CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION

RAIPUR

Chhattisgarh State Power Generation Co. Ltd.	......	P. No. 09/2021 (T)
Chhattisgarh State Power Transmission Co. Ltd	......	P. No. 04/2021 (T)
Chhattisgarh State Load Despatch Centre	......	P. No. 05/2021 (T)
Chhattisgarh State Power Distribution Co. Ltd.	......	P. No. 03/2021 (T)

Present: **Hemant Verma, Chairman**
Vinod Deshmukh, Member (Judicial)
Pramod Kumar Gupta, Member

In the matter of –

1. Chhattisgarh State Power Generation Company Ltd. (CSPGCL) Petition for final true-up for FY 2019-20 and determination of ARR and Tariff for FY 2021-22;
2. Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) Petition for final true-up for FY 2019-20 and determination of ARR and Tariff of FY 2021-22;
3. Chhattisgarh State Load Despatch Centre (CSLDC) Petition for final true-up for FY 2019-20 and determination of ARR and Tariff of FY 2021-22;
4. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) Petition for final true-up for FY 2018-19 and FY 2019-20, and determination of ARR and Retail Supply Tariff for FY 2021-22.

ORDER

(Passed on 02/08/2021)

1. As per provisions of the Electricity Act, 2003 (hereinafter referred as 'the Act') and the Tariff Policy, the Commission has notified the Chhattisgarh State Electricity

Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2015 (hereinafter referred as 'CSERC MYT Regulations, 2015') for determination of tariff for the generating company, licensees, and Chhattisgarh State Load Despatch Centre (CSLDC).

2. The Commission vide public notice CSERC letter 03/CSERC/Tariff 2020/1228 dated November 26, 2020 has notified the extension of CSERC MYT Regulations, 2015 for next year, i.e., FY 2021-22. Due to the intervening COVID-19 and subsequent lockdowns imposed, the new MYT Regulations could not be notified. Accordingly, the Generating Company(s) and Licensee(s) were informed to file the tariff petition for FY 2021-22 before 31st December, 2020 by adopting principles of CSERC MYT Regulations, 2015.

3. This order is passed in respect of the Petitions filed by the (i) Chhattisgarh State Power Generation Company Ltd. (CSPGCL) for approval of final true-up for FY 2019-20 and determination of ARR and Tariff for FY 2021-22, (ii) Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) for approval of final true-up for FY 2019-20 and determination of ARR and Tariff for FY 2021-22, (iii) Chhattisgarh State Load Despatch Centre (CSLDC) for approval of final true-up for FY 2019-20 and determination of ARR and Tariff for FY 2021-22, (iv) Chhattisgarh State Power Distribution Company Limited (CSPDCL) for final true-up for FY 2018-19 and FY 2019-20, and determination of ARR and retail supply tariff for FY 2021-22.

4. This order is passed under the provisions of Section 32(3), Section 45, and Section 62 read with Section 86(1) of the Act. The Commission, before passing the combined order on the above Petitions, has considered the documents filed along with the Petitions, supplementary information obtained after technical validation, suggestions emerging from the applicant Companies, the consumers, their representatives and other stakeholders during the Public Hearing.

5. The Petitions were made available on the Commission’s website. The Petitions were also available at the offices of the petitioners. A Public Notice along with the gist of the Petitions was also published in the newspapers, and objections/suggestions were invited as per the procedure laid down in the Regulations. The Commission also held a meeting with Members of the State Advisory Committee on February 22, 2021 for

seeking their valuable suggestions and comments. Further, the Commission conducted Public Hearings in physical and video conferencing mode on the Petitions in its office at Raipur on 23rd and 24th February 2021. CSPDCL submitted the audited accounts for FY 2018-19 and FY 2019-20, and the details of the variation between the amounts claimed under provisional true-up and final true-up for the respective years. On account of the reconstitution of the Commission, the Commission conducted further Public Hearings in physical and video conferencing mode on the Petitions in its office at Raipur on 19th and 20th July 2021. The Commission has finalised its views, considering the suggestions/ objections and after performing necessary due diligence on each of the issues.

6. The Commission has undertaken final true-up for FY 2019-20 for CSPTCL, CSLDC and CSPGCL and for FY 2018-19 and FY 2019-20 for CSPDCL, based on the audited accounts submitted by the Utilities and in accordance with the provisions of the CSERC MYT Regulations, 2015.

7. In the Multi-Year Tariff (MYT) order passed on March 31, 2016, the Commission had approved the ARR and tariff for the Control Period from FY 2016-17 to FY 2020-21 for the utilities, in accordance with the provisions of the CSERC MYT Regulations, 2015. Further, the Commission passed the Tariff Order for FY 2019-20 on February 28, 2019 and for FY 2020-21 on May 30, 2020.

8. The Revenue Surplus/(Gap) of CSPGCL, CSPTCL and CSLDC arising out of final true-up for FY 2019-20, along with corresponding carrying/holding cost, have been considered while computing the cumulative Revenue Surplus/(Gap) to be allowed for CSPDCL for FY 2021-22.

