CSLDC is part of STU, CSLDC's share out of the STU contribution shall be decided on pro-rata basis. For the purpose of ratio determination, the employee strength as on 1st April of the preceding year shall be considered."

In the MYT Order for FY 2015-16, provisions were made for contribution to pension fund and an amount of Rs. 0.88 Crore was approved for this purpose. The actual contribution of Rs. 0.88 Crore to pension fund has been considered in the true up for FY 2015-16.

5.2.4 Gross Fixed Assets

CSLDC's Submissions

CSLDC submitted that the closing GFA of FY 2014-15 as approved by the Commission in the Tariff Order dated April 30, 2016 has been considered as the opening GFA for FY 2015-16. CSLDC submitted that it has considered GFA addition of Rs. 30 Lakh in FY 2015-16.

Commission's Views

As discussed in earlier Chapter, the opening GFA for CSLDC for FY 2015-16 has been considered as Rs. 14.09 Crore after making the adjustment in GFA as per Asset Register. The Commission has considered addition in GFA of Rs. 0.30 Crore in FY 2015-16 as per the actual capitalisation in FY 2015-16.

5.2.5 Means of Finance

CSLDC's Submissions

CSLDC submitted that the GFA as on March 31, 2015 has been considered to be funded through equity as per SLDC Regulations, 2012 and debt which has been taken over from CSPTCL. CSLDC has considered the debt:equity ratio of 70:30 for funding of capitalisation.

Commission's Views

CSLDC was asked to justify its claim for consideration of equity addition at 30% of additional capitalisation in view of debt: equity ratio of 80:20 considered by CSPTCL. CSLDC, in its reply, submitted that it has considered equity addition of 30% of additional capitalisation in line with SLDC Regulations, 2012. However, as discussed below, the relevant Regulation 8 (Debt-Equity ratio) has been misinterpreted:

“8.1 The actual debt: equity ratio appearing in the books of accounts as on the date of transfer shall be considered for the opening capital cost of SLDC. Provided further that till the separate company is notified by the State Government, the debt equity ratio in the books of accounts of the STU shall be considered.

8.2 For an investment made on or after the date of transfer, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of charges:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.”

The Gross Fixed Assets have not been segregated between CSPTCL and CSLDC. CSLDC has no loan or equity on its own, and it is merely the allocation from CSPTCL. Hence, it would not be correct to consider a different debt:equity ratio for CSLDC and CSPTCL for funding of capitalisation. Hence, the Commission has considered the debt:equity ratio of 80:20 for CSLDC for FY 2015-16.

5.2.6 Depreciation

CSLDC's Submissions

CSLDC submitted that its asset base comprises of SCADA system, computer terminals, equipment, building, etc. The asset base of CSLDC 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 has been considered for computing the depreciation for FY 2015-16. The closing asset base of Rs. 16.58 Crore as approved by the Commission in Tariff Order for FY 2015-16 dated May 23, 2015, has been considered for the computation of depreciation. CSLDC requested the Commission to approve the depreciation of Rs. 0.88 Crore in the true up for FY 2015-16.

Commission's Views

The Commission has considered the Opening GFA of Rs. 14.09 Crore for FY 2015-16 for CSLDC. CSLDC was unable to produce the asset-class wise segregation of GFA for FY 2015-16. Hence, the weighted average depreciation rate of 5.25% as considered for CSPTCL, has been used for computation of Depreciation. The depreciation approved in the true up for FY 2015-16 is shown in the Table below:

Table 5.2-2: Depreciation approved in true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSLDC Petition	Approved after true up
Opening GFA	26.49	16.58	14.09
Additional Capitalisation during the Year	0.05	0.30	0.30
Closing GFA	26.54	16.88	14.39
Average GFA for the year	26.52	16.73	14.24
Depreciation Rate	4.73%	5.25%	5.25%
Depreciation	1.26	0.88	0.75

5.2.7 Interest on Loan Capital

CSLDC's Submissions

CSLDC submitted that since it is not operating as a separate company, it has considered the actual loan as applicable to CSPTCL, for consideration of applicable interest rate. The closing loan balance for FY 2014-15 as approved in the Tariff Order dated March 31, 2016, has been considered as the opening balance for FY 2015-16. The allowable depreciation for the year has been considered as normative repayment for the year. CSLDC has computed interest on loan on the basis of average loan for the year at the weighted average interest rate of 11.82%. CSLDC requested the Commission to approve the interest on loan capital of Rs. 0.74 Crore in the true-up for FY 2015-16.

Commission's Views

The Commission has considered the closing loan balance for FY 2014-15 as approved in the final True up for FY 2014-15, as the opening loan balance for FY 2015-16, after reducing opening balance of loan to the extent of 70% of GFA reduction of Rs. 2.49 Crore, as Debt: Equity Ratio of 70:30 was allowed in the past. The addition of normative loan has been considered at 80% of the actual capitalisation during the year. The allowable depreciation for the year has been considered as the normative repayment for the year.

Since, CSLDC has no separate loans, the weighted average interest rate has been considered same as considered for CSPTCL, i.e., 11.86%. The interest on loan capital approved by the Commission in the true up for FY 2015-16 is shown in the Table below:

Table 5.2-3: Interest on loan approved in true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSLDC Petition	Approved after true up
Total Opening Net Loan	12.53	6.59	4.85
Repayment during the period	1.26	0.88	0.75
Additional Loan borrowed during the year	0.04	0.21	0.24
Total Closing Net Loan	11.31	5.92	4.34
Average Loan during the year	11.92	6.26	4.59
Wt. Avg. Interest Rate	11.70%	11.82%	11.86%
Interest Expenses	1.39	0.74	0.54

5.2.8 Return on Equity (RoE)

CSLDC's Submissions

CSLDC submitted that the permissible equity in opening GFA for FY 2015-16 has been considered the same as given in the audited accounts for FY 2015-16. RoE has been computed using base rate of 15.50% without the MAT Rate of 20.9605%. CSLDC requested the Commission to approve the RoE of Rs. 0.84 Crore in the true up for FY 2015-16.

Commission's Views

The Commission has considered the closing balance of permissible equity as approved for FY 2014-15, as the opening balance for FY 2015-16, after reducing the opening equity to the extent of 30% of GFA reduction of Rs. 2.49 Crore, as debt: equity ratio of 70:30 was allowed in the past. The RoE rate of 15.50% has not been grossed up with the MAT rate, as CSLDC has not paid any Income Tax in FY 2015-16. The RoE approved in the true up for FY 2015-16 is shown in the Table below:

Table 5.2-4: RoE approved in true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSLDC Petition	Approved after true up
Permissible Equity in Opening GFA	8.18	5.37	4.62
Addition to equity due to increase in GFA	0.01	0.09	0.06
Permissible Equity in Closing GFA	8.19	5.46	4.68
Average Gross Permissible Equity during the Year	8.19	5.42	4.65
Rate of Return on Equity	19.38%	15.50%	15.50%
Return on Equity	1.59	0.84	0.72

5.2.9 Interest on Working Capital (IoWC)

CSLDC's Submissions

CSLDC submitted that the IoWC for FY 2015-16 has been computed in accordance with SLDC Regulations, 2012. The rate of interest has been considered as 13.50% (SBI Base Rate of 10% as on April 1, 2015, plus 350 basis points). CSLDC requested the Commission to approve the IoWC of Rs. 0.47 Crore in the true up for FY 2015-16.

Commission's Views

The normative IoWC for FY 2015-16 has been approved in accordance with the SLDC Regulations, 2012. For computation of working capital requirement, the Commission has considered normative O&M expenses approved in this Order for FY 2015-16 and receivables based on the actual revenue billed by CSLDC for FY 2015-16. The rate of interest has been considered as 13.50%, which is the SBI Base Rate as on April 1, 2015, plus 350 basis points. The IoWC approved in the true up for FY 2015-16 is shown in the Table below:

Table 5.2-5: IoWC approved in the true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSLDC Petition	Approved after true up
Operation and Maintenance expenses for one Month	0.79	0.88	0.64
Maintenance spares at 15% of O&M Expenses	1.41	1.58	1.15
Receivables equivalent to 1 month of fixed cost	1.10	1.01	1.02
Total working capital requirement	3.30	3.47	2.81
Applicable Interest Rate (%)	13.20%	13.50%	13.50%
Interest on Working Capital	0.44	0.47	0.38

5.2.10 Non-Tariff Income

CSLDC's Submissions

CSLDC submitted Non-Tariff Income of Rs. 1.20 Crore as per audited accounts for FY 2015-16. CSLDC further submitted that the Non-tariff Income was set off while recovering the SLDC Charges in the form of SOC/MOC from the monthly bills issued to Long Term/Medium Term Open Access Consumers.

Commission's Views

After reconciliation of Non-Tariff income submitted by CSPTCL and CSLDC vis-à-vis Non-Tariff income shown in Audited accounts, the Commission observes that CSLDC has not considered 'Other Income related to SLDC' of Rs. 1.08 Crore (Note 8.1 of Audited accounts). In view of this, the Commission has considered the total Non-Tariff Income of Rs. 14.45 Crore including Non-Tariff Income of Rs. 13.33 Crore for CSPTCL and Rs. 1.12 Crore for CSLDC based on Segment reporting as submitted in Note 41 of Audited Accounts for FY 2015-16. Hence, the Non-Tariff Income of Rs. 1.12 Crore has been approved for CSLDC for FY 2015-16.

5.2.11 Aggregate Revenue Requirement (Annual SLDC Charges)

Based on the above, the Annual CSLDC Charges as approved in the true up for FY 2015-16 is as shown in the Table below:

Table 5.2-6: Annual CSLDC Charges approved in the true up for FY 2015-16
(Rs. Crore)

Particulars	MYT Order 2013	CSLDC Petition	Approved after true up
Employee Expenses	9.42	5.82	5.82
A&G Expenses		3.35	3.35
R&M Expenses		1.35	1.35
Sharing of Gain/(Loss) for O&M Incentive	-	(1.42)	(1.42)
Contribution to Pension & Gratuity Fund	0.88	0.88	0.88
Interim Wage Relief Impact	-	0.47	0.47
Depreciation	1.26	0.88	0.75
Interest Charges	1.39	0.74	0.54
Interest on Working Capital	0.44	0.47	0.38
Return on Equity	1.59	0.84	0.72
Gross Aggregate Revenue Requirement (ARR)	14.97	13.38	12.84
Less: Non-Tariff Income	-	1.20	1.12
Net ARR	14.97	12.17	11.72

5.3 Revenue from CSLDC Charges

CSLDC's Submissions

CSLDC submitted the actual revenue from CSLDC Charges for FY 2015-16 as Rs. 12.26 Crore.

Commission's Views

The Commission has considered the revenue from CSLDC Charges for FY 2015-16 as Rs. 12.26 Crore as submitted by CSLDC, for the purposes of truing up.

It is observed that CSLDC has not considered the surplus revenue of Rs. 1.92 crore received on account of Revenue (Gap)/Surplus for FY 2013-14 passed through to CSPDCL in FY 2015-16. Hence, the Commission has added the amount of Revenue

Surplus of Rs. 1.92 crore for FY 2013-14 that has been passed through to CSPDCL in FY 2015-16.

Table 5.3-1: Revenue received approved in FY 2015-16 (Rs. Crore)

Particulars	FY 2015-16
Revenue received	12.26
Revenue surplus for FY 2013-14	1.92
Total	14.18

5.4 Revenue Gap/(Surplus) for FY 2015-16

The Revenue Gap/(Surplus) for FY 2015-16 as approved is shown in the Table below:

Table 5.4-1: Revenue Gap/(Surplus) approved by the Commission for FY 2015-16 (Rs. Crore)

Particulars	CSLDC Petition	Approved after true up
Annual CSLDC Charges	12.17	11.72
Revenue from CSLDC Charges	12.26	14.18
Revenue (Gap)/Surplus	0.09	2.45

Hence, the Commission has approved the net surplus of Rs. 2.45 Crore in the final true up for FY 2015-16 as against net surplus of Rs. 0.09 Crore claimed by SLDC.

Further, the Commission has considered the holding cost on the net surplus approved from mid of FY 2015-16 to mid of FY 2017-18. Accordingly, the Commission has approved the net surplus of Rs. 3.12 Crore.

CSERC SLDC Fee & Charges Regulations 2012 specifies for adjustment of excess recovered fee & charges in the fee and charges for the next year. Regulation 5.4 of the CSERC SLDC Fee & Charges Regulations 2012 is reproduced below;

“5.4 Where after the truing up, the fee & charges recovered 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.”

5.5 Accordingly, the revenue surplus of Rs. 3.12 Crore for FY 2015-16 has been adjusted in the ARR of CSPDCL for FY 2017-18.

5.6 Payment of carrying cost arising due to non-compliance of order of Commission by SLDC

Intra-State ABT for procurement of power from CSPGCL thermal power station was introduced from October 1, 2014. According to the notified Regulations and the Order of the Commission, the deviation from the schedule was required to be governed by CERC (Deviation Settlement Mechanism and related matters) Regulations, 2014. The DSM bills were required to be prepared by CSLDC. The bills raised by CSLDC from October 2014 to December 2014 were disputed, hence, no monetary transactions were done. For the period from January to March 2015, there was no dispute. According to the bills raised by CSLDC for the period October to December 2014, an amount of Rs. 8.27 Crore was to be paid by CSPGCL to CSPDCL, whereas according to CSPGCL it was required to receive Rs. 2.90 Crore from CSPDCL.

The billing modality adopted by CSLDC for over-injections (+) 12% was also disputed by a power developer namely, Arasmata Captive Power Company Limited, which filed Petition No. 6 of 2015 (D) before the Commission. The case was disposed of through an order dated May 7, 2015. In the Order, the Commission held that the billing modality followed by CSLDC was not correct and needs to be rectified. The Commission also directed CSLDC to implement its Order without any discrimination among sellers and buyers and the modality shall be made applicable to all such cases in the State. In view of the Order given by the Commission in Petition No. 6 of 2015 (D), CSLDC was required to rectify the Deviation Charges bills for CSPGCL. CSLDC did not comply with the Order of the Commission and filed an appeal before the Hon'ble APTEL in Appeal No. 219 of 2015. Even though there was no stay on the operation of the Order of the Commission by the Hon'ble APTEL, CSLDC preferred not to comply with the Order of the Commission. It is because of this fact that while truing up for FY 2014-15, impact due to Deviation Charges bills could not be factored in for CSPGCL.

The Hon'ble APTEL passed the Order in Appeal No. 219 of 2015 on December 5, 2016. In its Judgment, the Hon'ble APTEL upheld the Order of the Commission, and ruled as under:

“11.

ix) We are of the considered opinion that deviation settlement mechanism is predominantly significant to facilitate the grid discipline and grid security and it has been yielding good outcome through DSM Regulations ever since its implementation.

x) The amendment issued in respect of Annexure II was in fact to bring out the right spirit of the Main Regulations.

xi) When there is Substantive Regulation and as an offshoot of these Substantial Regulations, a methodology for computation of the commercial settlements is considered to the extent it is in tune with the Substantive Regulations. We have also observed that the Central Commission has rightly issued an amendment to bring in the consistency in line with its Substantive Regulations of the DSM Regulations. If such an interpretation as contemplated by the Appellant is considered, a generator would not generate electricity and supply to the grid to help the grid frequency as any such injection would be penalized rather than being incentivized. The provisions in the Annexure are only in aid of the parent Regulations and cannot override the main provisions of the Regulations. We do not have any doubt in our mind that in line with the spirit and the intention of the Main Regulations which would facilitate grid discipline and grid security, the error so alleged in the Annexure II of the DSM Regulations by the Appellant which was subsequently rectified through amendment is only considered to be an inadvertent error. The main intention to ensure grid discipline and grid security is abundantly clear in the Substantive Regulations and any application which is in contradiction with the spirit and intention intended in this Substantive Regulations which in this case is Annexure II has to be in line with the spirit of the Substantive Regulations, irrespective of the error in Annexure – II as alleged by the Appellant and this has been rightly contemplated by the WRPC while computing billing deviation charges.

xii) The amended provision of the Annexure does nothing but removes an error, or contradiction in the earlier Annexure, which was contradictory to the parent provision. As submitted hereinabove, even if the earlier provision is to be applied without any amendment, the Annexure cannot be read alone, but has to be in the context of and subject to the main controlling provision. The intent and object of the Regulations also support the plain language of Regulation 5.

xiii) In our view, the amendment issued subsequently to DSM Regulations is only to rectify the inadvertent error and the same has been rightly made effective from 17.02.2014 from the date of issuance of Principal Regulations by the State Commission in its Impugned Order. We do not observe any infirmity in the Impugned Order.”

In view of the Judgment of the Hon'ble APTEL and to ensure its compliance, during TVS, CSLDC was asked to submit revised correct bills for CSPGCL, so that the impending truing up of FY 2014-15 can be completed. CSLDC was asked by letter dated January 10, 2017 to submit the correct UI bills in respect of CSPGCL. Similarly, CSPGCL was also asked to submit the revised bill according to their calculations for the period October to December 2014.

CSLDC through letter dated January 17, 2017 stated that the correct DSM bills would have an impact on the end users and citing this reason they did not submit the revised correct bills. CSLDC was again asked through letter dated March 7, 2015, to submit the revised correct bills, however, it did not submit the revised bills again.

Meanwhile, CSPGCL vide letter dated March 22, 2017, submitted the bills according to their calculations for the period October to December 2014, according to which an amount of Rs. 2.90 Crore was required to be paid by CSPDCL to CSPGCL. A copy of the letter received from CSPGCL was forwarded to CSLDC and CSPDCL seeking their comments. In response to this, CSLDC submitted that they have filed an appeal before the Hon'ble Supreme Court, so status quo may be maintained till the Order is passed by the Hon'ble Supreme Court. It is pertinent to note that no stay order has been granted by the Apex Court on the Judgment of the Hon'ble APTEL.

Clause 5.3.7 of National Electricity Policy prescribes that the spirit of the provisions of the Act is to ensure independent system operations through NLDC, RLDC and SLDC. The Forum of Regulators (FOR) Working Report on Open Access – Theory & Practice has recommended that as the SLDCs have allegedly acted in partial manner in granting Open Access, thereby violating the provisions of EA 2003 for non-discriminatory treatment of Open Access transactions, there is a need to ensure functional independence of SLDC operations. A report of the Committee constituted by Ministry of Power for ring fencing of SLDC also recommends ensuring independent system operations. In the above mentioned FOR Report, it has been recommended that for ensuring functional independence the concerned State Governments need to ensure that SLDC should not be directly or indirectly reporting to any other power sector entity such as Distribution Licensee or Trading Licensee. In this case despite the repeated directions of the Commission, CSLDC did not submit the revised UI bills stating that it will have an impact on end users, which is not in accordance with the spirit of independent system operations mandated in the EA 2003.

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.

Illustration:

Suppose CSLDC raises total monthly bills for SOC and MOC charges of Rs. 50 Lakh in the month of April 2017 and Rs. 52 Lakh in the month of May 2017 for CSPGCL. CSPGCL shall pay to CSLDC Rs. 32.5 Lakh (Rs. 50 Lakh – Rs. 17.5 Lakh) against the bill raised for April 2017 and Rs. 34.5 Lakh (Rs. 52 Lakh – Rs. 17.5 Lakh) against the bill raised for May 2017. However, while claiming the bills from CSPDCL, CSPGCL shall claim an entire amount of Rs. 50 Lakh and Rs. 52 Lakh for April and May 2017, respectively.

6 FINAL TRUE UP FOR FY 2015-16 FOR CSPDCL

6.1 Consumer category-wise energy sales for FY 2015-16

CSPDCL's submission

CSPDCL submitted that during FY 2015-16, it served nearly 45,10,874 consumers connected at LV level and around 2495 consumers connected at HV and EHV level.

CSPDCL submitted that in the Tariff Order dated April 30, 2016, the Commission had merged HV and EHV categories into supply at HV voltage level. As a result, FY 2015-16 figures have been represented as per the tariff category approved by the Commission in the above said order. The sales for FY 2015-16 have been recorded at 18,916.45 MU, which is about 181.05 MU higher than that approved in the APR Order dated May 23, 2015. CSPDCL requested the Commission to approve the actual consumer category-wise sales in the true up for FY 2015-16.

Commission's View

The actual consumer category-wise energy sales submitted by CSPDCL for FY 2015-16 have been scrutinized with the actual billing data submitted by CSPDCL. While analysing the data submitted by CSPDCL, certain clarifications were sought from CSPDCL.

The Commission asked CSPDCL to submit the actual category-wise number of consumers, connected load, and sales in FY 2015-16 as per the consumer categories approved in the Order dated May 23, 2015, and also submit the breakup of BPL and other domestic sub-categories within domestic category.

CSPDCL was asked to submit the reasons for the significantly higher sale by 809 MU to Agricultural metered category as compared to approved sales. CSPDCL submitted that agricultural metered consumption during FY 2015-16 has shown significant increase due to lower rainfall by 16% to 24% resulting in drought like situation in the State. CSPDCL submitted that the increase in sales to DLF category during FY 2015-16 is due to increased usage of air-conditioners/coolers due to prolonged summer and poor monsoon.

The Commission observed that CSPDCL had considered kVAh consumption for HV and EHV categories for FY 2015-16 for Sales and Energy Balance, rather than kWh consumption, and asked CSPDCL to clarify the same.

CSPDCL submitted that the error was purely unintentional, as inadvertently, the sales in kVAh figures for HV and EHV categories were considered instead of kWh figures, due to voluminous data/information being handled at the time of preparation of the

Petition. CSPDCL added that the impact of this error has reflected on the projections of FY 2017-18 also. CSPDCL submitted that it did not intend to draw any benefit from this error and requested the Commission to condone this error, and consider and approve the kWh sales.

The Commission expresses its displeasure on CSPDCL's approach in this regard. Considering kVAh consumption instead of kWh consumption for Sales and Energy Balance has a very significant impact on the ARR, and CSPDCL should have exercised due diligence to ensure against such errors.

Regulation 11.1 of MYT Regulations, 2012 identifies the sales mix and quantum of sales as an uncontrollable item. The consumer category-wise sales for FY 2015-16 estimated in the Tariff Order dated May 23, 2015, actuals submitted by CSPDCL and approved in the true up are shown in the Table below:

Table 6.1-1: Approved Consumer category-wise sales in true up for FY 2015-16 (MU)

Particulars	Tariff Order FY 2015-16	CSPDCL Petition	Approved after true-up
LV	10,097.33	10,423.45	10,423.45
Domestic Including BPL	5215.20	4,666.43	4,666.43
Non-Domestic (Normal Tariff)	868.04	803.88	803.88
Non-Domestic (Demand Based)	12.20	22.95	22.95
Agriculture Metered	2,731.51	3,540.54	3,540.54
Agriculture Allied	17.46	16.59	16.59
LT Industry	536.12	530.21	530.21
Public Utilities	317.96	287.45	287.45
IT Industry		-	-
Temporary	398.83	555.40	555.40
EHV	3214.00	2670.00	2529.21
Railway Traction	885.97	976.00	889.97
Heavy Industries & Other Consumers	2029.68	1440.00	1400.48
Steel Industries	298.35	254.00	238.77
HV	5424.09	5823.00	5667.80
Steel Industries	3172.89	3577.00	3522.19
Mines, Cement, Other & General Purpose Non- Industries	1834.23	1816.00	1711.99

Particulars	Tariff Order FY 2015-16	CSPDCL Petition	Approved after true-up
Low Load Factor Industries	115.81	80.00	73.57
Residential, PWW, Irrigation & Agriculture Allied Activities	274.06	303.00	289.35
Start-Up Power Tariff	26.58	43.00	65.36
Industries related to manufacturing of equipment for power generation from renewable energy sources	0.52	1.00	1.21
Information Technology Industries		-	-
Temporary (EHV and HV)		3.00	4.11
Total	18,735.40	18,916.45	18,620.45

6.2 Distribution Loss and Energy Balance

CSPDCL's submission

CSPDCL submitted that the distribution losses have been calculated in accordance with MYT Regulations, 2012, as under:

“The energy loss for 33 kV and below voltage level, shall be calculated 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.”

The Energy Balance for FY 2015-16 as submitted by CSPDCL is shown in the Table below:

Table 6.2-1: Energy Balance for FY 2015-16 as submitted by CSPDCL

Particulars	Formulae	Actual
LV Sales	A	10,423.45
HV Sales	B	5,817.49
Sub-total	C=A+B	16,240.94
Distribution Loss below 33 kV (%)	D	23.41%
Distribution Loss below 33 kV (MU)	E	4,963.91
Gross Energy requirement at 33 kV level	F=C+E	21,204.85

Particulars	Formulae	Actual
Less: Direct Input to distribution at 33 kV level	G	177.91
Net Energy Input required at Distribution Periphery at 33 kV level	H=F-G	21,026.94
Sales to EHV consumers	I	2,675.51
Net Energy requirement at Distribution periphery	J=H+I	23,702.45
Distribution loss including EHV Sales	K	20.79%

CSPDCL submitted that as the actual distribution loss in FY 2015-16 is lower than that approved in the MYT Order, in accordance with Regulation 13 of MYT Regulations, 2012, it is eligible for part of the financial gains derived from achieving higher loss reduction as compared to the approved target level. CSPDCL claimed an incentive of Rs. 125.05 Crore on account of the actual distribution loss being lower than the approved target level, as shown in the Table below:

Table 6.2-2: Incentive for Distribution Loss for FY 2015-16 as submitted by CSPDCL

Particulars	CSPDCL Petition
Energy recorded at 33 kV outgoing feeder of all EHV S/s (MU)	21,026.94
Add: Net energy injected by generators connected at 33/11 kV S/s (MU)	177.91
Energy input at distribution periphery below EHV level (MU)	21,204.85
Add: EHV Sales (MU)	2,675.51
Energy input considered for distribution business (MU)	23,880.36
Distribution Losses (%) below 33 kV Level	23.41%
Targeted	27.00%
Overachievement	3.59%
Total Power Purchase Cost (Rs. Crore)	6,965.32
Average Power Purchase Cost at Distribution Periphery (Incl. EHV) (Rs/kWh)	2.92
Overachievement amount (Rs. Crore)	250.10
Overachievement to be retained by CSPDCL (Rs Crore)	125.05

Commission's View

CSPDCL was asked to justify the difference in intra-state Transmission Loss considered by CSPDCL vis-à-vis the Transmission Loss submitted by CSPTCL.

CSPDCL submitted that it has considered CSPTCL losses as 3.22% based on the Commission's Order dated April 30, 2016.

The Commission has computed the Energy Balance in the same format as approved in the Tariff Order for FY 2015-16, i.e., after considering the inter-State Transmission loss.. Further, as stated in the above discussion on sales reported in kVAh rather than kWh by CSPDCL, the Commission has corrected the Energy Balance by considering the sales to HV and EHV category in kWh terms, for consistency. The approved Distribution Loss and Energy Balance after true-up for FY 2015-16 is shown in the Table below:

Table 6.2-3: Approved Energy Balance and Distribution Loss for FY 2015-16

Particulars	Legend	Tariff Order FY 2015-16	CSPDCL Petition	Approved after true-up
Energy Requirement				
LV Sales (MU)	A	10097	10,423	10,423
HV Sales (MU)	B	5424	5,817	5,668
Total Sales Below EHV Level (MU)	C=A+B	15521	16,241	16,091
Energy Loss below 33 kV (%)	D	27%	23.41%	23.88%
Energy loss below 33 kV (MU)	E	5741	4,964	5,048
Energy requirement at Distribution Periphery (33 kV)	F=C+E	21262	21,205	21,139
Less: Input to distribution at 33/11 kV S/S by CGP's/IPPs	G	450	178	178
Energy Input requirement at Distribution periphery (MU)	H=F-G	20812	21,027	20,961
Sales to EHV consumers (MU)	I	3214	2,676	2,529
Energy required for retail sale inclusive of EHV sales (MU)	J=H+I	24026	23,702	23,491
Transmission loss (%)	K	4.20%		4.20%

Particulars	Legend	Tariff Order FY 2015-16	CSPDCL Petition	Approved after true-up
Transmission loss (MU)	L	1053		1,030
Net energy required at transmission periphery (MU)	M=J+L	25080		24,520
Inter-State Transmission Loss (MU)	N	296		285
Gross Energy Required including 33 kV (MU)	O=M+N	25376		24,805

Thus, the Distribution Loss achieved by CSPDCL in FY 2015-16 works out to 23.88% as against 23.41% computed by CSPDCL and 27% approved by the Commission in the Tariff Order.

The MYT Regulations, 2012 provide for gain/loss to be allowed at the time of true-up based on the difference between the actual and target Distribution Losses.

In this context, in the Order dated June 12, 2014, while approving the final true up for FY 2012-13 for CSPDCL, the Commission had observed as under:

“6.3.3 Distribution Loss

....

The distribution losses worked out by CSPDCL raises question when CSPDCL itself has reported that about 6% LV consumer meters are defective. As mandated in the Supply Code, 2011, the defective meters should not be more than 2.5%. Similarly a large number of 11 kV and 33 kV feeder meters are also lying defective which are meant for energy accounting. In absence of proper energy accounting data, sharing of gains and losses is not permitted. Various stake holders have also expressed their concern on distribution losses. In such scenario, allowing incentive to CSPDCL is not justified and directs CSPDCL to make extra efforts to minimise defective meters within the permissible limit as per the provision of Supply Code, 2011.....”

Analysis of the LT R-15 submitted by CSPDCL shows that in FY 2015-16, the percentage of burnt/defective meters is in the range of 4-5% and the assessed cases are in the range of 25-30% of the total bills raised by CSPDCL. In agricultural category, where CSPDCL has shown a significant 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 56-63% of the total bills raised by CSPDCL. Hence, the reasons given by the Commission in earlier Orders for not allowing gains on account of

Distribution Losses hold true for FY 2015-16 also, and hence, the Commission has decided that no incentive should be given to CSPDCL against its claim of overachievement of Distribution Loss target.

6.3 Power Purchase Cost for FY 2015-16

CSPDCL's submission

CSPDCL submitted that in FY 2015-16, power has been procured from Central Generating Stations, CSPGCL's generating stations, captive power plants, renewable energy sources, CSPTdCL and other short-term sources. The actual power purchase cost for FY 2015-16, including inter-State and intra-State Transmission Charges and SLDC Charges, as submitted by CSPDCL is Rs. 8128.44 Crore. CSPDCL also submitted the net reduction in the power purchase cost, on account of rebates and GBI claim received, non-consideration of Delayed Payment Charges, and payment to Jindal Power on account of reversal of Cross-Subsidy Surcharge (CSS), as Rs. 55.11 crore. CSPDCL submitted the revenue from sale of surplus power of 1303.28 MU as Rs. 529.78 at an average rate of Rs. 4.06 per kWh, and accordingly sought approval for the net power purchase cost of Rs. 7543.55 crore, against Rs. 7937.97 Crore approved by Commission in the Tariff Order dated May 23, 2015.

CSPDCL submitted that it has tied up banking of power of 1909.86 MU (net) during FY 2015-16, which has to be returned during FY 2016-17. Under the regulatory principles, banking of power is a cashless transaction where interchange of units has to be accomplished, however, financial principles require accounting for such expenses. Therefore, CSPDCL has not considered the cost related to banked energy amounting to Rs. 621.18 Crore, while accounting for power purchase expenses in its true-up petition. This is in line with the APTEL Judgment dated July 1, 2014 in Appeal No.220 of 2013, wherein APTEL ruled as under:

"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. 7543.55 Crore for FY 2015-16 (Net of Interstate Sales & Transmission Charges – Inter & Intra along with SLDC Charges) as per available annual accounts against Rs. 7937.97 Crores approved by Commission in the Tariff Order dated May 23, 2015.

Commission’s View

CSPDCL was asked to submit the details of quantum, cost and rate of power purchase from Jindal Power and also details of payment to Jindal Power on account of reversal of Cross-Subsidy Surcharge amounting to Rs. 84.82 Crore. CSPDCL clarified that during FY 2015-16, no power has been sourced from Jindal Steel & Power Ltd. (JSPL). CSPDCL submitted that JSPL had supplied 750.91 MU during the period from November 2011 to March 2013. Against this supply of electricity from Unit No. 3 and 4 of JSPL’s 4x135 MW DCP, CSPDCL had raised a bill of Rs. 78.29 crore towards CSS on July 23, 2013, treating JSPL as an Independent Power Plant (IPP). A notice of disconnection of supply was issued to JSPL on October 26, 2013, on account of non-payment of Rs. 83.70 lakh. JSPL disputed the demand by filing a Petition before the Commission registered as Petition No. 77 of 2013(D). The Commission disposed of the Petition through its Order dated January 2, 2015 with the finding that Unit No. 03 and 04 of JSPL at DCP maintain captive status and therefore, CSS will not be applicable for such period. However, Parallel Operation Charge will be applicable for availing grid support. CSPDCL had raised a bill of Rs. 16.70 crore towards Parallel Operation Charge till March 9, 2015 and the same was adjusted with excess payment deducted towards CSS. In compliance of aforesaid order of the Commission, CSPDCL refunded the difference amount of Rs. 84.82 Crore to JSPL raised against CSS.

As regards revenue from sale of surplus energy, CSPDCL submitted that during FY 2015-16, the sale of surplus energy has been undertaken through medium-term sale to Kerala and IEX. The energy sale to Kerala is accomplished through a trader, viz., NVVN, for 298 MW at Rs. 4.10/kWh (Non Escalable Capacity Charges Rs. 1.96/kWh + Non Escalable Energy Charges Rs. 2.14/kWh) during FY 2015-16 subsequent to a competitive bidding process. Balance surplus power has been sold

through the Power Exchanges wherein electricity prices are discovered based on day-to-day market conditions and technical conditions of power system.

The cost of power purchase from CSPGCL as shown by CSPDCL were lower than the revenue from sale of power considered by CSPGCL. CSPDCL clarified that it had not accounted for the FCA amount of Rs. 283 crore for the period from October 2015 to March 2016, as the same had been allowed by the Commission in the Tariff Order for FY 2016-17, whereas CSPGCL has considered the corresponding revenue in FY 2015-16.

After scrutiny of the material placed on record including the audited accounts for FY 2015-16, the actual source-wise power purchase cost for FY 2015-16 as submitted by CSPDCL has been approved. The Commission has considered the actual inter-State and intra-State transmission charges, UI and SLDC Charges after verifying the same from the audited accounts of CSPDCL. In line with the approach adopted in previous Orders, neither the income earned through Delayed Payment Charges from consumers nor the Delayed Payment Charges paid by CSPDCL have been considered.

The amount of rebate has been considered as Rs. 4.97 crore rather than Rs. 4.01 crore, based on the audited accounts. The revenue of Rs. 532.02 crore from sale of surplus power, based on the audited accounts, has been considered under separate head under the true-up, as per usual practice. The approved source-wise power purchase expenses after true-up for FY 2015-16 are shown in the Table below:

Table 6.3-1: Approved Power Purchase Cost for FY 2015-16

Source	FY 2015-16								
	Tariff Order			CSPDCL True-Up Petition			Approved after 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)
Central Generating Stations									
Korba STPS (1 to 6)	1,404.17	255.56	1.82	1,499.98	184.08	1.23	1,499.98	184.08	1.23
Sipat Stage II	989.00	282.85	2.86	1,032.68	275.77	2.67	1,032.68	275.77	2.67
Korba 7	1,024.90	290.05	2.83	774.08	252.49	3.26	774.08	252.49	3.26
Vindhyachal 3	668.72	155.81	2.33	566.60	163.01	2.88	566.60	163.01	2.88
Sipat Stage I	1,959.22	544.66	2.78	1,970.40	547.64	2.78	1,970.40	547.64	2.78
Vindhyachal 4	401.23	99.51	2.48	331.65	132.69	4.00	331.65	132.69	4.00
Vindhyachal 5				49.51	22.19	4.48	49.51	22.19	4.48
NTPC + SAIL	364.26	163.55	4.49	222.16	104.88	4.72	222.16	104.88	4.72
NTPC Mauda	228.93	122.25	5.34	369.20	219.41	5.94	369.20	219.41	5.94
TarapurAPS	259.08	80.06	3.09	366.86	107.74	2.94	366.86	107.74	2.94
Kakrapar APS	326.47	100.88	3.09	-	-		-	-	
Hirakud Hydro	16.64	1.66	1.00	16.40	2.78	1.70	16.40	2.78	1.70
Kahalgaon 2	178.61	71.62	4.01	154.61	55.65	3.60	154.61	55.65	3.60
NVVN Bundled				212.42	86.14	4.06	212.42	86.14	4.06
Other Sources (MPPKVVCL, etc.)				15.18	8.95	5.90	15.18	8.95	5.90
Other Charges (Surcharges, TDS, Tax refund, Installment, Debit/Credit for URS etc.)					55.51			55.51	
Total CGS	7,821.24	2,168.47	2.77	7,581.73	2,218.94	2.93	7,581.73	2,218.94	2.93
CSPGCL									
Korba Existing	2,713.00	677.29	2.50	1,957.96	520.14	2.66	1,957.96	520.14	2.66
DSPM	3,387.93	846.64	2.50	3,664.65	907.63	2.48	3,664.65	907.63	2.48
HTPS	5,853.69	1,047.46	1.79	5,194.10	1,008.74	1.94	5,194.10	1,008.74	1.94

Source	FY 2015-16								
	Tariff Order			CSPDCL True-Up Petition			Approved after 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)
Korba Extension	3,509.21	1,032.75	2.94	3,095.63	943.14	3.05	3,095.63	943.14	3.05
Marwah 1 & 2	2,786.40	875.76	3.14	38.82	5.89	1.52	38.82	5.89	1.52
CSPGCL Thermal	18,250.23	4,479.90	2.45	13,951.15	3,385.54	2.43	13,951.15	3,385.54	2.43
Hasdeo Bango	334.51	79.07	2.36	282.65	65.24	2.31	282.65	65.24	2.31
Kawardha	2.60	1.41	5.42	7.51	4.38	5.84	7.51	4.38	5.84
CSPGCL Mini Hydro				31.57	11.64	3.69	31.57	11.64	3.69
CSPGCL Renewables	337.11	80.48	2.39	321.73	81.26	2.53	321.73	81.26	2.53
CSPGCL Other Charges (Surcharge, Others, etc.)					488.13			488.13	
Total CSPGCL	18,587.34	4,560.38	2.45	14,272.89	3,954.93	2.77	14,272.89	3,954.93	2.77
IEX/PXIL/Traders				391.37	147.17	3.76	391.37	147.17	3.76
CPPs/IPPs				138.85	41.55	2.99	138.85	41.55	2.99
Other Charges of IPPs/CPPs					12.11			12.11	
Biomass				702.45	419.63	5.97	702.45	419.63	5.97
Solar				105.83	74.12	7.00	105.83	74.12	7.00
Hydel/Other RE				4.95	2.25	4.54	4.95	2.25	4.54
Other - Renewable Energy	1,000.54	738.78	7.38	813.22	496.00	6.10	813.22	496.00	6.10
Concessional PP - through CSPTdCL	494.94	95.52	1.93	772.99	149.73	1.94	772.99	149.73	1.94
Overdrawal/Withdrawal				383.94	120.14	3.13	383.94	120.14	3.13
Underdrawal/injection				156.45	29.31	1.87	156.45	29.31	1.87
UI Net				227.49	90.82	3.99	227.49	90.82	3.99
Power Export				314.36	-	-	314.36	-	-
Power Import				2,224.22	-	-	2,224.22	-	-
Banking Net				1,909.86	-	-	1,909.86	-	-

Source	FY 2015-16								
	Tariff Order			CSPDCL True-Up Petition			Approved after 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)
Gross Power Purchase	27,904.06	7,563.15	2.71	26,108.39	7,111.26	2.72	26,108.39	7,111.26	2.72
Less: Adjustments									
<i>Rebate if any</i>					(4.01)			(4.97)	
<i>GBI Claim received during the FY</i>					(48.56)			(48.56)	
<i>Delayed Payment Surcharge</i>					(87.36)			(87.36)	
Sale of Surplus Power if any	(2,231.76)	(781.12)	3.50	(1,303.28)	(529.78)	4.06		*	
<i>Trading Income from Sale to Telangana</i>					-			-	
<i>Jindal Power Payment for Reversal of Cross Subsidy Surcharge</i>					84.82			84.82	
Total Adjustments	(2,231.76)	(781.12)	3.50	(1,303.28)	(584.89)	4.49		(56.08)	
Transmission & SLDC Charges		1,155.94			1,017.19			1,017.19	
Total Power Purchase	25,672.30	7,937.97	3.09	24,805.11	7,543.55	3.04	26,108.39	8072.37	3.09

Note:*- Revenue of Rs. 532.02 crore from sale of surplus energy has been considered under revenue from sale of power

6.4 Operation and Maintenance (O&M) expenses

CSPDCL's submission

CSPDCL submitted that the O&M expenses comprise Employee expenses, Repair and Maintenance (R&M) expenses, and Administration and General (A&G) expenses. CSPDCL submitted that the actual O&M expenses for FY 2015-16 were Rs. 920.43 Crore as against the normative O&M expenses of Rs. 931.47 Crore approved by the Commission in the MYT Order dated July 12, 2013. In addition, CSPDCL claimed the actual contribution to Pension and Gratuity fund of Rs. 217.87 Crore, and the Interim Wage Relief of Rs. 89.60 crore, in the truing up for FY 2015-16

CSPDCL submitted that there was an interim wage relief impact as per Wage Advisory Committee Report dated January 29, 2015 to the extent of 15%. Total arrears on account of Wage Revision (Interim Relief) were to be passed on to employees in 15 equal instalments effective from January 1, 2014.