9. After applying the holding cost on Revenue Gap of CSPGCL for FY 2019-20, the total Revenue Gap up to FY 2021-22 has been approved as Rs. 329.75 cr.

10. After applying the holding cost on the Revenue Surplus of CSPTCL for FY 2019-20, the total Revenue Surplus up to FY 2020-21 has been approved as Rs. 46.06 cr. Similarly, after applying the carrying cost on Revenue Surplus of CSLDC for FY 2019-20, the total Revenue Surplus up to FY 2021-22 has been approved as Rs. 3.63 cr.

11. The Commission has also considered the CSPGCL Revenue Surplus of Rs. 5.72 crore, arising out of the final tariff determination of CSPGCL's Small-Mini Hydro

Plants for FY 2017-18 to FY 2023-24, as approved in the order in Petition No. 16/2021, which has to be passed on to CSPDCL. Further, CSPGCL has retired the KTPS Station, and will be earning revenue from sale of scrap, which has not been considered under NTI of CSPGCL. The Commission has provisionally considered the NTI on this account as Rs. 10 crore, which shall be trued based on actuals and prudence check at the time of true-up for FY 2021-22.

12. The cumulative Revenue Gap of CSPDCL after applying the carrying cost for FY 2018-19 and FY 2019-20 up to FY 2021-22 is computed as Rs. 2,235.39 cr. The cumulative Revenue Gap of CSPGCL, CSPTCL, CSLDC, and CSPDCL for FY 2018-19 and FY 2019-20 along with carrying cost amounting to Rs. 941.89 cr., has been considered in the ARR of CSPDCL for FY 2021-22.

13. The Commission notes that the whole country including the State of Chhattisgarh was under lockdown from March 2020 onwards because of the COVID-19 pandemic. The lockdown was lifted in a phased manner from June-July 2020 onwards. Even today, there are restrictions that need to be observed all around the country. The Government of India has declared the COVID-19 situation as a force majeure event. The Commission appreciates that most industrial and commercial establishments had to be shut down due to lockdown and have since, restarted.

14. The primary objective of the Commission is to protect the interest of the consumer and at the same time ensuring recovery of reasonable and justified cost by the utilities. The Commission in the previous Order had taken various steps to protect public interest and provided relief to the consumers and Utilities in the State of Chhattisgarh.

15. The Commission, vide its Orders dated April 21, 2020, May 1, 2020 and May 6, 2020 in Petition No. 40, 46 and 47 of 2020, respectively, has already provided certain relaxation to Generating Companies, Licensees and consumers in the State of Chhattisgarh, in order to mitigate the impact of COVID-19.

16. The Commission had determined the cumulative Revenue Gap of Rs. 303.92 Crore in the Tariff Order of FY 2020-21 and for full recovery of that Gap, a tariff hike of 3% was required. However, the Commission was of the view that increase in Tariff in situation of COVID-19 pandemic would not be appropriate and the Commission decided to continue with the Tariff approved for FY 2019-20 vide Order dated

February 28, 2019. Further, in the Tariff Order of FY 2019-20 dated February 28, 2019, the Commission had reduced the prevailing Tariff to grant relief to the consumer.

17. Now, as the State is gradually recovering from the COVID-19 situation, the Commission is of view that the Tariff Structure needs to be revised, else the accumulated Revenue Gaps will keep increasing along with associated carrying cost, which will further burden the consumers at some later date.

18. The Commission, in the MYT Order dated March 31, 2016 had approved capitalisation based on the Capital Investment Plan (CIP) for MYT Control Period. As per the CIP Petition submitted by the Utilities and the impact of COVID-19 on implementation of the approved projects, the Commission has approved the capitalisation for CSPGCL, CSPTCL, CSLDC and CSPDCL for FY 2021-22 and approved depreciation, interest on loan capital and return on equity accordingly.

CSPGCL: Tariff for FY 2021-22

19. The Commission has approved cumulative Revenue Gap of Rs. 329.75 Crore up to FY 2021-22 for CSPGCL, which shall be separately billed by CSPCGL on a monthly basis, at the rate of Rs. 27.48 Crore per month.

20. The Annual Fixed Cost (AFC) and Energy Charge Rate for CSPGCL stations, approved by the Commission for FY 2021-22, are as under:

<u>Thermal Power Stations</u>

Sl.	Particulars	Units	HTPS	DSPM	KWTPP	ABVTPP
1	Annual Fixed Cost	Rs. Cr.	516.45	444.90	628.12	1526.18
2	Energy Charge Rate (ex-bus power plant basis)	Rs./kWh	1.501	1.555	1.270	1.400
3	Contribution to Pension &Gratuity (P&G)	Rs. Cr.	104.49	38.77	23.21	63.46

<u>Hydro Power Station (Hasdeo Bango)</u>

Sl. No.	Particulars	Units	FY 2021-22
1	Approved Annual Fixed Cost	Rs. Cr.	21.94
2	Approved Net Generation	MU	271.26

Sl. No.	Particulars	Units	FY 2021-22
3	Approved Tariff	Rs./kWh	0.809
4	Contribution to P&G	Rs. Cr.	3.30

The Contribution to Pension & Gratuity approved by the Commission shall be separately billed by CSPCGL on a monthly basis.