CSPDCL submitted that the actual employee expenses excluding Interim Wage Relief for FY 2015-16 were Rs. 635.11 Crore. CSPDCL submitted that the actual R&M expenses for FY 2015-16 were Rs. 145.01 Crore and the actual A&G expenses for FY 2015-16 were Rs. 140.31 Crore.

CSPDCL added that Regulation 57.4.2 of the MYT Regulations, 2012, specifies that additional O&M expenses on account of new lines/substations commissioned after March 31, 2013 shall be allowed subject to prudence check at the time of truing up. As CSPDCL has commissioned additional distribution system during the 2nd Control Period, it had incurred total expenditure of Rs. 17.21 Crore on account of additional O&M on these sub-stations. Based on the additional O&M incurred, CSPDCL requested the Commission to revisit the normative expenses approved in MYT Order dated July 12, 2013 and in subsequent Orders.

For computation of sharing of gains/(losses), CSPDCL has escalated the approved normative O&M expenses of FY 2014-15, i.e., Rs. 815.63 Crore, approved in the Tariff Order dated March 31, 2016 by applying escalation rate based on applicable CPI and WPI Indices. Based on the revised normative expenses of Rs. 854.89 Crore vis-à-vis actual O&M expenses of Rs. 920.43 Crore, CSPDCL computed an efficiency loss of Rs. 65.55 Crore. As O&M losses are controllable, CSPDCL requested the Commission to approve Rs. 32.77 Crore as sharing of loss in O&M expenses for FY 2015-16 as per the MYT Regulations, 2012.

Commission's View

In the MYT Order dated July 12, 2013, the O&M expenses for FY 2015-16 were approved as Rs. 931.47 Crore. Further, the contribution to Pension and Gratuity fund for FY 2015-16 had been approved separately, as Rs. 217.87 Crore.

The actual O&M expenses comprising Employee expenses, R&M expenses, and A&G expenses for FY 2015-16 claimed by CSPDCL are Rs. 920.43 Crore.

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

“57.4 Operation and maintenance expenses

57.4.1 Operation and Maintenance (O&M) expenses for shall include:

I. Employee costs;

II. Administrative and General expenses

III. Repairs and Maintenance

- (a) The Operation and Maintenance expenses, excluding pension fund contribution and impact of pay revision arrears for the base year i.e. FY 2012-13, shall be derived on the basis of the normalized average of the actual Operation and Maintenance expenses excluding pension fund contribution and impact of pay revision arrears available in the audited/un audited accounts for the previous three (3) years immediately preceding the base year FY 2012-13, subject to prudence check by the Commission.*
- (b) The normalization shall be done by applying weighted average inflation at the rate of 60% weightage to actual variation in CPI and 40% weightage to actual variation in WPI on year to year basis. The average of normalized net present value for 2009-10, 2010-11 and 2011-12, shall then be used to project base year value for 2012-13. The base year value so arrived shall be escalated by the above inflation rate to estimate the O&M expense (excluding impact of pay revision, if any) for each year of the control period.*
- (c) At the time of true up, the O&M cost shall be considered after taking into account the actual inflation instead of projected inflation for that period....”*

In Truing-up for FY 2014-15, the normative O&M expenses for FY 2014-15 were approved as Rs. 825.42 Crore. The normative O&M expenses for FY 2015-16 have been computed by escalating the trued-up expenses for FY 2014-15 with the escalation rate of 2.39%, computed in accordance with MYT Regulations, 2012. In addition to the above, the impact due to O&M on account of additional distribution system has been factored in while computing the normative O&M expenses for FY 2015-16. CSPDCL had submitted its revised computations in this regard, which have been analysed by the Commission. The Commission has factored in the increase in the number of Sub-stations over the period, rather than being considered as static for each half-yearly period as proposed by CSPDCL.

Thus, the normative O&M expenses excluding Pension and Gratuity and Interim wage Relief for FY 2015-16 work out to Rs. 844.45 Crore, as shown in the Table below:

Table 6.4-1: Revised Normative O&M Expenses for FY 2015-16 (Rs. Crore)

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Additional O&M on account of additional distribution system	0.87	2.24	3.83
Normative O&M Expenses as approved in True Up	779.98	815.63	
Inflation Rate		4.85%	2.39%
Revised Normative O&M Expenses	780.85	820.99	844.45

CSPDCL was asked to submit the Detail break-up and calculation of “Interim Wage Relief” of Rs. 89.60 Crore. CSPDCL submitted the necessary details and the same was verified by the Commission.

The actual net Employee expenses as per the audited accounts of CSPDCL for FY 2015-16 are Rs. 675.75 crore, as against Rs. 635.11 crore submitted by CSPDCL in the Petition based on provisional accounts. Also, the actual net A&G expenses and R&M expenses as per the audited accounts of CSPDCL for FY 2015-16 are Rs. 143 crore and Rs. 121.91 crore, as against Rs. 140.31 crore and Rs. 145.01 crore submitted by CSPDCL in the Petition based on provisional accounts.

Accordingly, the O&M expenses considered after true-up for FY 2015-16 are shown in the Table below:

Table 6.4-2: Actual O&M Expenses considered in true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPDCL Petition	Approved after True-Up
Net Employee Expenses	931.47	635.11	675.75
Net R&M Expenses		145.01	121.91
Net A&G Expenses		140.31	143.00
Total O&M Expenses (excl. Interim Relief and Pension & Gratuity)	931.47	920.43	940.65

Hence, based on the audited accounts, the actual O&M expenses for FY 2015-16 are Rs. 940.65 Crore (excluding interim wage relief) as against the normative O&M expenses of Rs. 844.45 Crore, resulting in an efficiency loss of Rs.96.20 Crore.

As the O&M expenses are a controllable factor, the sharing of loss in O&M expenses has been carried out in accordance with MYT Regulations, 2012, as shown in the Table below:

Table 6.4-3: Sharing of loss in O&M expenses for FY 2015-16 (Rs. Crore)

Particulars	Normative O&M	Actual O&M	Efficiency Gain/(Loss)	Entitlement of Gain/(Loss)	
				CSPDCL	Consumers
O&M expenses	844.45	940.65	(96.20)	(48.10)	(48.10)

Hence, the net allowable O&M expenses for FY 2015-16, after sharing of loss, works out as Rs.892.55 Crore (844.45+48.10).

As regards the contribution to Pension and Gratuity fund for FY 2015-16, it has been observed that the amount is reported as Rs. 217.87 Crore in the audited accounts. The actual contribution to Pension and Gratuity fund allowed is Rs. 217.87 Crore in the truing up for FY 2015-16.

6.5 GFA for FY 2015-16

CSPDCL's submission

CSPDCL submitted that it has considered the funding of Gross Fixed Assets (GFA) through Consumer Contribution, debt and equity as approved in the MYT Order dated July 12, 2013. Further, the capital structure for FY 2015-16 has been determined based on following:

1. Closing CWIP of Rs. 2019.43 Crore of FY 2014-15 has been considered as the opening CWIP for FY 2015-16.
2. The actual loan reduction of Rs. 698.79 Crore has been considered for FY 2015-16 after effect of loan takeover under UDAY.
3. Addition in Consumer Contribution has been considered as Rs. 866.98 Crore as per the accounts for FY 2015-16.
4. Normative equity addition for FY 2015-16 has been considered as per actuals based on capital restructuring methodology approved by the Commission in the MYT Order dated 12 July, 2013.
5. GFA addition of Rs. 444.28 Crore has been considered as per the accounts for FY 2015-16.

The details of capital expenditure and capitalisation for FY 2015-16, as submitted by CSPDCL, are shown in the Table below:

Table 6.5-1: GFA for FY 2015-16 as submitted by CSPDCL (Rs. Crore)

Sr. No	Particulars	CSPDCL Petition
A	GROSS FIXED ASSETS (GFA)	
1	Opening GFA	5,217.25
2	Opening CWIP	2,019.43
3	Opening Capex	7,236.68
4	Capitalisation during the Year	444.28
5	Closing GFA	5,159.28
6	Closing CWIP	1,586.88
7	Closing Capex	6,746.16
B	GRANTS & CONSUMER CONTRIBUTION	
1	Opening Grant and Contribution	2,325.33
2	Consumer Contribution/Grants during the Year	866.98
3	Closing Consumer Contribution	3,192.31
4	Consumer Contribution in Opening GFA	1,676.44
5	Consumer Contribution in Closing GFA	2,441.39
C	LOAN BORROWED	
1	Opening Borrowed Loan	2,009.30
2	Loan Borrowed during the Year	(698.79)
3	Closing Borrowed Loan	1,310.51
4	Borrowed Loan in Opening GFA	1,448.60
5	Borrowed Loan in Closing GFA	1,448.60
D	EQUITY	
1	Opening Gross Equity	2,902.05
2	Equity addition during the Year	(658.71)
3	Closing Gross Equity	2,243.34
4	Gross Equity in Opening GFA	2,092.22
5	Gross Equity in Closing GFA	1,269.29
6	Average Gross Equity during the year	1,680.75
E	PERMISSIBLE EQUITY	
1	Permissible Equity in Opening GFA	1,593.01

Sr. No	Particulars	CSPDCL Petition
2	Permissible Equity in Closing GFA	1,269.29
3	Average Gross Permissible Equity during the year	1,431.15
F	NORMATIVE LOAN	
1	Opening Normative Loan	499.20
2	Closing Normative Loan	-
3	Average Normative Loan	249.60

Commission's View

The closing GFA for FY 2014-15 as approved in the true-up Order has been considered as the opening GFA for FY 2015-16. Addition in the GFA for FY 2015-16 as submitted by CSPDCL, which is based on the audited accounts, has been allowed. The GFA considered in the true up for FY 2015-16 is shown in the Table below:

Table 6.5-2: GFA Approved in the true up for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPDCL Petition	Approved after true-up
Opening GFA	3,317.84	5,217.25	5,217.25
Additional Capitalisation during the Year	311.00	444.28	444.00
Less: Transfer of assets under RGGVY		502.24	502.24
Closing GFA	3,628.84	5,159.28	5,159.00

6.6 Depreciation

CSPDCL's submission

CSPDCL submitted that the depreciation for FY 2015-16 has been calculated in accordance with Regulation 24 of the MYT Regulations, 2012 and the Commission's past methodology. CSPDCL has claimed depreciation of Rs. 150.73 Crore for FY 2015-16 as against Rs. 92.06 Crore approved in the MYT Order dated July 12, 2013.

Commission's View

The depreciation for FY 2015-16 has been computed by applying the weighted average depreciation rate of 5.08%, computed by applying the specified depreciation rates for each Asset Group with the GFA under that Asset Group. From the depreciation computed, depreciation on Grants and Consumer Contribution and

depreciation on fully depreciated assets has been deducted, in accordance with the approach adopted in the previous Orders. The depreciation on fully depreciated assets has been considered at the same level as approved in the true-up for FY 2014-15. The depreciation approved for FY 2015-16 after true-up is shown in the Table below:

Table 6.6-1: Approved Depreciation for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPDCL Petition	Approved after True-Up
Opening GFA	3,317.84	5,217.25	5,217.25
Additional Capitalisation during the Year	311.00	444.28	444.00
GFA at the end of the year after transfer of RGGVY assets	3,628.84	5,159.28	5,159.00
Average GFA for the year	3,473.34	5,188.26	5,188.12
Depreciation Rates (%)	5.51%	5.08%	5.08%
Gross Depreciation	191.27	263.74	263.73
Less: Depreciation on consumer contribution on live assets	82.27	97.19	97.19
Less: Depreciation on Fully Depreciated Assets	16.94	15.81	17.44
Net Depreciation	92.06	150.73	149.10

6.7 Interest on loan capital

CSPDCL's submission

CSPDCL submitted that the interest on loan has been computed in accordance with Regulation 23 of the MYT Regulations, 2012. The closing loan balance as per last submission in true up for FY 2014-15 has been considered as the opening loan balance for FY 2015-16. The debt component of GFA addition in FY 2015-16 has been considered as the loan addition during the year, which is nil due to conversion of loan into grant under UDAY. The depreciation for the year has been considered as the normative repayment for the year. The weighted average interest rate of 10.97% based on the actual loan portfolio has been considered for computing the interest expenses for FY 2015-16. CSPDCL has claimed the interest and finance charges of Rs. 114.07 Crore in the true up for FY 2015-16, as against the interest expenses of Rs. 50.98 crore approved in the MYT Order.

Commission's View

CSPDCL was asked to submit the documentary evidence for the opening loan balance for FY 2015-16 and applicable interest rate for each source of loan for FY 2015-16 and also submit the computation of weighted average rate of interest for FY 2015-16. The details submitted were duly scrutinized.

For approving the interest on loan for FY 2015-16, the Commission has considered the opening loan balance for FY 2015-16 as submitted by CSPDCL. The debt portion of the approved additional capitalisation for FY 2015-16 has been considered as the loan addition during the year. The Commission has also taken into account the conversion of Rs. 870 crore of loan to Grants under UDAY and its consequent impact on interest computations. The allowable depreciation for the year has been considered as the 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 2015-16. The interest expense approved for FY 2015-16 is shown in the Table below:

Table 6.7-1: Approved Interest Expense for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPDCL Petition	Approved after True-Up
Interest Expense for the Period without considering UDAY impact			
Total Opening Net Loan	375.40	1,365.21	1,365.21
Repayment during the period	92.06	150.73	149.10
Additional Capitalization of Borrowed Loan during the year	227.62	-	-
Addition/(Reduction) in Normative loan during the year	(14.93)	(499.20)	(499.20)
Total Closing Net Loan	496.03	715.27	716.91
Average Loan during the year	435.31	1,040.24	1,041.06
Wt. Avg. Interest Rate	11.70%	10.97%	10.97%
Interest Expense for the Period without considering UDAY impact(A)	50.98	114.07	114.16
Interest Expense for the Period considering UDAY impact			
Total Opening Net Loan			1,365.21
Repayment during the period			1,019.22
Additional Capitalization of Borrowed Loan during the year			-

Particulars	MYT Order 2013	CSPDCL Petition	Approved after True-Up
Addition/(Reduction) in Normative loan during the year			(499.20)
Total Closing Net Loan			(153.21)
Average Loan during the year			606.00
Wt. Avg. Interest Rate			10.97%
Interest Expense for the Period considering UDAY impact (B)			66.45

6.8 Interest on Working Capital (IoWC)

CSPDCL's submission

CSPDCL submitted that the IoWC for FY 2015-16 has been computed in accordance with the MYT Regulations, 2012. The interest rate of 13.50% has been considered, which is the SBI Base Rate as on April 1, 2015 plus 350 basis points. CSPDCL submitted that the normative IoWC entitlement for FY 2015-16 in accordance with MYT Regulations, 2012 is zero.

Commission's View

The normative IoWC has been computed in accordance with the MYT Regulations, 2012. The revised normative O&M expenses of Rs. 844.45 crore have been considered for computing the IoWC requirement. The receivables equivalent to 1 month's actual revenue has been considered rather than 1 month's ARR as considered by CSPDCL. The average Consumer Security Deposit of Rs. 1307.95 Crore has been considered during FY 2015-16. The working capital requirement for FY 2015-16 in accordance with MYT Regulations, 2012 works out to Rs. 942.20 Crore. As the Consumer Security Deposit amount is more than the normative working capital requirement, the actual IoWC for FY 2015-16 is negative, as shown in the Table below:

Table 6.8-1: Approved IoWC for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPDCL Petition	Approved after True-Up
Operation and Maintenance expenses for one Month	77.62	76.70	70.37
Maintenance spares at 15% of O&M Expense	139.72	138.07	126.67

Particulars	MYT Order 2013	CSPDCL Petition	Approved after True-Up
Receivable equivalent to one month's of revenue from sale of electricity	700.69	740.59	745.16
Total Working Capital Requirement	918.04	955.36	942.20
Less: Average amount of Consumer Security Deposit Held during the year	1,304.88	1,307.95	1307.95
Gross Interest on Working Capital	(386.85)	(352.60)	(365.75)
Rate of Interest on Working Capital	13.50%	13.50%	13.50%
Net Interest on Working Capital	0.00	0.00	(49.38)

6.9 Interest on Consumer Security Deposit

CSPDCL's submission

CSPDCL submitted that the interest on Consumer Security Deposit (CSD) of Rs. 91.17 Crore for FY 2015-16 has been claimed as per the actuals, in accordance with MYT Regulations, 2012, as against Rs. 110.91 Crore approved in the MYT Order.

Commission's View

CSPDCL was asked to submit the details of actual interest paid on CSD for FY 2015-16. The details submitted were duly scrutinized. The Commission has approved the interest on CSD for FY 2015-16 as claimed by CSPDCL, as shown in the Table below:

Table 6.9-1: Approved Interest on CSD for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPDCL Petition	Approved after True-Up
Opening Consumer Security Deposit	1,317.04	1,171.26	1,171.26
Addition to Consumer Security Deposit	(24.32)	273.38	273.38
Closing Security Deposit	1,292.72	1,444.64	1,444.64
Interest on Consumer Security Deposit	110.91	91.17	91.17

6.10 Return on Equity (RoE)

CSPDCL's submission

CSPDCL submitted that the RoE for FY 2015-16 has been computed in accordance with Regulation 22 of the MYT Regulations, 2012, at the rate of 15.50% on the average equity for the year. CSPDCL has claimed the RoE of Rs.221.83 Crore in the true up for FY 2015-16.

Commission's View

The closing equity approved for FY 2014-15 as approved in final true up for FY 2014-15 has been considered as the opening equity for FY 2015-16. The equity portion of the additional net capitalisation for FY 2015-16 has been considered as the equity addition for the year. The RoE has been computed considering the base rate of 16% on the average equity for the year. The RoE approved in the true up for FY 2015-16 is shown in the Table below:

Table 6.10-1: Approved RoE for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPDCL Petition	Approved after True-Up
Permissible Equity in Opening GFA	1,022.40	1,593.01	1,253.35
Permissible Equity in Closing GFA	1,103.76	1,269.29	1,235.88
Average Gross Permissible Equity during the Year	1,063.08	1,431.15	1,244.61
Rate of Return on Equity	15.50%	15.50%	15.50%
Return on Equity	164.78	221.83	192.92

6.11 Income tax

CSPDCL's submission

CSPDCL has not claimed Income Tax in the true up for FY 2015-16.

Commission's View

As the actual Income Tax for FY 2015-16 is zero, no Income Tax has been considered in the true up for FY 2015-16.