CSPTCL: Tariff for FY 2021-22

21. For CSPTCL, the Transmission Charge for FY 2021-22 shall be as under:

Sl.	Particulars	Units	FY 2021-22
A	ARR for CSPTCL (including contribution to pension and gratuity)	Rs. Cr.	1,025.74
B	*Less*: past year cumulative revenue surplus	Rs. Cr.	46.06
C	Net Approved ARR (A-B)	Rs. Cr.	979.67
D	Monthly Transmission Charges for Medium-term and Long-term Open Access Consumers (C/12)	Rs. Cr./month	81.64
5	Short-term Open Access Charges	Rs./kWh	0.3260

Further, transmission losses of 3% for the energy scheduled for transmission at the point or points of injection shall be recoverable from Open Access customers.

CSLDC: Tariff for FY 2021-22

22. For CSLDC, the Commission has revised ARR to Rs. 11.30 Crore for FY 2021-22. Accordingly, System Operation Charges are approved as Rs. 9.04 Crore and Intra-State Market Operation Charges as Rs. 2.26 Crore for FY 2021-22.

CSPDCL: Tariff for FY 2021-22

23. For FY 2021-22, CSPDCL has sought approval for ARR of Rs. 13,523.60 cr. As against this, the Commission, after prudence check and due scrutiny, has approved the ARR at Rs. 13,416.12 cr. The State Government subsidy has not been taken into account while approving the ARR of CSPDCL for FY 2021-22. After considering the ARR and revenue from sale of electricity for FY 2021-22, stand-alone Revenue Surplus for FY 2021-22 has been estimated at Rs. 1,804.28 cr.

24. CSPDCL, in its Petition for FY 2021-22, has sought approval for cumulative Revenue Gap of Rs. 5,801.05 cr. pertaining to previous years. As against this, the Commission, after prudence check and due scrutiny, has arrived at a cumulative Revenue Gap of Rs. 2,235.39 cr.

25. After adjusting the cumulative Revenue Surplus/(Gap) of Rs. 2,746.18 Crore for CSPGCL, CSPTCL, CSLDC, and CSPDCL and the Regulatory Asset of CSPDCL, the Commission has arrived at cumulative Revenue Gap of Rs. 941.89 cr. for CSPDCL for FY 2021-22.

26. Accordingly, the net ARR for recovery through tariff for FY 2021-22 has been approved as Rs. 16,162.29 cr. for CSPDCL. The Average Cost of Supply has been approved as Rs. 6.41/kWh, compared to Rs. 5.93/kWh for FY 2020-21.

27. The Commission in the Tariff Order of FY 2019-20 dated February 28, 2020 had reduced tariff for consumer categories in order to adjust the Revenue Surplus of Rs. 539.92 Crore. Further, in the Tariff Order for FY 2020-21 dated May 30, 2020, the Commission had decided to continue with the tariff approved for FY 2019-20. In order to recover the cumulative Revenue Gap of Rs. 941.89 Crore, the Commission has approved increase in the category-wise Tariff for FY 2021-22.

28. The average increase required across all consumer categories is 6.19%, which translates to 37 paise/kWh, with the adjusted ACoS of Rs. 6.41/kWh. The Commission has revised the category-wise tariffs in such a manner that the cross-subsidies are reduced and are brought within +20% of ACoS as stipulated in the Tariff Policy, 2016, to the extent possible. Further, the Commission has reverted to the category-wise tariffs approved for FY 2018-19 (tariff in force before the tariff reduction in FY 2019-20), and then adjusted the tariffs to achieve the revenue requirement, reduce cross-subsidies, while at the same time ensuring that no category is subjected to a tariff shock.

29. The Parallel Operation Charges (POC) rates have been revised from 4 paise/kWh to 13 paise/kWh.

30. As regards rationalisation of tariff categories and category-wise tariff, the Commission has made the following changes in this Order as compared to the tariff categories approved in the previous Tariff Order:

a) Facilities like prayer hall, gymnasium, and club house within the housing society have been included in LV-1 Category.

b) Export Oriented Textile Industries has been included along with the category of Information Technology at LV-6 and HV-8 in order to promote such industries as they regenerate employment in the State. Further a two-part tariff with reduced Demand Charges and Energy Charges has been introduced in this category such that they are cross-subsidised to some extent.

c) Mushroom cultivation and fisheries have been added in HV-5 Category in line with the approach adopted for LV-3 Category.

d) The load limit for single-phase connection for LV-1 and LV-2 category has been increased from 3 kW to 5 kW.

e) The Commission has revised the Fixed Charges for LV-1 category and linked the Fixed Charges to the Connected Load. The Commission has considered three slabs for Fixed Charges, viz., Connected Load up to 5 kW, above 5 kW up to 10 kW, and above 10 kW. Both energy charges and fixed charges have been kept telescopic, which will enable the consumers in higher consumption slabs to also get the benefit of the lower energy charges in the lower consumption slabs and lower fixed charges in the lower slabs. Further, Domestic consumers shall be entitled for subsidy as per State Government Order, and their consumption shall be billed as per tariff LV-1.

f) For all LV categories for whom Fixed Charges are applicable on the basis of Connected Load, if the Recorded Demand exceeds the Connected Load for any three consecutive months, then the Connected Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Connected Load, the load enhancement charges shall be applicable; however, the Security Deposit shall not be required to be increased correspondingly. Also, if the Recorded Demand is lower than the Connected Load for any three consecutive months, then the Connected Load can be restated to the highest demand recorded in these three months at the option of the consumer.

g) In order to promote the health infrastructure in the rural areas, a discount of 7% on Energy Charges shall be applicable for private clinics, hospitals and nursing homes including X-ray plant, diagnostic centres and pathological labs, situated in rural areas as defined by Government of Chhattisgarh and all areas in Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran Notified Vide Order dated August 22, 2005.

h) A discount of 15% on Energy Charges shall be applicable for defence establishments under Government of India under HV-3 category.

i) A discount of 5% on Energy Charges shall be applicable for rice mills/Poha and murmura mills under HV-3 category.

j) A discount of 10% on Energy Charges shall be applicable for exclusive oxygen plants connected up to 33 kV supply voltage under HV-3 category.

k) In order to improve the overall Power Factor, the Commission has revised the floor level of Power Factor to 0.9 from 0.85, below which Power Factor surcharge shall be applicable on the entire consumption of the month at the rate of 35 paise/kWh or 75 paise/kWh as per existing dispensation.

l) All categories of LV consumers in whose case power factor surcharge is applicable; shall be eligible for Power Factor incentive for Power Factor of above 0.95. Such incentive shall be payable @ 1% of the energy charges for each 0.01 increase or part thereof in power factor above 0.95 up to unity power factor.

m) The consumers shall have the option to pay bills online or offline. However, bill amounts of more than five thousand rupees shall mandatorily be paid online. For bill amount less than or equal to five thousand rupees, consumer may pay the bill through cash or cheque or demand draft or electronic clearing system at designated counters of a bank or through credit or debit cards or online payment through distribution licensees' web portal or any digital mode of payment and any change or further addition in the mode of payment shall be more user friendly for the consumers than the prevailing system. Further, the distribution licensee may stipulate a suitable incentive or rebate for payment through online system for consumers who opt to pay bill amount less than or equal to five thousand rupees.

n) The Steel Industries occupy a special place in the industrial and economical scene of the State. The COVID-19 pandemic has adversely affected the economy of the State as well as the State power Utilities. As the steel industry is the core industry in the State and contributes significantly to the sales and revenue of CSPDCL, and generates employment as well as provides tax revenues to the State, the Load Factor rebate is extended to HV-4 category to enable the industry to compete in the market.

o) In the Tariff Order for FY 2020-21, the Commission had provided Load Factor rebate for LV-4 Steel category for Load Factor equal to or higher than 63%. The Commission had capped the Load Factor rebate at 8%, to be achieved at 70 % Load Factor. Based on the need to improve the Load Factor of utilisation of power supply of this important category from CSPDCL, the Commission has provided Load Factor rebate for Load Factor equal to or higher than 50% and increased the cap for Load Factor to 25%, which is to be achieved at 74 % Load Factor. Since, the objective of the rebate is to increase the utilisation of power supply from CSPDCL, this facility of Load Factor rebate shall not be applicable to those consumers in HV-4 category having captive generating facility with installed capacity above 1 MW. This will encourage higher consumption by this subsidising category, which would improve the revenue of CSPDCL.

p) In order to better utilise the surplus power available with CSPDCL especially during night off-peak hours, the tariff for night-time consumption has been reduced from 75% to 65% of normal rate of energy charge.

q) In order to alleviate the difficulties related to billing based on accumulated meter reading and to improve the accountability of CSPDCL's officers, henceforth, if the bills are not issued consecutively for three months or more for any LT Consumer, billing on accumulated meter reading shall not be raised without approval of concerned Executive Engineer of CSPDCL.

31. The approved Tariff Schedule applicable is appended herewith as **Schedule**.

32. The Order will be applicable from 1st August, 2021 and will remain in force till March 31, 2022 or till the issue of next Tariff Order, whichever is later.