6.12 Prior period (income)/expenses

CSPDCL's submission

CSPDCL has claimed the prior period expense of Rs. 0.09 Crore in the true up for FY 2015-16, as shown in the Table below:

**Table 6.12-1: Prior period Expenses for FY 2015-16 as submitted by CSPDCL
(Rs. Crore)**

Particulars	CSPDCL Petition
Prior period income from redemption of bonds	
Sub Total Income	
Employee Costs	0.09
Interest Reversal	
Sub Total Expenses	0.09
Prior Period (Income)/Expenses	0.09

Commission's View

CSDPCL was asked to submit the details of each head of prior period (Income)/Expenses, the year to which such entry relates to, and the treatment given to the same in the True-up Order for that year. CSPDCL submitted that as per the audited accounts for FY 2015-16, the prior period employee expenses are Rs. 0.09 Crore, which were earlier not accounted in FY 2014-15 and have now been considered in FY 2015-16. The Commission has allowed 50% of the prior period employee expenses, as in the true-up for FY 2014-15, the employee/O&M expenses were already in excess, and sharing had been done.

The prior period charges allowed for FY 2015-16 are shown in the Table below:

Table 6.12-2: Approved Prior Period Expenses for FY 2015-16 (Rs. Crore)

Particulars	CSPDCL Petition	Approved after true-up
Excess Provision pertaining to previous years written back		
Sub Total Income		
Employee Costs	0.09	0.04
Redemption of bonds		
Sub Total Expenses	0.09	0.04
Prior Period (Income)/Expenses	0.09	0.04

6.13 Provision for Bad and doubtful debts

CSPDCL's submission

CSPDCL has submitted Rs. 0.13 Crore towards bad and doubtful debts in the true up for FY 2015-16.

Commission's View

Based on audited accounts for FY 2015-16, the Commission has approved Rs. 0.13 Crore towards Bad and doubtful debts for FY 2015-16.

6.14 Non-Tariff Income

CSPDCL's submission

CSPDCL has submitted the Non-Tariff Income of Rs. 204.31 Crore in the true up for FY 2015-16.

Commission's View

The Non-Tariff Income for FY 2015-16 has been approved by the Commission based on the audited accounts. Further, the revenue from sale of surplus energy has also been included under the Non-Tariff Income. The Non-Tariff Income approved in the true up for FY 2015-16 is shown in the Table below:

Table 6.14-1: Approved Non-Tariff Income for FY 2015-16 (Rs. Crore)

Particulars	MYT Order 2013	CSPDCL Petition	Approved after true up
Non-Tariff Income	246.57	139.22	119.09
Interest Income on Excess Consumer Security Deposits	51.06		
Wheeling Charges, Open Access & Cross Subsidy Charges	125.00	65.09	66.07
Total	422.63	204.31	185.16

6.15 Aggregate Revenue Requirement (ARR)

In the MYT Order issued on July 12, 2013, the Commission had approved each component of ARR for each year of the Control Period, i.e., FY 2013-14, FY 2014-15 and FY 2015-16. However, in the Tariff Order dated May 23, 2015, when true up for FY 2013-14 was undertaken, in accordance with Regulation 5.7 of MYT Regulations, 2012, the Commission had revised the sales, Energy Balance and power purchase expenses for FY 2015-16, and had also passed through the Revenue Gap/(Surplus) after true-up of FY 2013-14. Therefore, the true-up for FY 2015-16 has to be done with respect to the ARR components approved in the Tariff Order dated May 23, 2015.

However, CSPDCL in its Petition, has proposed true-up of the ARR against the values approved in MYT Order dated July 12, 2013, which does not present an accurate comparison. More importantly, CSPDCL has not included the Revenue Gap

of Rs. 735 Crore approved after true-up of FY 2013-14, which was allowed for recovery in the revised ARR of FY 2015-16.

In reply to the Commission's query, CSPDCL submitted as under:

"CSPDCL would like to submit that the past revenue gaps /surpluses were inadvertently missed out during the preparation of Petition. CSPDCL requests the Hon'ble Commission to kindly condone the error and also requests to kindly consider same while approving the true-up of FY 2015-16."

The Commission fails to understand how such a big amount of Rs. 735 Crore and the basic approach of undertaking true-up with reference to the approved ARR for that year could have been inadvertently missed out. The consequence of this "inadvertent error" is that the Revenue Gap of FY 2015-16 has been understated, and the consumers have not been made aware that the true-up for FY 2015-16 has resulted in a significant Revenue Gap rather than a Revenue Surplus, as presented by CSPDCL in its Petition. At the same time, such amount has already been approved by the Commission for recovery through the ARR of FY 2015-16, and CSPDCL is entitled to recover this amount. Hence, the Commission has included this amount in the true-up of FY 2015-16. However, CSPDCL should ensure against such errors and understatement of ARR and Revenue Gap in future.

Based on the above, the ARR approved in the true up for FY 2015-16 is shown in the Table below:

Table 6.15-1: Approved ARR for FY 2015-16 (Rs. Crore)

Sr. No	Particulars	Tariff Order FY 2015-16	CSPDCL Petition	Approved after True-Up
A	Power Purchase Expenses	7,937.89	7,543.55	8072.37
1	Power Purchase Cost	6,782.03	6,526.36	7,055.18
2	Inter-State Transmission charges (PGCIL)	306.05	224.13	224.13
3	Intra-State Transmission Charges	834.92	701.05	701.05
4	WRLDC Charges	-	29.26	29.26
5	CSLDC Charges	14.97	10.52	10.52
6	Other Charges		52.23	52.23
B	Operation & Maintenance Expenses	1,149.34	1,227.90	1,248.12
1	Net Employee Expenses	931.47	635.11	675.75

Sr. No	Particulars	Tariff Order FY 2015-16	CSPDCL Petition	Approved after True-Up
2	Net Administrative and General Expenses		140.31	143.00
3	Net Repair and Maintenance charges		145.01	121.91
4	Pension & Gratuity	217.87	217.87	217.87
5	Interim Wage Relief	-	89.60	89.60
C	Interest & Finance Expenses	161.89	205.24	128.69
1	Interest on Loan	50.98	114.07	86.90
2	Interest on Security Deposit	110.91	91.17	91.17
3	Interest on Working Capital Requirement	-	-	(49.38)
D	Other Expenses	340.92	372.79	342.19
1	Depreciation	92.06	150.73	149.10
2	Return on Equity	164.78	221.83	192.92
3	Income tax	-		
4	Bad debt	84.08	0.13	0.13
5	Other debits/ Prior period Expenses	-	0.09	0.04
E	Gain/(Loss) on Efficiency	-	92.28	(48.10)
1	Gain/(Loss) on Sharing O&M Efficiency	-	(32.77)	(48.10)
2	Licensee's Share in Gain on account of reduction in distribution losses	-	125.05	
F	Adjustment on account of Review Order dt. 08.12.2014	4.00	-	4.00
G	Less: Non-Tariff Income	422.63	204.31	185.16
1	Non-Tariff Income	246.57	139.22	119.09
2	Income on Consumer Security Deposit- Notional	51.06	-	-
3	Wheeling Charges, Open Access & Cross Subsidy Charges	125.00	65.09	66.07
G	Annual Revenue Requirement	9,167.49	9,237.45	9,562.11

6.16 Revenue from sale of power

CSPDCL's submission

CSPDCL submitted the total revenue for FY 2015-16 as Rs. 8887.04 Crore.

Commission's View

The revenue from retail sale for FY 2015-16 has been considered as Rs. 8941.98 Crore based on the audited accounts and as per the reconciliation of revenue submitted by CSPDCL, in the true up for FY 2015-16.

The revenue from sale of surplus 1303.28 MU power has been considered as Rs. 532.02 Crore.

The total revenue from sale of power considered in the true-up for FY 2015-16 is shown in the table below:

Table 6.16-1: Approved Revenue for FY 2015-16 (Rs. Crore)

Particulars	CSPDCL Petition	Approved
Revenue from retail sale	8,887.04	8,941.98
Revenue from sale of surplus power	-	532.02
Total revenue from sale of power	8,887.04	9,474.00

6.17 Revenue Gap/(Surplus)

CSPDCL's submission

CSPDCL has submitted a Revenue Gap of Rs. 350.41 Crore for FY 2015-16 based on the actual ARR and revenue. However, after considering the State Government subsidy of Rs. 407.25 Crore received during the year, there is an overall surplus of Rs. 60.68 Crore including the carrying cost calculated at 13.50% in accordance with the MYT Regulations, 2012.

Commission's View

As mentioned earlier, in the Tariff Order dated May 23, 2015, the Commission had approved a Revenue Gap of Rs. 735 Crore for CSPDCL for FY 2013-14 including carrying cost, which was included in the revised ARR of FY 2015-16. However, in the Tariff Petition for true up of FY 2015-16, CSPDCL has not considered the Revenue Gap of FY 2013-14 and to that extent CSPDCL has understated the Revenue Gap/(Surplus) for FY 2015-16. The Commission has considered the past Revenue Gap while approving the overall Revenue Gap/(Surplus) for FY 2015-16.

As regards Government Subsidy, the Commission has considered entire Rs. 450 Crore in view of commercial implications on tariff. Further, CSPDCL is requested to pursue the State Government for disbursement of remaining balance of subsidy.

The summary of standalone Revenue Gap/(Surplus) approved after true up for CSPDCL for FY 2015-16, is shown in the Table below:

Table 6.17-1: Approved Revenue Gap/(Surplus) for FY 2015-16 (Rs. Crore)

Particulars	CSPDCL Petition	Approved after true-up
Aggregate Revenue Requirement (A)	9,237.45	9,562.11
Revenue Gap of FY 2013-14 allowed in Tariff Order dated May 23, 2015 (B)	-	735.00
Overall Revenue Requirement (C = A+B)	9,237.45	10,297.11
Revenue from Sale of Power (D)	8,887.04	9,474.00
Standalone Revenue Gap/(Surplus) (E = D-C)	350.41	823.11
Govt. subsidy received during the year (F)	407.25	450.00
Overall Revenue Gap/(Surplus) after adjusting Govt. subsidy (G = E-F)	(56.84)	373.11

Table 6.17-2: Summary of Approved ARR for the Control Period FY 2013-14 to FY 2015-16 (Rs. Crore)

Sr. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
	Expenses			
1	Power Purchase Cost	6540.66	7801.17	8072.37
2	Employee Expenses (Incl. Interim Wage Relief)	561.76	637.97	765.34
3	Administrative and General Expenses	128.97	121.43	143.00
4	Repair and Maintenance charges	96.8	123.65	121.91
5	Pension & Gratuity Payment	89.71	187.19	217.87
6	Interest and finance charges	78.28	102.79	86.90
7	Interest on Consumer Security Deposits	68.62	83.7	91.17
8	Interest on Working Capital Requirement	(30.98)	(34.06)	(49.38)
9	Depreciation	110.46	120.83	149.10
10	Income tax	0.00	0.00	0.00
11	Provision for Bad debts	0.00	0.00	0.13
12	Prior Period Expenses	84.98	0.09	0.04
13	Adjustment on account of review order	-	-	4.00
	Sub-total Expenses	7,729.26	9,144.76	9,602.46

Sr. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
	Return on Equity	154.66	187.02	192.92
A	Gross ARR Total Expenses plus RoE	7,883.92	9,331.78	9,795.37
	Revenue			
18	Non-Tariff Income	199.50	208.27	119.09
19	Income on Excess Consumer Security Deposits	0	0.00	0.00
20	STOA Charges	51.93	58.53	66.07
21	Revenue from retail Sale	5753.99	7092.95	8,941.98
22	Revenue from Inter State Sale	799.69	473.64	532.02
B	Total Revenue	6,805.11	7,833.39	9,659.16
	Licensee's Share in Gain/(Loss) on account of O&M Expenses	(3.78)	(33.71)	(48.10)
C	Standalone Revenue Gap/(Surplus)	1075.03	1464.68	88.11

7 REVISED ENERGY CHARGES FOR CSPGCL FOR FY 2017-18

7.1 Determination of revised energy charges

In MYT Order dated March 31, 2016, the Commission had estimated variable cost for CSPGCL stations in accordance with MYT Regulations, 2015. The variable cost for each generating stations were computed by considering the norms of operation and GCV as specified in the MYT Regulations, 2015.

There were various representations from the stakeholders regarding the VCA levied to the consumers. In view of this the Commission has decided to re-visit the FCA charges of CSPGCL. It is observed that there was a significant increase in the landed price of coal with respect to the estimated figure in the Tariff Order FY 2016-17. The Commission asked CSPGCL to submit notifications of CIL and Govt. of India regarding prices of coal and other applicable taxes. Based on the notifications submitted by CSPGCL and the actual GCV of the coal as fired and actual landed cost of coal, the energy charge has been re-estimated in this Order for FY 2017-18. The revised estimated energy charge rate has been used as an input to determine power purchase cost for CSPDCL for FY 2017-18. Further, the Commission directs CSPGCL to bill FCA on the basis of actual GCV and actual cost of coal in FY 2017-18. The revised estimated energy charge rate for FY 2017-18 are shown below:

Table 7.1-1: Revised Variable Cost for CSPGCL stations for FY 2017-18

Particulars	DSPM		KTPS		HTPS		KWTPP	
	MYT Order 2016	Revised Estimate	MYT Order 2016	Revised Estimate	MYT Order 2016	Revised Estimate	MYT Order 2016	Revised Estimate
Landed Cost of Coal (Rs./MT)	1525.70	1921.22	1405.74	1641.03	1295.00	1690.52	1295.00	1690.52
Landed Cost of Oil (Rs./kl)	32270	32270	32262	32262	38919	38919	38919	38919
GCV of Coal (kcal/kg)	3280.29	3449.20	2967.00	3080.85	3356.00	3406.33	3356.00	3400.59
GCV of Oil	10000	10000	10000	10000	10000	10000	10000	10000
Normative SHR	2500	2500	3110	3110	2650	2650	2375	2375
Normative Sp. Oil	0.50	0.50	2.00	2.00	0.80	0.80	0.50	0.50
Normative Aux Consumption	9.00%	9.00%	11.25%	11.25%	9.70%	9.70%	5.25%	5.25%
ECR for Coal (Rs/kWh)	1.275	1.527	1.650	1.855	1.129	1.452	0.965	1.243

Particulars	DSPM		KTPS		HTPS		KWTPP	
	MYT Order 2016	Revised Estimate	MYT Order 2016	Revised Estimate	MYT Order 2016	Revised Estimate	MYT Order 2016	Revised Estimate
ECR for Oil (Rs/kWh)	0.018	0.018	0.073	0.073	0.034	0.034	0.021	0.021
Energy charges (Rs/kWh)	1.293	1.545	1.722	1.927	1.163	1.487	0.986	1.264

* In view of shutdown required for ESP work, Normative parameters for HTPS in the MYT order were relaxed. However as the ESP work may take some time, in the instant order the normative sp. oil consumption has been revisited to 0.8 ml/kwh subject to relaxation at the time of true up based on actual shutdown for the approved capital works.

Table 7.1-2: Approved Cost for FY 2017-18

Sl.	Particulars	Units	FY 2017-18			
			KTPS	HTPS	DSPM	KWTPP
1	Annual Fixed Cost	Rs. Crore	328.62	504.86	492.86	713.29
2	Energy Charge Rate (ex-bus power plant basis)	Rs/kWh	1.927	1.487	1.545	1.264
3	Contribution to P&G	Rs. Crore	50.59	52.37	8.60	8.47

7.2 Statutory and Other Charges for FY 2017-18

As regards, the applicability of the statutory charges, CSERC MYT Regulations, 2015 specifies as under:

1. Regulation 35.1 specifies that the Statutory Taxes and Duties shall be recoverable on reimbursement basis, as per actual.
2. Further, Regulation 38.5.1(f) specifies that water charges shall be pass through in tariff on reimbursement basis.

In view of the above Regulations, Statutory charges such as duty & cess (if any), water charges, SLDC charges etc. shall be recoverable from CSPDCL on reimbursement basis, as per actual. Similarly, the expenses incurred by CSPGCL for start-up power, shall be billed to CSPDCL separately in the same manner as statutory and other charges, and shall be reimbursed by CSPDCL.

As regards charges towards CSR activities, the Companies have to incur the same from their net profits, and the same cannot be passed through to the consumers.

7.3 Billing for FY 2017-18

It is stipulated that the recovery of fixed cost shall be through station-wise capacity charges in accordance with the formulae specified in Regulation 41.1, 41.2 and 41.3 of MYT Regulations, 2015; while recovery of energy charges shall be through the station-wise energy charge rate (in Rs/kWh) in accordance with the formulae specified in Regulation 41.6 of the MYT Regulations, 2015. It may be apposite to note that AFC does not comprise of contribution to P&G Fund, SLDC charges, water charges and other statutory charges. CSPGCL shall raise the amount approved towards contribution to P&G Fund in twelve equal monthly instalments in its monthly bill raised for power supply to the CSPDCL. SLDC charges, water charges, start up power and other statutory charges shall be claimed on reimbursement basis. Further, in case of thermal stations, the bimonthly increase in the primary fuel cost for FY 2017-18 shall be recovered as per the Fuel Cost Adjustment mechanism specified in Regulation 67 of the MYT Regulations, 2015. As per Regulation 67.3 of the MYT Regulations, 2015, CSPGCL shall compute the CHFC for each thermal generating stations separately for each month based on actual GCV of the coal as fired and actual landed cost of coal and convey the bi-monthly amount to CSPDCL for payment as part of Fuel Cost Adjustment by 30th of the month following the last date of the bi-monthly period. For example, the CHFC for the month April and May shall be conveyed by 30th June, and for June and July by 30th August, and so on. CHFC shall be computed for existing thermal generating stations of CSPGCL, i.e., KTPS, HTPS, DSPM and KWTPP and new generating Stations or Units to be commissioned during the year. The variation in secondary fuel oil GCV and Cost shall be considered at time of truing up for the respective year. The amount of CHFC (in Rupees) payable by CSPDCL shall be paid in two equal monthly instalments. For the bi-monthly period April and May, CSPGCL shall raise the bill for CHFC for bimonthly period in two equal monthly instalments in the month of August and September. Bills for bi-monthly period June and July, CSPGCL shall raise the bill for CHFC for bi-monthly period in two equal monthly instalments in the month of October and November. Similar schedule shall be followed for payment of CHFC for other bi-monthly period in the financial year.

The due FCA charges of CSPGCL for the period December 2016 to March 2017 shall be claimed by CSPGCL and shall be paid by CSPDCL from the month of April 2017 to July 2017.

8 REVISED ARR FOR FY 2017-18

8.1 Sales Projections

CSPDCL's Submission

CSPDCL submitted that there are various factors that have an impact on the actual consumption of electricity and are often beyond the control of the Licensee, such as Government Policy, economic climate, weather conditions, force-majeure events like natural disasters, change in consumption mix, etc. CSPDCL submitted that the MYT Regulations, 2015 also categorise sales mix and quantum of sales as uncontrollable factors.

CSPDCL submitted that the Commission in its Tariff Order dated April 30, 2016 had merged HV and EHV categories into supply at HV voltage level, which was made effective from April 1, 2016. Therefore, for projecting the category-wise energy sales for FY 2017-18, CSPDCL has categorized the sales prior to FY 2016-17 based on redefined categories/sub-categories such that the total actual category-wise sales is the same. CSPDCL has considered the past growth trends in each consumer category for projecting the sales for FY 2017-18.

CSPDCL submitted that it has computed Compounded Annual Growth Rates (CAGR) from the past sales for each category for the past 5-year period FY 2010-11 to FY 2015-16, the 4-year period FY 2011-12 to FY 2015-16, the 3-year period FY 2012-13 to FY 2015-16, the 2-year period FY 2013-14 to FY 2015-16, along with the year-on-year growth rate of FY 2015-16 over FY 2014-15.

Subject to the specific characteristics of each consumer category, CSPDCL has chosen the 5-Year CAGR as the basis of sales projection for most categories. For example, if an abnormal growth rate (very high) relative to the current trend, was observed at the beginning of the five-year period, then the maximum growth considered by CSPDCL is 10% in that particular category/sub-category. Further, if the 5-year CAGR is less than 10%, then CSPDCL has considered the actual growth. In case where the past data shows a declining trend, nil growth has been considered by CSPDCL.

CSPDCL submitted that for making projections of sales and connected load/number of consumers, the actual sales for FY 2015-16 for each consumer category has been considered as the base and the CAGR has been applied over the actual sales for FY 2015-16 to make projections for each category for FY 2016-17; and for projections for FY 2017-18.

Further, for projection of number of consumers, sales and connected load of subcategories/slabs of any consumer category, CSPDCL has used the ratio of sales in the sub-category to total sales of the category observed in FY 2015-16.