33. The Commission directs the Companies to take appropriate steps to implement the Tariff Order.

Sd/-	**Sd/-**	**Sd/-**
(PRAMOD KUMAR GUPTA)	**(VINOD DESHMUKH)**	**(HEMANT VERMA)**
MEMBER	**MEMBER**	**CHAIRMAN**

CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION

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Present: **Hemant Verma, Chairman**
Vinod Deshmukh, Member (Judicial)
Pramod Kumar Gupta, Member

In the matter of –

1. Chhattisgarh State Power Generation Company Ltd. (CSPGCL) Petition for final true-up for FY 2019-20 and determination of ARR and Tariff for FY 2021-22;
2. Chhattisgarh State Power Transmission Company Ltd. (CSPTCL) Petition for final true-up for FY 2019-20 and determination of ARR and Tariff of FY 2021-22;
3. Chhattisgarh State Load Despatch Centre (CSLDC) Petition for final true-up for FY 2019-20 and determination of ARR and Tariff of FY 2021-22;
4. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) Petition for final true-up for FY 2018-19 and FY 2019-20, and determination of ARR and Retail Supply Tariff for FY 2021-22.

CORRIGENDUM ORDER

(Passed on 10/08/2021)

The following corrections are made in the Order issued by the Commission on Aug 02, 2021 in the above Petitions. In the Order, certain inadvertent typographical errors have been noticed. Accordingly, the following changes have been made in the Order.

2. In para 19 of the Order, the amount ‘Rs. 27.48 Crore’ shall be read as ‘Rs. 41.22 Crore’.

3. In para 20 of the Order, in the table for **Thermal Power Stations**, the amount ‘Rs. 628.12 Crore’, 'Rs. 1.501', 'Rs. 1.270' and 'Rs. 1.400' shall be read as ‘Rs. 625.12 Crore’, 'Rs. 1.502', 'Rs. 1.269' and 'Rs. 1.399' respectively and in the table for **Hydro Power Station (Hasdeo Bango)**, the amount ‘Rs. 21.94 Crore’ and ‘Rs. 0.809’ shall be read as ‘Rs. 24.94 Crore’ and ‘Rs. 0.920’ respectively .

4. The Commission directs the Companies to take appropriate steps to implement the Tariff Order.

Sd/-	**Sd/-**	**Sd/-**
(PRAMOD KUMAR GUPTA)	**(VINOD DESHMUKH)**	**(HEMANT VERMA)**
MEMBER	**MEMBER**	**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 Limited
CSPHCL	Chhattisgarh State Power Holding Company Limited
CSPTrCL	Chhattisgarh State Power Trading Company Limited
CSPTCL	Chhattisgarh State Power Transmission 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
HV	High Voltage
kcal	kilocalorie
kg	kilogram
kV	kilo Volt
kVA	kilo Volt-Ampere
kW	Kilo Watt
kWh	kilo Watt-hour
LV	Low Voltage
MAT	Minimum Alternative Tax
ml	Millilitre

Abbreviation	Description
MMC	Monthly Minimum Charges
MT	Metric Tonnes
MU	Million Units
MYT	Multi Year Tariff
NTI	Non-Tariff Income
O&M	Operation 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 Despatch Centre
SLM	Straight Line Method
T&D Loss	Transmission and Distribution Loss
UI	Unscheduled Interchange

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1 BACKGROUND AND BRIEF HISTORY

1.1 Background

The Chhattisgarh State Electricity Board (CSEB) was restructured by the Government of Chhattisgarh (GoCG) in pursuance of the provisions of Part XIII of the Electricity Act, 2003. GoCG, vide notification No. 1-8/2008/13/1 dated December 19, 2008. The erstwhile CSEB was unbundled into five different Companies, viz., Chhattisgarh State Power Generation Company Limited (CSPGCL), Chhattisgarh State Power Transmission Company Limited (CSPTCL), Chhattisgarh State Power Distribution Company Limited (CSPDCL), Chhattisgarh State Power Trading Company Limited (CSPTrCL), 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.

1.2 The Electricity Act, 2003, Tariff Policy and Regulations

Section 61 of the Electricity Act, 2003 (herein after referred as 'the EA, 2003' or 'the Act') stipulates the guiding principles for determination of tariff by the Commission and mandates that the tariff should progressively reflect the cost of supply of electricity, reduce cross subsidy, safeguard consumers interest and recover the cost of electricity in a reasonable manner. This Section also stipulates that the Commission while framing the Tariff Regulations shall be guided by the principles and methodologies specified by the Central Electricity Regulatory Commission for determination of the tariff applicable to generating companies and transmission licensees.

Section 62 of the Act stipulates that the Commission shall determine the tariff for:

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

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

1.3 Procedural History

The Commission notified the Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2015 (hereinafter referred to as CSERC MYT Regulations, 2015) on September 9, 2015. Based on the above Regulations, the Commission issued the MYT Order dated April 30, 2016 for CSPGCL, CSPTCL, CSLDC and CSPDCL for the control period from FY 2016-17 to FY 2020-21.

Subsequently, the Commission issued tariff order for FY 2016-17 and FY 2018-19. Further, Utilities had filed Petitions for final true-up for FY 2016-17 and provisional True-up for FY 2017-18, on which the Commission has issued Order February 28, 2019, along with Tariff for FY 2019-20.