Commission's View

For more realistic sales projection for FY 2017-18, the Commission asked CSPDCL to submit the actual category-wise sales for the period from April 2016 to February 2017, which were submitted by CSPDCL.

Based on actual sales for 11 months in FY 2016-17, the Commission had projected the category-wise sales for FY 2017-18 based on past trends. To analyse the past trends, the Commission has computed the 5-year, 4-year, 3-year and 2-year CAGR along with year-on-year increase in sales. Based on the category-wise past trend observed, appropriate CAGR has been selected to project the sales for FY 2017-18. The category-wise sales projected by CSPDCL and approved by the Commission has been discussed in the paragraphs below:

LV-1: Domestic Consumers including BPL consumers

CSPDCL's Submission

CSPDCL submitted that as per the available annual accounts data at the end of FY 2015-16, it has 37.03 lakh Domestic Consumers including BPL Consumers. It has recorded a 5-year CAGR of 5.87% (on overall basis), and the same has been used to project the sales at 5526.48 MU (*stated as 4666.43 MU in the Petition*) for FY 2017-18.

Commission's View

CSPDCL has projected 5526.48 MU sales to this category as compared to the sales of 5981.29 MU approved in the MYT Order. CSPDCL has separately projected sales for BPL and Domestic consumers, however, in line with the approach adopted in previous Tariff Orders, the Commission has projected the sales for domestic category consumer inclusive of consumption of BPL category.

The sales to domestic category has increased at a CAGR of 11.45% over the last five years, 10.48% over the last four years, 10.64% over the last three years, 8.88% over the last two years, and 12.26% year-on-year, based on the estimated revised sales for FY 2016-17.

As the growth trend is almost steady, the Commission has considered the 5-year CAGR of 11.45% for projection of sales to the domestic category over the estimated

sales for FY 2016-17. The Commission has estimated sales to domestic category (including BPL) at 5838.33 MU for FY 2017-18.

LV-2.1: Non-Domestic Consumers

CSPDCL's Submission

CSPDCL submitted that for the Non-domestic category it has recorded a 5-year CAGR of 8.96% and the same has been considered for projecting sales of 954.81 MU for FY 2017-18.

Commission's View

CSPDCL has projected 954.81 MU sales to this category as compared to the sales of 974.80 MU approved in the MYT Order.

The sales to Non-domestic category has increased at CAGR of 9.39% over the last five years, 8.58% over the last four years, 8.28% over the last three years, 9.76% over the last two years, and 13.50% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 4-year CAGR of 8.58% for projection of sales to Non-domestic category on the estimated sales for FY 2016-17. The Commission has estimated sales to Non-domestic category at 990.70 MU for FY 2017-18.

LV-2.2: Non-Domestic Consumers (Demand Based Tariff)

CSPDCL's Submission

CSPDCL submitted 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.

Commission's View

CSPDCL has projected 27.76 MU sales to this category as compared to the sales of 51.31 MU approved in the MYT Order. The sales to non-domestic consumers (demand-based tariff) had increased at CAGR of 53.83% over the last five years, 47.63% over the last four years, 52.43% over the last three years, 57.56% over the last two years, and 55.87% year-on-year based on the estimated sales for FY 2016-17.

As there has been a substantial and consistent increase in the sales to this category, the Commission has considered the 5-year CAGR of 53.83% for projection of sales over the estimated sales for FY 2016-17. The Commission has estimated sales to Non-domestic category (demand-based tariff) at 55.02 MU for FY 2017-18.

LV 3: Agriculture Consumers

CSPDCL's Submission

CSPDCL submitted that the Agriculture category has shown a sudden increase in sales in FY 2015-16 of about 31.49% with the sales recorded at 3540.54 MU. The increase may be attributed to the metering of the agriculture consumers and the drought in the State of Chhattisgarh. Therefore, considering increase on the sales of FY 2015-16 based on past trends would be inappropriate, therefore, it has considered an increase of 10%.

Commission's View

CSPDCL has projected 4284.05 MU sales to this category as compared to the sales of 3932.09 MU approved in the MYT Order.

The sales to agriculture category has increased at CAGR of 11.26% over the last five years, 12.04% over the last four years, 16.73% over the last three years, 14.89% over the last two years, and 0.38% year-on-year based on the estimated sales for FY 2016-17.

As the past trend in growth is uneven, the Commission has considered the 5-year CAGR of 11.26% for projection of sales over the estimated sales for FY 2016-17. The Commission has estimated sales to Agricultural category at 3954.17 MU for FY 2017-18.

LV 4: Agriculture Allied Services

CSPDCL's Submission

CSPDCL submitted that it has considered an increase of 6% for projecting sales for this category.

Commission's views

CSPDCL has projected 19.37 MU sales to this category as compared to the sales of 17.26 MU approved in the MYT Order. The sales to Agriculture Allied Services category has increased at CAGR of 8.35% over the last five years, 4.82% over the last four years, 6.86% over the last three years, 6.90% over the last two years, and 12.06% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 3-year CAGR of 6.86% for projection of sales over the estimated sales for FY 2016-17. The Commission has estimated sales to Agriculture Allied Services category at 19.87 MU for FY 2017-18.

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 equivalent to 5-year CAGR as a smooth trend is observed over the past five years.

Commission's Views

CSPDCL has projected 571.81 MU sales to this category as compared to the sales of 492.25 MU approved in the MYT Order. The Commission has observed a negative CAGR of -1.33% over the last five years, -1.75% over the last four years, -4.85% over the last three years, -7.77% over the last two years, and -16.14% year-on-year based on the estimated sales for FY 2016-17. The negative CAGR is because of the estimated lower sales in FY 2016-17, which could be on account of the tariff increase effected for FY 2016-17 in the MYT Order. In the three years till FY 2015-16, the sales to this category has ranged from 516 MU to 530 MU.

As discussed subsequently in the Tariff Philosophy section, the Commission has rationalised the tariffs applicable to this category, in order to encourage consumption and also utilise the surplus power within the State rather than sell the same at lower rates outside the State. The Commission has considered an increase of 20% in sales to LT Industry in FY 2017-18 over the estimated sales in FY 2016-17, and has accordingly approved sales at 533.53 MU for FY 2017-18, which is very close to the actual sales in the three years till FY 2015-16.

LV 6: Public Utilities

CSPDCL's Submission

CSPDCL submitted that the Public Utilities category comprising of street lights and public water works has shown a smooth growth trend in the past. Therefore, a CAGR of 10% has been considered appropriate for considering the growth in Sales.

Commission's Views

CSPDCL has projected 347.82 MU sales to this category as compared to the sales of 300.62 MU approved in the MYT Order. The sales to this category consumers had increased at CAGR of 9.90% over the last five years, 6.20% over the last four years, 4.72% over the last three years, 3.86% over the last two years, and 6.16% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 4-year CAGR of 6.20% for projection of sales

over the estimated sales for FY 2016-17. The Commission has estimated sales to Public Utilities category at 324.07 MU for FY 2017-18.

LV 7: Temporary

CSPDCL's Submission

CSPDCL submitted that it has considered notional increase of 10% year on year for projection of sales to the Temporary category, due to the abnormal increase observed in the last 5 years.

Commission's Views

CSPDCL has projected 672.03 MU sales to this category as compared to the sales of 691.58 MU approved in the MYT Order. The sales to this category consumers had increased at CAGR of 30.24% over the last five years, 15.34% over the last four years, 21.24% over the last three years, 7.73% over the last two years, and 0.39% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 4-year CAGR of 15.34% for projection of sales over the estimated sales for FY 2016-17. The Commission has estimated sales to Temporary category at 643.11 MU for FY 2017-18.

HV 1: Railway Traction

CSPDCL's Submission

CSPDCL submitted that it has projected 4.76% growth for the Railway Traction category based on 5-Year CAGR.

Commission's Views

CSPDCL has projected 1070.61 MU sales to this category as compared to the sales of 922.78 MU approved in the MYT Order. As stated earlier in the True-up for FY 2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates. The sales to this category had increased at CAGR of 1.96% over the last five years, -0.86% over the last four years, 1.25% over the last three years, 0.17% over the last two years, and -2.34% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 5-year CAGR of 2.70% for projection of sales

over the estimated sales for FY 2016-17. The Commission has estimated sales of 925.64 MU for FY 2017-18 for Railways.

HV 2: Mines

CSPDCL's Submission

CSPDCL submitted that it has projected 9.85% growth for the Mines category based on the 5-Year CAGR.

Commission's Views

CSPDCL has projected 561.20 MU sales to this category as compared to the sales of 604.19 MU approved in the MYT Order. As stated earlier in the True-up for FY 2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates. In the MYT Order dated April 30, 2016, the Commission had created a separate category for Mines and re-categorised sales based on voltage level on which supply is taken. The sales for FY 2017-18 have been projected for the entire category as a whole and then apportioned based on past actual sales.

The sales to Mines category had increased at CAGR of 14.53% over the last five years, 15.15% over the last four years, 16.64% over the last three years, 22.16% over the last two years, and 35.45% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 5-year CAGR of 14.53% for projection of sales over the estimated sales for FY 2016-17. The Commission has estimated sales to Mines category at 698.39 MU for FY 2017-18.

HV 3: Other Industrial & General Purpose Non-Industrial

CSPDCL's Submission

CSPDCL submitted that it has projected growth of 9.19% for the first two sub-categories based on 5-Year CAGR and for the next two sub-categories, notional 10% increase has been considered over the previous FY as the 5-Year CAGR was abnormal.

Commission's Views

CSPDCL has projected 3358.04 MU sales to this category as compared to the sales of 2750.05 MU approved in the MYT Order. As stated earlier in the True-up for FY

2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates. The Sales for FY 2017-18 have been projected for the entire category as a whole and then apportioned based on past actual sales.

The sales to this category has increased at CAGR of 3.67% over the last five years, 2.13% over the last four years, -0.79% over the last three years, -10.51% over the last two years, and -18.53% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 4-year CAGR of 2.13% for projection of sales over the estimated sales for FY 2016-17. The Commission has estimated sales to Other Industrial and General Purpose Non-Industrial category at 2287.52 MU for FY 2017-18.

HV 4: Steel Industries

CSPDCL's Submission

CSPDCL submitted that it has projected 10% notional increase for the first sub-category as it was showing an abnormal increase based on 5-Year CAGR, and for the next three sub-categories, sales have been projected based on 5-Year CAGR.

Commission's Views

CSPDCL has projected 3990.85 MU sales to this category as compared to the sales of 4618.27 MU approved in the MYT Order. As stated earlier in the True-up for FY 2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates. The Sales for FY 2017-18 have been projected for the entire category as a whole and then apportioned based on past actual sales.

The sales to Steel category has increased at CAGR of 5.23% over the last five years, 7.96% over the last four years, 11.53% over the last three years, 10.83% over the last two years, and 10.77% year-on-year based on the estimated 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 2017-18 on the basis of 4-year CAGR of 7.96%. The Commission has estimated sales to Steel category at 4566.76 MU for FY 2017-18.

HV 5: Low Load Factor Industries

CSPDCL's Submission

CSPDCL submitted that Low Load Factor Industries category has recorded a negative 5-year CAGR of -2.54%, therefore, it considered 0% growth rate for sales projection for FY 2017-18.

Commission's Views

CSPDCL has projected 84.32 MU sales to this category as compared to the sales of 79.35 MU approved in the MYT Order. As stated earlier in the True-up for FY 2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates. The sales to Low Load Factor Industries category has increased by CAGR of 3.30% over the last five years, CAGR of 4.22% over the last four years, CAGR of -1.99% over the last three years, CAGR of -37.16% over the last two years and year-on-year growth of 20.93%. Considering the mixed trends in the past, the Commission has considered the 4-year CAGR of 4.22% for estimating the Sales to HV 5 tariff category. The sales to HV 5 Tariff category is estimated as 107.15 MU for FY 2017-18.

HV 6: 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 5-year CAGR of 0.92%, which has been considered for projecting sales to this category for FY 2017-18.

Commission's Views

CSPDCL has projected 120.61 MU sales to this category as compared to the sales of 73.15 MU approved in the MYT Order. As stated earlier in the True-up for FY 2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates. The sales to HV 6 category had increased at CAGR of 0.53% over the last five years, 2.61% over the last four years, 3.62% over the last three years, 6.99% over the last two years, and 1.47% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 4-year CAGR of 2.61% for projection of sales over the estimated sales for FY 2016-17. The Commission has estimated sales to HV-6 category at 119.45 MU for FY 2017-18.

HV 7: Residential

CSPDCL's Submission

CSPDCL submitted that residential category has recorded a negative 5-year CAGR of -0.11 %, hence, it has considered 0% growth rate for sales projection for FY 2017-18.

Commission's Views

CSPDCL has projected 190.76 MU sales to this category as compared to the sales of 262.41 MU approved in the MYT Order. As stated earlier in the True-up for FY 2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates.

The sales to HV 7 category has increased at CAGR of -0.23% over the last five years, 1.63% over the last four years, 2.31% over the last three years, 4.96% over the last two years, and 2.83% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered the 3-year CAGR of 2.31% for projection of sales over the estimated sales for FY 2016-17. The Commission has estimated sales to HV-7 category at 194.44 MU for FY 2017-18.

HV 8: Start-up Power

CSPDCL's Submission

CSPDCL has considered Nil increase for projecting the Sales to Start-up Power.

Commission's Views

CSPDCL has projected 43.14 MU sales to this category as compared to the sales of 38.67 MU approved in the MYT Order. As stated earlier in the True-up for FY 2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates. The sales to HV 8 category has increased at CAGR of -5.73% over the last five years, 27.92% over the last four years, 77.58% over the last three years, 144.04%

over the last two years, and 151.68% year-on-year based on the estimated sales for FY 2016-17.

The Commission has considered a reduction while projecting sales over the estimated sales for FY 2016-17. As Marwa TPP has been commissioned in FY 2016-17, it is estimated that sales in HV8 category will reduce in FY 2017-18. The Commission has estimated sales to HV-8 category at -49.35 MU for FY 2017-18.

HV 9: 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, due to unavailability of projection-able data.

Commission's Views

CSPDCL has projected 1.50 MU sales to this category as compared to the sales of 1.27 MU approved in the MYT Order. As stated earlier in the True-up for FY 2015-16, CSPDCL has incorrectly considered the sales in kVAh for FY 2015-16 and projected the sales for FY 2017-18 on these incorrect values, as a result of which, CSPDCL's sales projections to the HV categories is higher than the Commission's estimates. HV 9 category has shown a 2-year CAGR of 81.07% and year-on-year increase of 41.69%. As the growth rates are abnormally high on account of the low base, the Commission has estimated a 10% increase in sales to HV 9 category and accordingly estimated sales of 1.89 MU for FY 2017-18.

HV 11: Temporary

CSPDCL's Submission

CSPDCL submitted that it has considered notional increase of 10% year on year for projection of Sales to the Temporary category, due to abnormal increase observed in the last 5 years.

Commission's Views

CSPDCL has projected 5.52 MU sales to this category as compared to Nil sales approved in the MYT Order. The Commission has accepted CSPDCL's projection of sales to this category in the absence of past data, and has estimated sales of 5.52 MU for FY 2017-18.

8.1.1 Overall Sales

The summary of the category-wise sales for FY 2017-18 approved in the MYT Order, projected by CSPDCL, and approved in this Order, is shown in the Table below:

Table 8.1-1: Consumer category-wise sales estimated by the Commission for FY 2017-18 (MU)

Particulars	MYT Order 2016	CSPDCL Petition	Approved in this Order
LV Category	12441.18	12,404.14	12,358.78
LV 1: Domestic Including BPL	5981.29	5,526.48	5,838.33
LV 2: Non-Domestic (Normal Tariff)	974.80	954.81	990.70
LV 2.1: Non-Domestic (Demand Based Tariff)	51.31	27.76	55.02
LV 3: Agriculture – Metered	3932.09	4,284.05	3,954.17
LV 4: Agriculture - Allied Activities	17.26	19.37	19.87
LV 5: LT Industry	492.25	571.81	533.53
LV 6: Public Utilities	300.62	347.82	324.07
LV 7: IT Industries	-	-	-
LV 8: Temporary	691.58	672.03	643.11
HV Category	9350.15	9,426.54	8,956.11
HV 1: Railway Traction	922.78	1,070.61	925.64
HV 2: Mines	604.19	561.20	698.39
HV 3: Other Industrial and General Purpose Non-Industrial	2829.40	3,358.04	2,287.52
HV 4: Steel Industries	4618.27	3,990.85	4,566.76
HV 5: Low Load Factor Industries	79.35	84.32	107.15
HV 6: Irrigation & Agriculture Allied Activities, Public Water Works	73.15	120.61	119.45
HV 7: Residential	262.41	190.76	194.44
HV 8: Start-up Power Tariff	38.67	43.14	49.35
HV 9: Industries related to manufacturing of equipment for RE power generation	1.27	1.50	1.89
HV 10: Information Technology Industries	-	-	-
HV 11: Temporary Connection	-	5.52	5.52
Total Sales for FY 2017-18	21,791.33	21,830.68	21,314.89

8.2 ENERGY Losses & Energy Balance

CSPDCL's Submission

For computing Energy Losses and Energy Balance, CSPDCL has considered the weighted average inter-State Transmission Loss of the Western Region over the last 12 months, i.e., 3.76%, and the Intra-State Transmission Loss of 3.22% approved by

the Commission in the MYT Order for CSPTCL. CSPDCL submitted that it has considered distribution loss below 33 kV of 21% for FY 2017-18 as specified in the MYT Regulations, 2015.

Commission's Views

The Commission has considered energy loss below 33 kV of 21% for FY 2017-18 as specified in the MYT Regulations, 2015. The Energy Balance for FY 2017-18 has been projected by considering the projected voltage-wise sales for FY 2017-18, approved energy loss level below 33 KV for FY 2017-18, and the approved intra-State Transmission Loss of 3.22% for FY 2017-18. The Commission has considered the inter-State Transmission Loss level of 3.69%, which is the average of the actual loss level for January 2016 to January 2017.

The Energy Balance approved by the Commission for FY 2017-18 is shown in the Table below:

Table 8.2-1: Energy Balance approved by the Commission for FY 2017-18

Particulars	Formulae	MYT Order 2016	CSPDCL Petition	Approved
LV Sales	A	12441	12,404.14	12,358.78
HV Sales (11 kV & 33 kV)	B	6422	6,355.73	6,493.56
Sub-total	C=A+B	18863	18,759.87	18,852.33
Distribution Loss below 33 kV (%)	D	21.00%	21.00%	21.00%
Distribution Loss below 33 kV (MU)	E	5014	4,986.80	5,011.38
Gross Energy requirement at 33 kV level	F=C+E	23877	23,746.66	23,863.72
Less: Direct Input to distribution at 33 kV level	G	1625	177.91	177.91
Net Energy Input required at Distribution Periphery at 33 kV level	H=F-G	22252	23,568.76	23,685.81
Sales to HV consumers (132 kV & 220 kV)	I	2928	3,070.81	2,462.56

Particulars	Formulae	MYT Order 2016	CSPDCL Petition	Approved
Net Energy requirement at Distribution periphery	J=H+I	25,180	26,639.57	26,148.37
Distribution loss including EHV Sales	K	18.71%	18.60%	19.04%
Intra-State Transmission loss (in %)	L	3.22%	3.22%	3.22%
Intra-State Transmission loss (in MU)	M	838	886.33	869.99
Net energy requirement at Transmission periphery	N=J+M	26018	27,525.90	27,018.36

8.3 Power Purchase Expenses

CSPDCL's Submission

CSPDCL submitted that it had broadly categorised the sources of energy into State-Owned Generation, i.e., Generation from CSPGCL, Allocation (firm and non-firm) from Central Generating Stations (CGS), Captive Power Plants (CPPs), Independent Power Producers (IPPs), Biomass, and Solar Power Plants and Short-Term/UI/Bilateral purchases, etc. CSPDCL further submitted that new Central and State Generating Plants are scheduled to commence generation during FY 2017-18 and projected the available generation from these sources based on the expected commissioning date.