Further, CSPGCL, CPSTCL and CSLDC had filed petitions for final true-up for FY 2017-18 and FY 2018-19, while CSPDCL filed Petition for final true-up for FY 2017-18 and provisional true-up for FY 2018-19, for which the Commission issued order on May 30, 2020, along with tariff for FY 2020-21.

The Commission vide public notice CSERC letter 03/CSERC/Tariff 2020/1228 dated November 26, 2020 has notified the extension of CSERC MYT Regulations, 2015 for the next year, i.e., 2021-22. Due to the intervening COVID-19 and subsequent lockdowns, the new MYT Regulations could not be notified. Accordingly, the Generating Company(s) and Licensee(s) was informed to file the Tariff Petition for FY 2021-22 before 31st December, 2020 by adopting principles of CSERC MYT Regulations, 2015.

CSPGCL filed the petition for approval of final true-up for FY 2019-20 and determination of ARR and tariff for FY 2021-22 for thermal generating stations and hydro electric plants on 12 January, 2021, which was registered as Petition No. 09 of 2021 (T). CSPTCL filed the Petition for approval of final true-up for FY 2019-20 and determination of ARR and transmission tariff for FY 2021-22 on 06 January, 2021, which was registered as Petition No. 04 of 2021 (T). Also, CSLDC filed the Petition for approval of final true-up for FY 2019-20 and determination of ARR & SLDC charges for FY 2021-22 on 8 January, 2021, which was registered as petition No. 05 of 2021(T). CSPDCL filed the Petition for approval of final true-up for FY 2018-19, provisional true-up of FY 2019-20 and determination of ARR and retail supply tariff for FY 2021-22 on 04 January, 2021, which was registered as Petition No. 03 of 2021(T). Subsequently, CSPDCL submitted the audited accounts for FY 2019-20 and requested the Commission for final true-up for FY 2019-20.

In this instant order, the Commission has undertaken the final true-up for FY 2019-20 and determination of ARR and tariff for FY 2021-22 for CSPGCL, CSPTCL and CSLDC in accordance with the provisions of the MYT Regulations, 2015. In case of CSPDCL, the Commission has undertaken final true-up for FY 2018-19 and FY 2019-20 and determination of revised ARR and tariff for FY 2021-22. The Commission in this order has undertaken the final true-up based on audited accounts. The Hon'ble APTEL in OP.NO.1 of 2011 has directed the State Commission to ensure that the Annual Performance review, true-up of past expenses has to be carried out on year-to-year basis.

1.4 Admission of the Petition and Hearing Process

The petitions filed by CSPDCL was registered on 6 January, 2021, CSPTCL and CSLDC on 12 January, 2021, and CSPGCL on 13 January, 2021.

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 by CSPDCL on 24 January, 2021, CSPGCL on 25 January, 2021, CSPTCL on 26 January, 2021 and CSLDC on 31 January, 2021 in the leading newspapers of the State.

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

In order to have better clarity on the data submitted by the petitioners and to remove inconsistency in the data, the Technical Validation Sessions (TVS) were held on 5 February, 2021 and 6 February, 2021 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 during TVS. The notices under Section 94(2) of the Act were published on 9 February, 2021 and 18 February, 2021 in the leading newspapers of the State. Further Notices were published on 10 July, 2021, in the leading newspapers of the State.

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-I**.

Public hearing was held on February 23 and 24, 2021. The Commission held further public hearings on July 19 and 20, 2021. The Commission has ensured that the due process as contemplated under the law to ensure transparency and public participation was followed at every stage and adequate opportunity was given to all the persons to offer their views. The list of persons who submitted comments during the hearing is annexed as **Annexure-II**.

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

1.5 State Advisory Committee Meeting

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

A meeting of the State Advisory Committee was convened on 22 February, 2021 to discuss the Petitions and seek inputs from the Committee. CSPGCL, CSPTCL, CSLDC and CSPDCL gave presentations in the meeting on the salient features of their petitions. Various aspects of the petitions were discussed by the Members of the Committee in the meeting. The list of the SAC Members who participated in the meeting in annexed as **Annexure III.**

The following suggestions and objections were submitted:

a) The loss intimated by CSPDCL is very low, i.e., of the tune of 15% whereas AT&C loss for Chhattisgarh State appearing in the website of GoI is of the tune of 34%. Therefore, the Commission should scrutinize the losses carefully. Further, the loss being projected by distribution licensee does not factor in the commercial loss. Commercial loss also needs to be factored in and should be reported in the petition.

b) Penetration of renewables should be increased by negotiating newer PPAs in the power purchase mix of the State. Solar tariff has reduced drastically over the last five years in the country. CSPDCL should aim to reduce its effective power purchase cost by sourcing solar and renewable power.

c) Efficiency of distribution licensee and transmission licensee should be improved.

d) The power purchase cost of the power being sold to Telangana State should not be included.

e) All the members suggested that the tariff should not be increased or should at least be kept at the same level.

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

2.1 Common Objection

2.1.1 Excess Claim of Contribution to Pension & Gratuity Fund and Formation of Tariff Stabilization Fund in FY 2021-22

The objector submitted that for employees of all Power Companies the Commission had allowed total contribution of Rs. 441.91 Crore in tariff order FY 2019-20 towards Pension & Gratuity (P&G) Fund. While deciding such contribution interest income to be earned on the existing volume of the fund was also projected. Power companies have now claimed additional Rs.141.81 Crore for FY 2019-20 as contribution towards P&G Fund for compensating the deficit for the year. Power companies have further claimed total contribution towards P&G Fund for FY 2021-22 as Rs.740.19 Crore without considering interest income on existing volume of such fund.

Though the power companies have not provided the details of existing volume of P&G Fund and interest income earned from it, the volume is estimated to be about Rs.4,700 Crore (opening balance of FY 2020-21), which is fetching about 6-7% annual Return on the investment, i.e., about Rs.300-310 Crore annually. Present volume of the Fund is sufficient for paying liability of P&G till at least FY 2025-26. Considering the impact of COVID-19 pandemic on the economy of the State, the State Government has decided to put on hold increments, incentives, and allowances, etc., payable to Government employees during post-COVID-19 period. The objector suggested to make a Tariff Stabilization Fund considering the impact of COVID-19 pandemic instead of allowing the proposed Contribution of Rs.740.19 Crore towards P&G Fund during FY 2021-22 and not to allow the additional claim of Rs. 141.81 Crore.

Petitioner's Reply

CSPDCL submitted that it opposes the creation of Tariff Stabilization Fund as the Contribution to P&G Fund is an approved expenditure towards the business of generation, transmission and distribution of electricity. Clause 32 of CSERC MYT

Regulations, 2015 provides for the manner and quantum of contribution by power companies to this fund. The suggestion of the objector to create Tariff Stabilization Fund is against the statutory provisions applicable for discharging pension and other terminal payments, which falls under statutory liabilities.

CSPGCL submitted that detailed explanation along with the calculation of the additional amount has been provided in Para 5.1 to 5.7 on Page No.22 and 23 of its petition. CSPGCL submitted that the calculations provided are based on the actual facts and figures.

Commission's View

Regulation 32 of the CSERC MYT Regulations, 2015 specifies principles for contribution to P&G Fund for each year of the MYT Control period. Accordingly, for FY 2021-22 the contribution to P&G Fund has been considered by escalating the P&G Contribution approved in CSERC MYT Order for FY 2020-21 by the average CPI rate recorded over last five years. Further, the excess/deficit between the estimated and actual contribution / interest income from P&G Fund has been trued-up. The issue of P&G contribution for FY 2021-22 and the deficit of FY 2019-20 has been addressed in subsequent chapters of this order.

2.2 Objections for CSPGCL

2.2.1 Income Tax paid by CSPGCL

The objector submitted that during FY 2018-19 and FY 2019-20, CSPGCL has paid huge amount of Income Tax of Rs. 76.92 Crore and Rs. 70.68 Crore, respectively. The objector suggested that all Power companies except CSPTCL should be merged immediately so that huge expenses (about Rs.150 Crore every year) are saved.

Petitioner's Reply

CSPGCL submitted that the appropriateness of the objector's views fall within the purview of the State Government. CSPGCL added that the matter is however, not relevant to the instant Petition.

Commission's View

Income Tax paid by CSPGCL for FY 2018-19 and FY 2019-20, has been allowed after due prudence check and based on the audited accounts for respective years. Further, the suggestion regarding merger of power companies is not within the Commission's purview.

2.2.2 Non-Tariff Income of CSPGCL

The Objector submitted that in the Final True-up Petition for FY 2019-20, CSPGCL has claimed total Non-Tariff Income (NTI) of Rs. 22.18 Crore for its power plants, whereas in the Audited Accounts of FY 2019-20, NTI is shown as Rs. 39.23 Crore. The Objector requested the Commission to consider NTI of CSPGCL as Rs. 39.23 Crore and to prudently check the revenue suppression of Rs.17.05 Crore.

Petitioner's Reply

CSPGCL submitted that there are two coal blocks allocated to CSPGCL, namely Gidhuri Pathuria and GP3. The coal block of Gidhuri Pathuria is not incidental to the regulated business of CSPGCL, as already settled in previous orders of the Commission. As regards the other coal mine (GP3), the treatment is in line with the settled principles followed in all previous orders. The interest incurred on Fixed Deposits created for the purpose of Bank Guarantees (BGs) has to be adjusted against the Interest During Construction (IDC) incurred on the Project. The interest incurred and interest received must go hand in hand, and cannot be treated as revenue income for the plants. Hence, the income does not qualify as NTI in the True up for FY 2019-20. The applicable NTI has been submitted along with the Petition. CSPGCL prayed for rejection of the objection, as the same is contrary to facts and based on misplaced notion.

Commission's View

The Commission sought reconciliation of NTI reported in the Audited Accounts vis-à-vis amounts submitted in the Petition, while Truing-up of FY 2019-20. The Commission has approved NTI for FY 2019-20 after due prudence check and based on the approach adopted by the Commission in previous tariff orders. The details are provided in subsequent Chapter of this order.