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 old Central Generating Stations like Korba Super Thermal Power Station, Vindhyachal Thermal Power Station, Sipat Super Thermal Power Station, Kahalgaon Super Thermal Power Station, Mauda Super Thermal Power Station and Tarapur Atomic Power Stations to meet its energy requirement. Under new Central Generating Stations, CSPDCL has signed a PPA with Lara STPS, which is expected to get commissioned by April 1, 2017.

CSPDCL submitted that it has considered the average energy charge (excluding FSA) in the four months from April 16 to August 16 for projecting the energy charge for FY 2017-18. The fixed charge of the relevant station has been escalated at a nominal rate of 5% Y-o-Y based on latest Tariff Order as approved by the Central Electricity Regulatory Commission (CERC). Further, while estimating the costs, CSPDCL has considered only the fixed and energy charge and has estimated that any cost over and above would be passed though on actual basis.

As regards LARA STPS, CSPDCL submitted that while estimating the power purchase cost for FY 2017-18, it has considered the average power purchase cost at Rs 3.50/kWh.

The summary of the power purchase quantum and cost as submitted by CSPDCL for CGS is shown in the Table below:

Table 8.3-1: Power Purchase from CGS as projected by CSPDCL

Station	FY 2017-18	
	MU	Rs. Crore
Korba STPS	1507.71	294.22
Korba STPS (Unit VII)	550.24	172.48
Vindhyachal Stage 3	691.33	202.88
Vindhyachal Stage 4	411.84	188.45
Vindhyachal Stage 5	252.94	83.28
SIPAT STAGE 1	2086.45	605.68
Sipat STPS Stage II	1053.22	293.78
NTPC Mauda	409.86	257.01
NTPC+SAIL (NSPCL)	297.95	99.12
Lara STPS Unit I	2784.80	974.68
Lara STPS Unit II	1617.48	566.12
Kahalgaoon Stage II	182.63	68.59
Tarapur (Unit 3 & 4)	303.97	88.85
Hirakud	13.95	2.73
Total	12164.35	3897.87

Power Purchase from State Generating Stations

CSPDCL submitted that it has allocation of 2312.20 MW (excluding Marwa 1000 MW) from CSPGCL. While projecting the power purchase from CSPGCL, CSPDCL has considered the MYT Order dated April 30, 2016 and has considered the phasing

out of Units of Korba (Phase I), i.e., availability of 87.50 MW in FY 2017-18.

CSPDCL submitted that while estimating the costs, it has considered the fixed and energy charge as approved by the Commission in its MYT Order dated April 30, 2016 and has estimated that any cost over and above would be passed though on actual basis. The quantum of energy purchased from each generating station of CSPGCL is also based on PLF approved by the Commission for FY 2017-18 in the MYT Order dated April 30, 2016.

CSPDCL submitted that 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 period from April 16 to August 16.

CSPDCL submitted that it will directly sell the entire power procured from Marwa to Telangana in FY 2017-18 under back to back arrangement. Further, a trading margin of Rs 0.07/kWh has been estimated by CSPDCL on sale to Telangana from Marwa as per CERC (Fixation of Trading Margin) Regulations, 2010 for FY 2017-18. CSPDCL has considered the technical specifications and rate for Marwa as approved by the Commission in its MYT Order dated April 30, 2016.

The total power purchase cost along with quantum from CSPGCL as projected by CSPDCL is shown below:

Table 8.3-2: Power Purchase from CSPGCL as projected by CSPDCL

Particulars	FY 2017-18	
	MU	Rs. Crore
KTPS	1714.28	674.41
DSPM	3387.93	939.52
HTPS	4942.28	1135.97
Korba West Extension	3527.54	1069.58
HPS Bango	271.26	49.65
Korba Mini Hydro	4.38	1.71
SHP Gangrel	25.75	9.51
SHP Sikasar	24.04	6.61
Kawardha co-generation plant (Biomass)	47.70	22.75
Total	13945.15	3909.70

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, in its MYT Order dated April 30, 2016, it 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 2017-18 with an increase of 0.50% in solar.

Table 8.3-3: Minimum quantum of electricity to be procured through renewable sources

Category	FY 2017-18
Solar	1.50%
Bio Mass	3.75%
Other RE (Hydro, Wind, Co-generation etc.)	2.50%

CSPDCL submitted that in FY 2015-16, it had purchased solar power from SECI and in addition, it would be purchasing additional 100 MW from October 2017 onwards to meet the solar requirement. It has estimated Power Purchase from Solar at the cost of Rs 6.50/kWh, whereas power purchase from Biomass and Other RE has been estimated at Rs. 5.50/kWh and Rs. 5.00/kWh, respectively. Based on the above, the quantum of renewable energy to be purchased by CSPDCL for FY 2017-18 is shown in the Table below:

Table 8.3-4: Purchase of RPO in FY 2017-18 as projected by CSPDCL

Particulars	MU	Rs Crore
Bio Mass	957.96	526.88
Solar	536.35	348.63
Other RE (Hydro, Wind, Co-generation, etc.)	353.89	176.94
Total	1848.19	1052.45

Power Purchase from Concessional Sources

CSPDCL submitted that it has projected additional 68.50 MW additional capacity from concessional power purchase sources as per current availability at Rs 1.90/kWh and Rs 2.00/kWh during FY 2017-18, as shown in the Table below:

Table 8.3-5: Concessional Power Purchase as projected by CSPDCL

Particulars	FY 2017-18	
	MU	Rs. Crore
At Rs 2.00/kWh	112.13	22.43
At Rs 1.90/kWh	2,404.80	456.91
Total	2516.92	479.34

Power Purchase from Short-Term Sources

CSPDCL submitted that considering the demand-supply gap for FY 2017-18, it has projected power to be procured from short-term sources at the rate of Rs. 3.50 per unit.

Transmission Charges – Inter-State, Intra-State & CSLDC Charges

CSPDCL submitted that it has to pay Transmission Charges to PGCIL for use of transmission facilities enabling power drawal from the 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 July 28, 2016.

As regards intra-State transmission and CSLDC charges, CSPDCL submitted that it has considered values as approved in MYT Order dated April 30, 2016.

Inter-State Sale

CSPDCL submitted that electricity from Marwa TPP would be directly sold to Telangana under a back to back arrangement with a trading margin of Rs 0.07/kWh and the balance surplus power in FY 2017-18 would be sold at Rs 2.28/kWh as per latest seven months (IEX- April 16 to October 16) rate for sale of power in Chhattisgarh Region.

CSPDCL submitted that 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 sale of surplus energy is always with the objective of maximising the revenue from such sale and to pass on the accrued benefit to the retail consumers.

Commission's Views

CSPDCL's submissions and assumptions have been analysed in detail and additional

information was asked on the same. The power purchase expenses have been estimated based on the energy requirement assessed above. The Commission has approved the Power Purchase Expenses for FY 2017-18 in the following manner:

- (a) The quantum of power purchase from CSPGCL Stations has been considered as approved in the MYT Order.
- (b) CSPDCL has proposed that the power generated from Marwa would be sold to Telangana. The Commission has accepted the proposal of CSPDCL and accordingly the trading margin has been considered while computing revenue of CSPDCL from sale of power to Telangana.
- (c) The purchase from new Generating Station of NTPC, i.e., Lara STPS have been estimated by considering Unit 1 operating at 85% PLF for 120 days. At present no power purchase has been estimated from Unit 2 of Lara STPP. It may be noted that the PPA between CSPDCL and NTPC-Lara is under consideration before the Commission, and the inclusion of this quantum of energy in the power purchase of CSPDCL does not imply de-facto approval for the PPA.
- (d) 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 percentage is applicable to the quantum of sales to LV, HV and EHV categories for CSPDCL in FY 2017-18:

Year	Solar	Non-Solar	Total
2017-18	2.0%	7.0%	9.0%

- (e) The quantum of purchase of Renewable Energy has been considered based on the actual purchase in the first 7 months of FY 2016-17. The shortfall in Solar and Non-Solar RE purchase has been considered as being met through purchase of Renewable Energy Certificates (REC) at the floor rates of Rs. 3.50 per kWh and Rs. 1.50 per kWh for Solar and Non-Solar REC, respectively.
- (f) Purchase of unscheduled power from various sources of around 100 MW available to CSPDCL has been considered at 50% PLF.
- (g) To meet the demand supply gap, if any, CSPCDL has proposed to purchase short term power at the weighted average rate of Rs. 3.50 per unit. Whereas, for the inter-state sales, CSPDCL has proposed rate of Rs. 2.28 per unit. CSPDCL has submitted that the proposed rate of inter-state

sale is based on exchange rate. It is surprising that if CSPDCL is procuring power the purchase rate will be high, where as selling rate will be considerably lesser. This logic is not acceptable. CSPDCL has also stated that the sale of surplus power is not within the regulatory purview. It has already been upheld by the Hon'ble APTEL that in Appeal No. 41 & 67 of 2015 and Appeal No. 89 of 2011 if the power purchase is regulated then the sale of power is also regulated.

- (h) The Commission has estimated 1000 MU purchase from short-term sources at Rs. 2.60 per unit to meet the demand supply gap, if any, on real time basis. The actual weighted average rate for short term purchase from market for seven months in FY 2016-17 is Rs. 2.57 per unit, based on the same the Commission has considered Rs. 2.60 per unit. CSPDCL may procure short term power as and when required to meet its demand requirement and ensure that weighted average rate of such purchase is within Rs. 2.60 per unit.
- (i) The actual rates of power purchase for different sources of power, other than CSPGCL, in the first 7 months of FY 2016-17, i.e., April to October 2016, have been considered as the base rate of power purchase in FY 2016-17.
- (j) A marginal increase of 3% has been considered on the above rates, and any further variation in rates will be adjusted through the FCA and VCA mechanism.
- (k) In case of CSPGCL, energy rate has been computed based on actual GCV and actual landed price of coal in FY 2016-17.
- (l) The Purchase from concessional sources has been considered at Rs. 1.60 per kWh provisionally rather than Rs. 1.90 per kWh and Rs. 2.00 per kWh proposed by CSPDCL. The rate of Rs. 1.90 per kWh and Rs. 2.00 per kWh has not been approved by the Commission. CSPDCL has been directed in the past to get the rate for such purchase approved, however, CSPDCL has been continuing this adhoc rate for years, without getting the rate approved. The Commission directs CSPDCL to get the rate for such purchase approved at the earliest, and the Commission shall true-up the cost of such purchase from the date of effectiveness of such tariff determination, after approval of the rate. For the purpose of this Order, the Commission has considered the rate of Rs. 1.60 per kWh, with the

reference of the rate approved for Lanco Amarkantak by the Haryana Electricity Regulatory Commission, which had approved the rate of Rs. 1.53 per kWh for 2014 in Case No. HERC/PRO – 05 of 2014.

- (m) The average rate for purchase of unscheduled power has been estimated as Rs. 1.30 per kWh.
- (n) The inter-State transmission charges payable to PGCIL have been accepted as projected by CSPDCL for FY 2017-18.
- (o) The intra-State transmission charges have been considered based on the ARR of CSPTCL approved in the MYT Order dated April 30, 2016.
- (p) The SLDC charges have been considered based on the ARR of CSLDC approved in the MYT Order dated April 30, 2016.
- (q) The revenue from sale of surplus energy has been subtracted from the overall power purchase cost. The weighted average rate for sale of surplus power has been estimated as Rs. 2.30 per kWh as proposed by CSPDCL. However, CSPDCL should endeavour to maximize the revenue from inter-state sale of electricity. Also to the extent possible, the surplus power should be sold to the consumers within the State.

8.3.1 Summary of Power Purchase Cost

The summary of power purchase cost as submitted by CSPDCL and approved by the Commission in this Order, is shown in the Table below:

Table 8.3-6: Power Purchase Cost for FY 2017-18

Sr.	Particulars	MYT Order 2016			CSPDCL Petition			Approved		
		MU	Rs. Crore	Rs/ kWh	MU	Rs. Crore	Rs/ kWh	MU	Rs. Crore	Rs/ kWh
1	Central Generating Stations	14192.67	4322.37	3.05	12,164.35	3,897.87	3.20	8,339.46	3,075.14	3.66
<i>a</i>	<i>NTPC</i>	<i>13069.42</i>	<i>3963.68</i>	<i>3.03</i>	<i>11,548.48</i>	<i>3,707.17</i>	<i>3.21</i>	<i>7,723.56</i>	<i>2,867.92</i>	<i>3.71</i>
<i>b</i>	<i>NTPC - SAIL (NSPCL)</i>	<i>322.76</i>	<i>131.20</i>	<i>4.06</i>	<i>297.95</i>	<i>99.12</i>	<i>3.33</i>	<i>297.95</i>	<i>111.97</i>	<i>3.76</i>
<i>c</i>	<i>NPCIL</i>	<i>786.61</i>	<i>225.41</i>	<i>2.87</i>	<i>303.97</i>	<i>88.85</i>	<i>2.92</i>	<i>303.97</i>	<i>92.44</i>	<i>3.04</i>
<i>d</i>	<i>Others</i>	<i>13.88</i>	<i>2.08</i>	<i>1.50</i>	<i>13.95</i>	<i>2.73</i>	<i>1.96</i>	<i>13.95</i>	<i>2.81</i>	<i>2.02</i>
2	State Generating Stations	13778.02	3090.35	2.24	13,945.15	3,909.70	2.80	14,650.82	4,411.74	3.01
<i>a</i>	<i>CSPGCL - Thermal</i>				<i>13,572.03</i>	<i>3,819.47</i>	<i>2.81</i>	<i>14,277.69</i>	<i>4,324.10</i>	<i>3.03</i>
<i>b</i>	<i>CSPGCL - Renewables</i>				<i>373.13</i>	<i>90.22</i>	<i>2.42</i>	<i>373.13</i>	<i>87.64</i>	<i>2.35</i>
3	IEX/PXIL/Traders	585.76	205.01	3.50	89.83	31.44	3.50	1,000	260.00	2.60
4	Concessional Power - Through CSPTrdCL	2154.96	410.39	1.90	2,516.92	479.34	1.90	2,516.92	402.71	1.60
5	Others - Renewables	1719.19	946.46	5.51	1,848.19	1,052.45	5.69	1,111.41	684.83	6.16
<i>a</i>	<i>Biomass</i>	<i>1024.20</i>	<i>562.93</i>	<i>5.50</i>	<i>957.96</i>	<i>526.88</i>	<i>5.50</i>	<i>864.15</i>	<i>528.01</i>	<i>6.11</i>
<i>b</i>	<i>Solar</i>	<i>273.12</i>	<i>177.53</i>	<i>6.50</i>	<i>536.35</i>	<i>348.63</i>	<i>6.50</i>	<i>238.72</i>	<i>152.76</i>	<i>6.40</i>
<i>c</i>	<i>Hydel/Other RE</i>	<i>421.87</i>	<i>206.00</i>	<i>4.88</i>	<i>353.89</i>	<i>176.94</i>	<i>5.00</i>	<i>8.54</i>	<i>4.06</i>	<i>4.75</i>
6	Unscheduled sources							438.00	56.94	1.30
7	REC Purchase								144.69	
8	Transmission Charges		1272.07		-	1,350.72	-		1,350.72	
<i>A</i>	<i>Interstate Transmission Charges</i>		<i>341.63</i>			<i>420.28</i>			<i>420.28</i>	

Sr.	Particulars	MYT Order 2016			CSPDCL Petition			Approved		
		MU	Rs. Crore	Rs/ kWh	MU	Rs. Crore	Rs/ kWh	MU	Rs. Crore	Rs/ kWh
B	Intrastate Transmission Charges		916.80			916.80			916.80	
D	CSLDC Charges		13.64			13.64			13.64	
9	Gross Power Purchase Cost	32430.60	10246.65	3.16	31,411.52	11,017.98	3.51	27,678.60	10,327.52	3.73
10	Less: Adjustments		48.99		3,290.20	798.77	2.43	788.68	181.40	2.30
A	Sale of Surplus Power if any	4252.31*	1424.52*	3.35	3,290.20	749.38	2.28	788.68	181.40	2.30
B	Trading Income from Sale to Telangana		48.99			49.39			49.39	
11	Net Power Purchase Cost	32430.60	10197.66	3.14	27,274.25	9,922.74	3.64	26,889.93	10,096.73	3.75

Note: *Considered separately in MYT Order, and not reduced from power purchase expense

8.4 Revised ARR for FY 2017-18

Based on the above, the ARR approved by the Commission for FY 2017-18 is shown in the Table below:

Table 8.4-1: ARR approved by the Commission for FY 2017-18

Sr. No.	Particulars	FY 2017-18		
		MYT Order 2016	CSPDCL Petition	Approved
A	Power Purchase Expenses	8,773.14	9,922.74	10,096.73
1	<i>Power Purchase Cost (Net of Bilateral Sale, Transmission & SLDC Charges and Trading Income)</i>	7,501.07	8,572.02	8,803.84
2	<i>Interstate Transmission charges (PGCIL)</i>	341.63	420.28	362.45
3	<i>Intrastate Transmission Charges</i>	916.80	916.80	916.80
4	<i>CSLDC Charges</i>	13.64	13.64	13.64
B	Operation & Maintenance Expenses	1,482.61	1,482.61	1,482.61
1	Net Employee Expenses	818.72	818.72	818.72
2	Net Administrative and General Expenses	144.69	144.69	144.69
3	Net Repair and Maintenance charges	134.47	134.47	134.47
4	<i>Terminal Benefits (Pension & Gratuity)</i>	325.83	325.83	325.83
5	<i>Interim Wage Relief</i>	58.90	58.90	58.90
C	Interest & Finance Expenses	294.96	294.96	229.37
1	<i>Interest on Loan</i>	195.75	195.75	195.75
2	<i>Interest on Security Deposit</i>	99.21	99.21	99.21
3	<i>Interest on Working Capital Requirement</i>	-*	-	-
D	Other Expenses	380.02	380.02	380.02
1	<i>Depreciation</i>	154.69	154.69	154.69
2	<i>Return on Equity</i>	225.33	225.33	225.33
E	Less: Non-Tariff Income	402.12	402.12	355.11
1	<i>Non-Tariff Income</i>	277.21	277.21	277.21
2	<i>Income on Consumer Security Deposit- Notional</i>	47.01	47.01	-
3	<i>Wheeling Charges, Open Access & Cross Subsidy Charges</i>	77.90	77.90	77.90
F	Annual Revenue Requirement	10,528.60	11,678.21	11,833.62

Note: * - shown under Interest on Working Capital based on revised numbers

8.5 Revenue at existing tariff

CSPDCL's Submission

CSPDCL submitted that it has computed Revenue from Sale of Power for FY 2017-18 based on the tariff determined by the Commission in MYT Order dated April 30, 2016. CSPDCL has estimated the Revenue from sale of electricity at existing tariff as Rs. 12,949.14 Crore.

Commission's View

The Commission has estimated the revenue from sale of electricity as Rs. 13,614.66 Crore, on the basis of the prevailing tariff and applicable terms & conditions as specified in Tariff schedule for each consumer category, and the category-wise sales projected by the Commission, as discussed earlier. It should be noted that the prevailing VCA of Rs. 0.50 per kWh has been merged with the existing tariff, as the prevailing fuel costs have been factored in while projecting the power purchase costs. The VCA charges for December 2016 and January 2017 is Rs. 164 Crore. Therefore, the Commission has estimated Rs. 328 Crore as impending VCA charges for the period December 2016 to March 2017. **Hence, VCA charges for the period December 2016 to March 2017 shall not be billed to retail consumers.**

8.6 Standalone Revenue Gap/(Surplus)

The Commission has considered the balance estimated FCA amount of Rs. 350 Crore of FY 2016-17 (December 2015 to March 2017) that is yet to be recovered, to the ARR of FY 2017-18, so that there is no incidence of VCA in the first month itself. Subsequently, depending on the movement of fuel and power purchase prices, the FCA and VCA will be recovered as specified in the MYT Regulations, 2015.

As the FCA amount pertaining to generation stations for the period December 2016 to March 2017 has been considered as an expense in the ARR of FY 2017-18, CSPDCL should pay the amount claimed by CSPGCL towards FCA for the above stated months in the months of April to July 2017.

Based on the estimation of ARR and Revenue at existing tariff, the standalone revenue gap/(surplus) for FY 2017-18 approved by the Commission is shown in the Table below:

**Table 8.6-1: Standalone Revenue Gap/(Surplus) approved by the Commission
for FY 2017-18**

Particulars	FY 2017-18	
	CSPDCL Petition	Approved
Annual Revenue Requirement	11,678.21	11,833.62
Balance FCA to be recovered	-	350.00
Total Annual Revenue Requirement	11,678.21	12,183.62
Revenue from Sale of Power at Existing Tariff	12,949.14	13,614.66
Standalone Revenue (Deficit)/Surplus	1,270.94	1,431.04

9 CUMULATIVE REVENUE GAP/(SURPLUS)

9.1 Cumulative Revenue Gap/(Surplus)

CSPDCL's Submission

CSPDCL submitted that it has shown a cumulative Revenue Surplus/(Deficit) of Rs 60.68 Crore on account of true up of FY 2015-16. The standalone surplus/ (deficit) for FY 2017-18 has been projected at Rs 1270.94 Crore. The Commission has approved a Regulatory Asset of Rs 760.80 Crore in the MYT Order dated April 30, 2016, which was to be amortized in the next two years, i.e., in FY 2017-18 and FY 2018-19. CSPDCL proposed to amortize the full Regulatory Asset in FY 2017-18 itself. As a result, the cumulative deficit at the start of FY 2017-18 as submitted by CSPDCL is Rs. 741.04 Crore. Further, CSPDCL has considered the additional claim on account of error admitted by the Commission in the Order dated December 8, 2014 in Petition No 35/2014 (T) under para 16, i.e., Rs 3.92 Crore, which along with carrying cost has been estimated at Rs. 5.79 Crore. Besides, CSPDCL has considered the Revenue (Gap)/Surplus of CSPGCL at Rs (389.87) Crore, CSPTCL at Rs (55.78) Crore and CSLDC at Rs. 0.11 Crore, respectively. CSPDCL has calculated the Carrying Cost at 12.80% as per MYT Regulations, 2015.

Commission's View

In the truing up of FY 2015-16, the Commission had observed that CSPDCL has not claimed the Revenue Gap of FY 2013-14 and to that extent CSPDCL has understated the Revenue Gap/(Surplus) for FY 2015-16. The Commission has adjusted the revenue gap/(surplus) of CSPGCL, CSPTCL and CSLDC for FY 2013-14 in their respective ARRs for FY 2015-16. After adjusting the gap/(surplus) of previous years, the resultant revenue gap/(surplus) of CSPGCL, CSPTCL and CSLDC for FY 2015-16 have been considered while computing cumulative gap/(surplus) to be allowed for CSPDCL for FY 2017-18.

The Commission has also considered the amortization of Regulatory Asset of Rs. 760 Crore in FY 2017-18 as proposed by CSPDCL. Hence, the cumulative Revenue Gap/(Surplus) at the beginning of FY 2017-18 as determined by the Commission is Rs. 1257.80 Crore.

The Commission has approved the standalone gap/(surplus) of Rs. (1429.94) Crore for FY 2017-18 as shown in the Table above. Carrying Cost/(Holding Cost) on Revenue Gap/(Surplus) for FY 2015-16 has been computed at the weighted average

interest rate of 13.04% and for FY 2017-18 has been computed at 12.80% in accordance with MYT Regulations, 2015.

The cumulative Revenue Gap for CSPDCL for FY 2017-18, after considering all the above Revenue Gap/(Surplus) of CSPDCL, CSPGCL, CSPTCL, and SLDC for FY 2015-16, approved by the Commission is shown in the Table below:

Table 9.1-1: Approved Cumulative Revenue Gap/(Surplus)

Sr. No	Particulars	FY 2017-18	
		CSPDCL Petition	Approved
1	Revenue Gap/(Surplus) for FY 2015-16	(56.84)	373.11
a)	Interest rate considered	13.50%	13.04%
b)	(Holding)/ Carrying cost for half year in FY 2015-16	(3.84)	24.33
2	Closing Gap(Surplus) for FY 2015-16	(60.68)	397.44
3	Opening Gap/(Surplus) for FY 2016-17	(60.68)	397.44
a)	Regulatory Asset to be amortized	760.80	760.80
b)	Total Gap/(Surplus)	700.12	1158.24
c)	Interest rate considered	12.80%	12.80%
d)	(Holding)/ Carrying cost for full year in FY 2016-17	40.92	99.56
4	Closing Gap/(Surplus) for FY 2016-17	741.04	1257.80
5	Opening Gap/(Surplus) for FY 2017-18	741.04	1257.80
a)	Standalone Gap/(Surplus)	(1,270.94)	(1431.04)
b)	Claim to be adjusted against Review Order dated 8 Dec 2014 in Petition No 35/2014 (T)	5.79	5.79
c)	CSPGCL/CSPTCL/CSLDC Gap/(Surplus)	445.54	222.67
(i)	CSPGCL		329.80
(ii)	CSPTCL		(103.21)
(iii)	CSLDC		(3.12)
d)	Closing Gap/(Surplus)	(78.56)	56.33
e)	Interest Rate (%)	12.80%	12.80%
f)	Holding/ Carrying cost for half year in FY 2017-18	21.20	34.93
6	Total Closing Revenue Gap/(Surplus)	(57.36)	91.26

The Average Cost of Supply approved by the Commission for FY 2017-18 is shown in the Table below:

Table 9.1-2: Approved Average Cost of Supply for FY 2017-18

Particulars	Approved
ARR for FY 2017-18 (Rs. Crore)	12,183.62
Total Estimated Sales for FY 2017-18 (MU)	21,314.89
Average Cost of Supply (Rs./kWh)	5.72
Adjusted ARR for FY 2017-18 after considering the Cumulative Revenue (Gap)/Surplus (Rs. Crore)	13,669.09
Average Cost of Supply on adjusted ARR (Rs./kWh)	6.41

10 TARIFF PRINCIPLES AND TARIFF DESIGN

10.1 Voltage wise Cost of Supply (VCOS)

As regards tariff determination on the basis of Voltage-wise Cost of Supply (VCOS), the Commission had asked CSPDCL to submit the calculations. CSPDCL submitted the calculation of VCOS for FY 2015-16 and FY 2017-18.

Table 10.1-1: VCOS for FY 2015-16 as submitted by CSPDCL

Sr. No	Particulars	Units/ Formulae	FY 2015-16			
			EHV	33 kV	11 kV and LV	Total
1	Sales	MU	2,675.51	5,817.49	10,423.45	18,916.45
2	Loss	%	3.22%	4.85%	18.56%	
3	Cumulative Loss	%	3.22%	8.07%	26.63%	
4	Net Energy Input	MU	2,764.53	6,328.17	14,206.69	23,299.39
5	Loss Difference Apportioned as per ATE	MU	178.66	408.96	918.10	1,505.72
6	Gross Energy Input	MU	2,943.18	6,737.13	15,124.80	24,805.11
7	Net Power Purchase Cost including Transmission Charges	Rs Cr.	895.06	2,048.85	4,599.64	7,543.55
8	Other Cost	Rs Cr.	239.58	520.94	933.38	1,693.90
9	Gap Cost for only for FY 17 including Past Gaps as per latest petition	Rs Cr.				
10	Total Cost	Rs Cr.	1,134.64	2,569.78	5,533.03	9,237.45
11	Voltage Wise Cost to Serve	Rs/kWh	4.24	4.42	5.31	4.88

Table 10.1-2: VCOS for FY 2017-18 as submitted by CSPDCL

Sr. No	Particulars	Units/ Formulae	FY 2017-18			
			EHV	33 kV	11 kV and LV	Total
1	Sales	MU	3,070.81	6,355.73	12,404.14	21,830.68
2	Loss	%	3.22%	4.85%	16.15%	
3	Cumulative Loss	%	3.22%	8.07%	24.22%	
4	Net Energy Input	MU	3,172.98	6,913.66	16,368.62	26,455.26
5	Loss Difference Apportioned as per ATE	MU	98.23	214.03	506.73	818.99
6	Gross Energy Input	MU	3,271.21	7,127.69	16,875.35	27,274.25
7	Net Power Purchase Cost including Transmission Charges	Rs Cr.	1,190.11	2,593.15	6,139.47	9,922.73
8	Other Cost	Rs Cr.	246.93	511.08	997.45	1,755.46
9	Gap Cost for only for FY 17 including Past Gaps as per latest petition	Rs Cr.	0.00	0.01	0.01	0.02
10	Total Cost	Rs Cr.	1,437.04	3,104.23	7,136.93	11,678.21
11	Voltage Wise Cost to Serve	Rs/kWh	4.68	4.88	5.75	5.35

Commission's View

The Hon'ble APTEL in its Judgment dated March 24, 2015 in Appeal No. 103 of 2012, ruled as under on the issue of determination of tariff and cross-subsidy with reference to the voltage-wise cost of supply:

*"68. This Tribunal in the various judgments from the year 2006 onwards has repeatedly stated that **the tariffs have to be determined considering both the overall average cost of supply of the distribution licensees and the voltage-wise cost of supply.** The principles laid down by this Tribunal are as under:-*

"i) The cost of supply referred in Section 61(g) is the cost of supply to the consumer category and not overall average cost of supply.

ii) The cross subsidy for a consumer category is the difference between cost to serve that category of consumer and average tariff realization for that category of consumer.

iii) **The State Commission has to determine the category wise cost of supply as well as overall average cost of supply to all the consumers of the distribution licensee.**

iv) While the cross subsidies have to be reduced progressively and gradually in the manner specified by the Appropriate Commission so as to avoid tariff shock to the subsidized categories of consumers, it is not the intention of the legislation that cross subsidies have to be eliminated. Therefore, it is not necessary that the tariff should be the mirror image of actual cost of supply to the concerned category of consumer and to make the cross subsidy zero.

v) The subsidizing consumers should not be subjected to disproportionate increase in tariff so as to subject them to tariff shock.

vi) The State Commission should fix a limit of consumption for the subsidized consumer categories and once a consumer exceeds that limit he has to be charged at normal tariff.

vii) Tariff for consumer below the poverty line will be at least 50% of the average cost of supply. **Tariffs for all other categories should be within $\pm 20\%$ of the overall average cost of supply for the distribution licensee by the end of 2010-11.**

viii) The tariffs can be differentiated according to consumer's load factor, voltage, total consumption of electricity during specified period or the time or the geographical location, the nature of supply and the purpose for which electricity is required. For example, the consumers in domestic category can be differentiated from the consumers in Industrial category or commercial category on the basis of purpose for which electricity is required.

ix) **The Tribunal in Appeal no. 102 of 2010 and batch in Tata Steel case has also given a formulation for determination of voltage-wise cost of supply in the absence of availability of detailed data."**

69. This Tribunal in Tata Steel Ltd. gave a method for determination of cost of supply for different consumer categories. **It was held that in the absence of segregated network costs, it would be prudent to work out voltage-wise cost of supply taking into account the distribution losses at different voltage levels as a first major step in the right direction. As power purchase cost is a major component of tariff, apportioning the power purchase cost at different voltage levels taking into account the distribution loss at the relevant voltage level and the upstream system will facilitate determination of voltage-wise cost of supply. Thus, a practical method was suggested to reflect the consumer-wise cost of supply. However voltage-wise cost of supply would also require determination of distribution loss at different voltage levels of the distribution system."**

The Commission has taken due cognisance of the submissions of CSPDCL. It has been observed that the computation of VCOS submitted by CSPDCL is incorrect as cumulative losses cannot be arrived at by simply adding different loss levels.

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 average cost of supply for the Distribution Licensee. However, 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 higher voltages. However, due to historical reasons, this objective cannot be achieved immediately, and hence, a gradual movement initiated the MYT Order dated March 31, 2016 has been carried forward in this Order.

Table 10.1-3: VCOS for FY 2017-18 as calculated by Commission

Sr. No.	Particulars	Units	FY 2017-18			
			EHV	33 kV	11 kV and LV	Total
1	Energy Sales	MU	-	5,939.46	12,912.87	18,852.33
2	Distribution Loss	%	-	4.85%	26.72%	21.00%
3	Energy input at 33 kV	MU	-	6,242.21	17,621.50	23,863.72
4	Energy input to discom level	MU	-	46.54	131.37	177.91
5	Net input at 33 kV Level	MU	-	6,195.67	17,490.13	23,685.81
6	EHV Sales	MU	2,462.56	-	-	2,462.56
7	Energy requirement for Distribution	MU	2,462.56	6,195.67	17,490.13	26,148.37
8	Transmission Loss	%	3.22%	3.22%	3.22%	3.22%
9	Energy requirement at G<>T Interface	MU	2,544.49	6,401.81	18,072.05	27,018.36
10	Avg. Power Purchase Cost Rate	Rs./kWh	3.76	3.76	3.76	3.76

11	Power Purchase Cost	Rs. Crore	955.52	2,404.05	6,786.54	10,146.12
12	Other Cost	Rs. Crore	223.86	539.94	1,173.86	1,937.66
13	Total Cost	Rs. Crore	1,179.39	2,943.99	7,960.41	12,083.78
14	Energy Sales	MU	2,462.56	5,939.46	12,912.87	21,314.89
15	Cost of Supply	Rs./kWh	4.79	4.96	6.16	5.67

10.2 Tariff Proposal

CSPDCL has proposed following changes in its Tariff Proposal:

10.2.1 HV-3 Other Industrial and General Purpose Non-Industrial

Tariff:

It is proposed to merge the part of existing HV-5: Low Load Factor Industries with this category based on load factor. Further, the existing HV-5: Low Load Factor Industries category is now proposed to be removed.

Supply Voltage HV- 4(a)	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
220 kV supply	375	5.30
132 kV supply	375	5.35
33 kV supply (Load factor >15%)	375	5.70
33 kV supply (Load factor ≤15%)	100	6.85
11 kV supply (Load Factor >15%)	375	6.05
11 kV supply (Load Factor ≤15%)	100	7.25

10.2.2 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, 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:

It is proposed to merge the part of existing HV-5: Low Load Factor Industries with this category based on load factor. Further, the existing HV-5: Low Load Factor Industries category is now proposed to be removed.

Supply Voltage HV- 4(a)	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
220 kV supply	375	5.20
132 kV supply	375	5.25
33 kV supply (Load factor >15%)	375	5.30
33 kV supply (Load factor ≤15%)	100	6.85
11 kV supply (Load Factor >15%)	375	5.35
11 kV supply (Load Factor ≤15%)	100	7.25

Load Factor Rebate

The consumers of this category shall be eligible for load factor rebate on energy charges, as under:

Monthly Load Factor (LF)	Rebate
a) Monthly Load Factor is between 60% and 70% of contract demand	Every 1% increase shall be allowed a rebate of 1% each on normal energy charges calculated on entire energy consumption.
b) Monthly Load Factor is above 70% of contract demand	Every 2% hike in monthly load factor would be entitled for additional rebate of 1% on each step on normal energy charges calculated on entire energy consumption.

- *Provided that Load factor rebate payable under (a) & (b) shall not exceed an amount over maximum limit of 15% of energy charges calculated on entire energy consumption*
- *Provided that hours of load restriction enforced by CSPDCL/CSPTCL shall be excluded for calculation of load factor.*
- *Provided further 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.*

Commission's View

The Commission has accepted CSPDCL's proposal to merge the part of existing HV-5: Low Load Factor Industries with HV-4: Steel Industries and HV-3: Other Industrial and General Purpose Non-Industrial based on load factor. As regards the provisions pertaining to Load Factor Rebate, the Commission in principle agrees to the modality proposed by CSPDCL. However, taking into consideration all relevant aspects and its commercial implications, it has been decided that load factor rebate shall be given to consumers achieving load factor of 65% and above.

10.2.3 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 HV-4: Steel Industries category,

- 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

Commission's View

The Commission has accepted CSPDCL's proposal regarding additional charge for exceeding contract demand and extended it to all HV categories where TOD is applicable.

10.3 LT Categories

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 Govt. (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 a rate determined for domestic consumers in this order. The tariff for all consumption slabs of LV-1 category has been revised. In LV-1 domestic category, the Commission has split the consumption slab of 0-200 units by introducing two new consumption slabs, i.e., 0-40 units per month and 41-200 units per month, as under:

Slab 1: 0-40 units;

Slab 2: 41-200 units;

Slab 3: 201-600 units; and

Slab 4: more than 600 units.

The tariff for this category has been designed after merging prevailing energy charges and VCA.

LV-2: Non-Domestic

The tariff for all consumption slabs of LV-2 category has been increased by 2% after merging prevailing energy rates and VCA. The option for demand based tariff for non-domestic category will continue.

LV-3: Agriculture

The tariff agriculture category has been kept at 81% of ACOS. The agricultural consumers should be given the due benefit of the subsidy, if any, made available to them by the Govt. of Chhattisgarh from time to time.

LV-4: Agriculture allied activities

The tariff for all sub-categories of agricultural allied category has been increased by 1% after merging the applicable VCA and existing energy charge.

The option for demand based tariff for agriculture allied activities category will continue.

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 specified under tariff category shall be allowed for LV industries located in rural areas notified by Government of Chhattisgarh.

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, 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).

LV-6: Public Utilities

The tariff for the Public Utilities category has been kept at Average Cost of Supply.

LV-7: Information Technology Industries

The tariff for Information Technology Industries category has retained at existing level.

LT Temporary Supply

The tariff for temporary supply is maintained at one and a half times the tariff for the respective categories with permanent connection. However, in case of excess drawal of power than contracted, the billing as per provision of excess supply as in case of permanent connection shall also be applicable.

All LT installations which have welding transformers are required to install suitable capacitor(s) so as to ensure power factor of not less than 85%. Consumers not complying with the above shall have to pay surcharge of 75 (seventy-five) paisa per unit on the entire monthly consumption, provided the load of the welding transformer(s) exceeds 25% of the total connected load of connection.

10.4 HV Categories

HV-1: Railway Traction

The tariff for HV-1 category has been kept at 105% of Average Cost of Supply. Further, a load factor rebate has been introduced for Indian Railways.

HV-2: Mines

The tariff for HV-2 category has been revised. Fixed charges has been increased to

Rs. 500/kVA from existing Rs. 400/kVA. Energy charge has been increased by 15 paisa after merging existing applicable VCA and energy charge. In line with the approach adopted in MYT Order dated March 31, 2016, the tariff for supply at higher voltage has been kept lower.

HV-3: Other Industry and General Purpose Non-Industrial

The tariff for HV-3 category has been revised. There is a 3% increase in tariff for category as a whole. In line with the approach adopted in MYT Order dated March 31, 2016, the tariff for supply at higher voltage has been kept lower.

HV-4: Steel Industries

The tariff for HV-4 category has been revised. There is a 5% increase in tariff for category as a whole. In line with the approach adopted in MYT Order dated March 31, 2016, 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), a special rebate of 7% on energy charge is being provided to the consumers starting production on or after April 1, 2017.

HV-5: Low Load Factor Industries

This category has been merged with HV-3 and HV-4 in accordance with the proposal submitted by CSPDCL. There is a 3% increase in tariff for category as a whole. In line with the approach adopted in MYT Order dated March 31, 2016, the tariff for supply at 33 kV has been kept lower than supply at 11kV.

HV-6: Irrigation, Agriculture Allied Activities & Public Water Works

The tariff for HV-6 category has been revised. Energy charge has been increased by 15 paisa after merging existing applicable VCA and energy charge.

HV-7: Residential

The tariff for HV-7 category has been increased by 15 paisa after merging existing applicable VCA and energy charge.

HV-8: Start up Power

The tariff for HV-6 category has been increased by 5 paisa after merging existing applicable VCA and energy charge.

HV-9: Industries related to manufacturing of equipment for power generation from renewable energy sources

The tariff for HV-9 category has been increased by 10 paisa after merging existing applicable VCA and energy charge.

HV-10: Information Technology Industries

The tariff for HV-10 category has been retained at existing level.

10.5 Category-specific Changes

The category-specific changes approved for FY 2017-18 are elaborated below:

- i. A person having non-subsidized agriculture pump connections, then that person shall be entitled for concession of 10% on energy charge for the consumption recorded on that pump.
- ii. The Applicability of LV-1: Domestic Works category has been extended to 'zero waste centre compost unit'
- iii. **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:

Monthly Load Factor (LF)	Rebate
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

Monthly Load Factor (LF)	Rebate
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% and Above	rebate of 10% 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 that hours of load restriction enforced by CSPDCL/CSPTCL shall be excluded for calculation of load factor.

Provided further 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.

- iv. The Energy charges in the Peak Period to be billed at 115% instead of 130%. Similarly, during Non-Peak Period Energy charges to be billed at 90% instead of 70%.

10.5.1 Wheeling Charges

CSPDCL 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 10.5-1: Wheeling Charges Proposed by CSPDCL for FY 2017-18

Particulars	FY 2017-18
Total Energy Input to 33 kV distribution system (MU)	23,746.66
Distribution Cost for Wires Business (Rs. Crore)	1,284.34
Distribution Cost for 33 kV voltage level (Rs. Crore)	449.52
Wheeling Charges for 33 kV voltage level (Rs/kWh)	0.1893

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 input at 33 kV has been considered as 24,016.12 MU based on the approved Energy Balance for FY 2017-18.

For long-term, medium-term and short-term open access customers, Wheeling Charges shall be Rs. 240/MWh (or Rs. 0.240 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.

10.5.2 Revenue at Approved Tariff

Existing tariff will be applicable with effect from April 1, 2017, for the consumers of the State for FY 2017-18.

Table 10.5-2: Revenue in FY 2017-18 at Tariffs approved by the Commission

Consumer Category		Revenue (Rs. Crore)
A	LV	6,982.42
1	Domestic including BPL	2,864.94
2	Non-Domestic (Normal Tariff & Demand Based Tariff)	901.42
4	Agriculture – Metered & Allied Activities	2,064.64
6	LT Industry	425.62
7	Public Utilities	207.66
8	Temporary	518.13

Consumer Category		Revenue (Rs. Crore)
B	HV	6,831.31
1	HV1: Railway Traction	621.18
2	HV2: Mines (Coals & others)	573.49
3	HV3: Other Industry & General Purpose Industry	2,051.24
4	HV4: Steel Industries	3,198.32
5	Others	386.98
Total Revenue from LV and HV categories		13,813.73

10.5.3 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 Average Cost of Supply (Rs. 6.20 per kWh) is such that the tariffs for some categories of consumers are higher than the ACOS while the tariffs for others 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 10.5-3: Cross Subsidy with existing and approved Tariff (Rs./kWh)

Consumer Category		Approved in Tariff Order for FY 2016-17		Approved in Tariff Order for FY 2017-18	
		ABR (Rs./kWh)	ABR/ACOS (%)	ABR (Rs./kWh)	ABR/ACOS (%)
LV	Domestic	5.04	80%	4.91	77%
	Non-Domestic	8.19	136%	8.62	134%
	Agriculture	4.51	75%	5.18	81%
	LT Industry	5.72	95%	7.98	124%
	Public Utilities	5.29	88%	6.41	100%
HV	HV1: Railway Traction	6.48	107%	6.71	105%
	HV2: Mines (Coals & others)	6.75	112%	8.21	128%
	HV3: Other Industry & General Purpose Industry	7.97	132%	8.97	140%
	HV4: Steel Industries	6.87	114%	7.00	109%

The Average Billing Rate (ABR) considered in the above Table is based on the actual

average billing rate for representative sample of consumers from each category, as analysed based on actual category-wise billing data submitted by CSPDCL for FY 2016-17.

10.5.4 Cross-Subsidy Surcharge

The Commission has determined the Cross-Subsidy Surcharge 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) For 220 kV/132 kV consumers Rs. 1.68 per kWh (which is 90% of the computed value of Rs. 1.86 per kWh).
- b) For 33 kV consumers Rs. 1.26 per kWh (which is 90% of the computed value of Rs. 1.40 per kWh).

The approved Tariff Schedule for FY 2017-18 is given in Chapter 11.

The Order will be applicable from 1st April, 2017 and will remain in force till 31.03.2018 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.

11 TARIFF SCHEDULE FOR FY 2017-18

11.1 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 75 kW in case of demand based tariff or for maximum contracted load of 100 HP in case of other tariff, as applicable.

11.1.1 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	1.25	Single Phase Rs. 40/- p.m.
	41-200 units	2.60	1.30	
	201 - 600 units	3.40	2.00	Three phase Rs. 120/- p.m.
	601 and above units	4.90	2.55	

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 categories of 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.

11.1.2 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, 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. 75 per kW per month up to 3 kW and Rs. 125 per kW per month above 3 kW	5.75
	101 - 500 units		6.75
	501 and above units		8.05
LV-2.2: Non-Domestic Demand Based Tariff (for Contract demand of 15 to 75 kW)		Demand Charges- Rs 240/kW/month on billing demand	7.35

Note:

- Fixed charges for LV-2.1 are non-telescopic. For example, if connected load is 5 kW then monthly fixed charges shall be Rs. 625 per month;
- The tariff LV-2.2 will be optional.
- 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.

11.1.3 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)
LV-3: L.V. Agriculture	Rs. 80/HP/month	4.80

One 40W incandescent bulb or CFL/LED 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 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 unit.
- 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.

11.1.4 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)
LV-4.1: Up to 100 HP or 75 kW	Rs. 130 per HP per month or Rs 175 per kW per month	5.70
LV-4.2: Demand based tariff for contract demand of 15 to 75 kW	Rs. 250 per kW per month on billing demand	5.60

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 unit.
- 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.

11.1.5 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)
LV-5: L.V. Industry			
5.1	Flour mills, Hullers, power looms, grinders for grinding masalas, terracotta, handloom, handicraft, agro-processing units, minor forest produce up to 15 HP	Rs 85/HP/month	4.00
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs 85/HP/month	3.40
5.2	Other Industries		
5.2.1	Up to 25 HP	Rs. 120/HP/month	5.00
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs. 100/HP/month	4.00
5.2.2	Above 25 HP up to 100 HP	Rs. 150/HP/month	5.70
5.3	Demand based Tariff- for Contract Demand of 15 kW to 75kW	Demand charges- Rs. 220/kW/month on billing demand	5.90

***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 75 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, 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).

11.1.6 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. 130/HP/month or Rs. 175/kW/month	5.70

Note:

Fixed Charge is monthly minimum charge whether any energy is consumed during the month or not.

11.1.7 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.

11.1.8 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 to 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:

- 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.
- 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 11.1.11.
- 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.

11.1.9 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. No new L.V. connection above 75 kW of contract demand/100 HP of contracted load shall be served.
- 3. All existing L.V. connections with contracted load above 100 HP (75 kW), which have not availed H.T. supply so far shall be levied 35% additional charge on total amount of monthly bill comprising fixed charge/demand charge and energy charge.
- 4. Contracted load/connected load or contract demand/maximum demand in fraction shall be rounded off to the next whole number.
- 5. 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.

6. 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.

11.1.10 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 unit on the entire consumption of the month.
2. All the agriculture pump connections of above 3 HP shall provide 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 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.
5. **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.
6. 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.
7. 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 to the satisfaction of CSPDCL.
8. 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 bill.
9. 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 unit on the entire consumption of that month in which he maintains an average monthly power factor equal or above 0.90 and @ 15 paise per unit of entire consumption of that month in which he maintains an average monthly power factor 0.95 or above.

11.1.11 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 base 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-5.3/LV-4.2/LV- 2.2) 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-5.3/LV-4.2/LV- 2.2) 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.

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 Charge**

Variable Cost Adjustment (VCA) charges to be recovered for previous year's consumption for the period December 2016 to March 2017 shall not be billed to retail consumers.

VCA charge on consumption from April 1, 2017 as per the formula and conditions specified in the 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.

11.2 Tariff Schedule for High Voltage (HV) Consumers

11.2.1 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	5.00

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 2017-18.
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.

11.2.2 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

11.2.3 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, 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	5.90
132 kV supply	375	6.00

Supply Voltage HV- 3	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
33 kV supply (Load factor >15%)	375	6.35
33 kV supply (Load factor ≤15%)	190	6.50
11 kV supply (Load Factor >15%)	375	6.70
11 kV supply (Load Factor ≤15%)	190	6.90

11.2.4 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	5.60
132 kV supply	375	5.75
33 kV supply (Load factor >15%)	375	6.00
33 kV supply (Load factor ≤15%)	190	6.50
11 kV supply (Load Factor >15%)	375	6.10
11 kV supply (Load Factor ≤15%)	190	6.90

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

Monthly Load Factor (LF)	Rebate
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% and Above	rebate of 10% 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 that hours of load restriction enforced by CSPDCL/CSPTCL shall be excluded for calculation of load factor.

Provided further 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.

11.2.5 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 by including energy used for lighting pump house.
- 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	5.50

11.2.6 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	5.90

11.2.7 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:

- Contract demand shall not exceed 10% of the highest capacity of generating unit of the generating station/captive generating plant
- 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.
- Captive generating plant which have co-located industrial load are also entitled for start-up power tariff
- 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.
- Start-up power shall also be made available to the generator/captive generating plant connected to CTU grid with proper accounting.
- This tariff shall also be applicable to generators for consumption upto COD of the plant.
- In case of 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 such financial year and such payable amount will be billed in three equal instalments after such happening comes in the notice of CSPDCL.

11.2.8 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

11.2.9 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.

11.2.10 Temporary Connection at HV**Applicability**

This tariff is applicable to all HV connections (other than the consumers availing Start up power Tariff (HV-8), 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

- 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.

11.2.11 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.)	115% of normal rate of Energy Charge
(iii) Off-peak load period (11:00 p.m. to 5:00 am of next day)	90% 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.

11.2.12 Terms and Conditions of HV Tariff

The maximum and minimum contract demand for different supply voltage 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 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.20000 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.

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 with the approval of competent authority 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 charge

Variable Cost Adjustment (VCA) charges to be recovered for previous year's consumption for the period December 2016 to March 2017 shall not be billed to retail consumers.

VCA charge on consumption from April 1, 2017 as per the formula and conditions specified in the 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.

Notwithstanding the provisions, if any, contrary to the agreement entered into by the consumer with the CSPDCL, all conditions prescribed herein shall be applicable to the consumer.

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. 67.80 Crore.

For short-term open access customer: Rs. 240/MWh (or Rs. 0.240 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 transaction at the point or points of injection.

b) Energy losses for transmission

Transmission losses at the rate 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. 240/MWh (or Rs. 0.240 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.

d) Energy losses for distribution

Distribution losses 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.

e) Operating Charges

The short-term open access customer shall pay the operation 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 paisa/kVARh

g) Cross Subsidy Surcharge

- i. For 220 kV/132 kV consumers Rs. 1.68 per kWh (which is 90% of the computed value of Rs. 1.86 per kWh).
- ii. For 33 kV consumers Rs. 1.26 per kWh (which is 90% of the computed value of Rs. 1.40 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. 11.44 per kWh (1.5 times of the average billing rate of Rs.7.63 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 15.26 per kWh (2 times of the average billing rate of Rs. 7.63 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 0.93 per kWh (which is 50% of the computed value of Rs. 1.86 per kWh).
 - b) For 33 kV/11 KV consumers Rs. 0.70 per kWh (which is 50% of the computed value of Rs. 1.40 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 open access charges.

12 DIRECTIVES TO STATE POWER COMPANIES

Certain directives were issued in previous Tariff Orders to the State Power Companies and CSLDC. Compliance submitted by them were noted and the following consolidated Company-wise directives are issued. CSPGCL, CSPTCL, CSLDC and CSPDCL should submit the quarterly report by 30th of every quarter on the compliance of directives to the Commission.

12.1 Directives to CSPGCL

- i. Detailed report of fuel cost adjustment charge should be submitted to the Commission and also be made available to the Members of State Advisory Committee. The same should also be uploaded on the website of the Company.
- ii. Quarterly Report should be submitted to the Commission on the progress of implementation of the approved CIP.

12.2 Directives to CSPTCL

- i. CSPTCL should ensure that HT and EHT connections are released in accordance with the timelines specified in the Supply Code. For this purpose, CSPTCL should coordinate with CSPDCL, and submit quarterly report to the Commission.
- ii. Quarterly Report should be submitted to the Commission on the progress of implementation of the approved CIP.
- iii. CSPTCL should maintain its financial books in a way that it reflects the expenses and revenue related to heads defined in Tariff Regulations and other applicable Regulations. For example, Revenue of CSPTCL should reflect the bills raised to CSPDCL against LTOA, MTOA and STOA charges as well as bills raised to other open access consumers against LTOA, MTOA and STOA charges. Delayed Payment Surcharge billed to CSPDCL and other open access customers (if any) should be indicated separately.

12.3 Directives to CSLDC

- i. CSLDC should continue to submit State Energy Account to the Commission on quarterly basis endorsing a copy to CSPDCL.
- ii. Quarterly Report should be submitted to the Commission on the progress of implementation of the approved CIP.

12.4 Directives to CSPDCL

- i. CSPDCL should continue to reconcile the power purchase bills according to SEA and submit reconciliation report to the Commission on quarterly basis.
- ii. CSPDCL should exert all possible efforts to minimize revenue arrears.
- iii. Quarterly Report should be submitted to the Commission on the progress of implementation of the approved CIP.
- iv. CSPDCL should ensure to serve HT connection within the time limit prescribed in the Supply Code and furnish a quarterly report on pendency of HT connections as well as the load enhancement/reduction cases with reasons for their pendency. No sooner an application for availing connection on EHT or HT is received, the same shall be uploaded on the website of CSPDCL and subsequently its status shall be updated on the website till connection is released. CSPDCL will apprise the Commission on release of EHT/HT connections as also enhancement/reduction in Contract Demand cases on monthly basis in the prescribed form being sent separately.
- v. CSPDCL should maintain its financial books in a way that it reflects the expenses and revenue related to heads defined in Tariff Regulations and other applicable Regulations.
- vi. CSPDCL should maintain the accounts in such a way that it reflects the UI charges for over-drawal and under-drawal from regional pool separately. Similarly, for State UI pool, the UI charges for over-injection, under-injection, over-drawal and under-drawal shall be shown separately. Amount billed against cross subsidy surcharge, parallel operation charges, wheeling charges, reactive energy charges, VCA charges and revenue from trading of electricity should be reflected in books of accounts. The volume of energy on the above heads shall also be indicated.
- vii. Division-wise loss reduction target and all other commitments stipulated in the UDAY Scheme shall be adhered to. Achievement made in various Schemes shall be intimated on quarterly basis to the Commission.
- viii. CSPDCL should adhere to the principles of “Merit Order Power Purchase” and follow the Internal Operating Procedure for Chhattisgarh State Grid. The quantum of power and its purchase price should be decided with due diligence and prudence.
- ix. Two O&M circles, one each in Raipur and Bilaspur region, namely Mahasamund and Janjgir – Champa, respectively, be selected and all

distribution centres (DC) under these circles shall function as independent profit centres with effect from 1st July, 2017. All necessary arrangements such as metering and other infrastructure development works shall be completed before 30th June 2017 so that DCs can function as independent profit centres. Modalities for the same shall be decided in consultation with the Commission.

- x. Meterisation of DTRs supplying power to agriculture pumps only should be completed by 31st September, 2017 so that the actual consumption gets accounted for. CSPDCL should also ensure proper meterisation of 11 kV Atal Jyoti feeders by 31st September, 2017, if not done so far.
- xi. There are some domestic and other category consumers within inhabited villages who are getting supply through 11 kV Atal Jyoti feeders laid to cater to irrigation load. CSPDCL shall extend the lines to enable such consumers to get supply at par with the inhabited villages.
- xii. CSPDCL should bring awareness among the consumers on Standard of Performance (SOP) Regulations 2006, consumer rights and their responsibilities by making use of print, electronic media, etc., detailing the SOP norms and CGRFs at all field level offices up to distribution centres.
- xiii. CSPDCL should frame and propose proper modalities to consume surplus power within the State instead of selling the same outside the state at lower rate.
- xiv. While fulfilling the RE purchase obligation, CSPDCL shall comply with the notified RPO-REC Regulations. CSPDCL should ensure cost effective procurement of RE power and/or RE Certificate.

13 ANNEXURE 1

13.1 List of Persons who submitted written submissions on Petition No. 64/2016, 65/2016, 66/2016 and 67/2016

Sl.	Name
1.	Shri Rahul Morkhade (Asth. Energy Manager) M/s Bharti Infratel Ltd., H-3, Metro Tower, 4 th Floor, Sch.No.54, Near Vijay Nagar Sqare, A.B. Road, Indore
2.	Shri Kishore V. Madavi, Chief Electrical Distribution Engineer for General Manager (Electrical) South East Central Railway, Bilaspur
3.	Shri R.C.Gupta, DGM I/c Power Systems Department, SAIL. Bhilai Steel Plant
4.	Shri Manish Dhuppad, General Secretary, Chhattisgarh Mini Steel Plant Association, Samta Colony, Raipur (CG)
5.	Shri Santosh Tiwari, President, Bastar Kisan Kalyan Sangh, Jagdalpur
6.	Shri Ashok Kumar Agrawal, President, Chhattisgarh Steel Re-Rollers Association, Ramsagar Para, Raipur (CG)
7.	Shri Pramod Dubey, Mayor, Municipal Corporation Raipur (CG)
8.	Shri Pavan Kumar Agrawal, Director, Prime Ispat Ltd., Pyarelal Agrawal Marg, Ramsagar Para, Raipur (CG)
9.	Shri Ravi Tiwari, Chief Executive (Co-ordination), Shree Cement Ltd., Civil Lines, Raipur (CG)
10.	Shri Anirudhha Pande, Raipur (CG)
11.	Office of the Municipal Corporation Durg (CG)
12.	Shri Nanu Kumar Yadav, Suhaga Mandir, Brahmanpara, Raipur (CG)
13.	Shri Ravi Choudhary (Secretary General), Chhattisgarh Woven Sacks Producers' Association, Avanti Vihar, Raipur (CG)
14.	Shri Abhinav Kardekar (Advt.), Chhattisgarh Rice Bran Oil Association
15.	Shri C.P.Baid, Dy. Managing Director, Monnet Ispat & Energy Limited, Mandir Hasaud, Raipur (CG)
16.	Shri Shyam Kabra, Urla Industries Association, Urla Industrial Complex, Urla, Raipur (CG)
17.	Shri Virendra Pande, 31/666, New Shanti Nagar, Raipur (CG)

18.	Shri Ramesh Varlyani (Advt.), Chhattisgarh Pradesh Congress Committee.
19.	Shri Kamal Sarda, President, Chhattisgarh Power Producer Association, Pandri, Raipur (CG)
20.	Office of the Collector and District Magistrate, Korba (CG)
21.	Shri P. K. Khare (Gen.Secretary) Chhattisgarh Vidyut Mandal Abhiyanta Sangh, Raipur (CG)
22.	Shri Gopal Garg, VP- F&A, SKS Ispat & Power Ltd., Kurla Road, Andheri, Mumbai
23.	Shri Loknath Nayak (Kisan Mazdoor Sangharsh Samiti), Saraipali, Baloda Bazar (CG)

14 ANNEXURE 2

14.1 List of Persons who submitted comments during Hearing on Petition No. 64/2016, 65/2016, 66/2016 and 67/2016 dated 8, 9 and 10 February 2017

Sl.	Name
1.	Shri C.P.Baid, Dy. Managing Director, Monnet Ispat
2.	Shri Gopal Garg, VP- F&A, SKS Ispat & Power Ltd.
3.	Shri Vikas Agrawal, Mini Steel Plant
4.	Shri Ashok Agrawal, CG Re-rollers Association
5.	Shri Abhinav Kardekar (Advt.), Chhattisgarh Rice Bran Oil Association
6.	Shri Shyam Kabra, Urla Industries Association
7.	Shri B.K. Bhargav, M/s Uniworth Textile Industries
8.	Shri R.C.Gupta, Bhilai Steel Plant
9.	Shri Rajesh Agrawal, Mahamaya Steel
10.	Shri Virendra Pandey,
11.	Shri Aniruddha Pandey
12.	Shri Ramesh Warlyani
13.	Shri Gopal Patel
14.	Shri Loknath Nayak
15.	Shri Rajesh Patel,
16.	Shri Vidhya Charan Choudhary
17.	Shri Rajkumar Gupta
18.	Shri I.K. Verma
19.	Shri Pramod Pawar
20.	Shri Nankeshwar Patel
21.	Shri Babulal Sahu, Durg
22.	Shri Krishna Dewangan, Durg