2.2.3 Capacity Charges of ABVTPP

The Objector submitted that during FY 2019-20, Plant Availability Factor (PAF) of ABVTPP was only 49.05% against approved PAF of 76.5%, however, CSPGCL has claimed Capacity Charges of Rs.1,556.57 Crore as against approval of Rs.1,599.32 Crore, which is not reasonable.

Petitioner's Reply

CSPGCL submitted that it has filed the Petition in accordance with the CSERC MYT Regulations, 2015. The deviation in ARR has been dealt strictly in accordance with the applicable Regulations and is in line with the well settled method adopted in all previous orders. No additional relaxation/consideration has been prayed for in the True up Petition by CSPGCL. Further, the Objector has not referred to the sharing of gains/losses and its consideration in Gap/Surplus as submitted in the Petition. Selective reference to one section of the Petition and omission of the other is not appropriate. The Objector is in violation of the principles of truthfulness and transparency. CSPGCL hence, requested to reject the said objection.

Commission's View

In accordance with the CSERC MYT Regulations, 2015, the CSPGCL in its Petition has reduced Fixed Charges of ABVTPP proportionately on account of lower actual PAF as compared to normative PAF. The Commission has also considered the same while computing sharing of gains/losses for the consideration of Gap/Surplus in the True-up for FY 2019-20, the details of which are provided in subsequent Chapter of this order.

2.2.4 Excess Claim against Coal Cost by CSPGCL

The Objector submitted that CSPGCL has not provided consolidated quantum and cost of coal consumed in its True-up Petition for FY 2019-20. There is an excess claim of Rs. 240.33 Crore in the True-up Petition with respect to the Audited Accounts of FY 2019-20. The Objector requested the Commission to disallow Rs. 240.33 Crore against coal cost claimed in excess over that reported in the Audited Accounts of FY 2019-20.

Petitioner's Reply

CSPGCL submitted that the coal cost has been calculated in line with the applicable Regulations and as per the well settled methodology adopted in the earlier orders of the Commission. The landed cost of coal also includes all the costs incurred for transportation of coal and the cost of employees engaged in coal transportation. The

Objector has excluded these costs while comparing the coal cost reported in the Audited Accounts. The Objector has only referred to the cost of fuel appearing in Note 23 of the Accounts but has excluded the handling and transportation cost, which also appears under the same note. The Objector has also neglected the fact that while the Accounts refer to the moving average coal cost, the True ups consider the coal cost based on coal received during the year, as per well settled methodology. Even at the time of determination of Tariff, the landed cost of coal is derived in similar manner. CSPGCL requested the Commission to reject the said objection.

Commission's View

The Commission has done prudence check on the submission of CSPGCL and has accordingly approved the coal cost in line with the provisions of CSERC MYT Regulations, 2015 and as per the settled methodology adopted in previous tariff orders.

2.2.5 Plant Availability Factor of HTPS of CSPGCL

The Objector submitted that the Commission had allowed lower PAF of 76.5% for the 4 x 210 MW HTPS Power Station of CSPGCL from FY 2017-18 to FY 2020-21 (4 years) against Normative PAF of 83%, considering shutdowns due to installation of Electrostatic Precipitator (ESP) in its two Units. CSPGCL has informed that the said work is still not completed and hence, requested for continuity of lower PAF of 76.5% for FY 2021-22. CSPGCL has not submitted any progress report, investment made, legitimate reasons for delay and expected completion time for the said work, and hence, such request should not be accepted. The Objector requested the Commission to approve Normative PAF of 83% for HTPS Power Plant of CSPGCL for FY 2021-22.

Petitioner's Reply

CSPGCL submitted that with specific reference to HTPS, the relaxation in PAF was provided based on the Capital works related to ESP augmentation, which was supposed to be completed in FY 2020-21. However, due to the COVID-19 pandemic, which was an unforeseen and uncontrollable event, the capital works could not be completed by 31st March, 2021 and part of these works would spill over to FY 2021-22. CSPGCL submitted that the Ministry of Power (MoP) vide its Circular dated 27th March, 2020 has also acknowledged the situation arising out of the pandemic as a

Force Majeure event. In fact, the impact of COVID-19 is a universal truth, which cannot be denied. Hence, claim for continuation of the norms allowed for FY 2020-21 to FY 2021-22 is just due to Force Majeure event.

In view of the above, CSPGCL requests the Commission to reject the objection and extend the norms for FY 2020-21 to FY 2021-22.

Commission's View

The Commission is of the view that the restrictions imposed due to COVID-19 pandemic, , has led to delays in implementation of works to be taken up in FY 2020-21 and hence, such works are likely to spill over to FY 2021-22. The Commission has hence, approved the lower normative PAF of 76.5% for FY 2021-22 also, as discussed in subsequent Chapter of this order.

2.3 Objections for CSPTCL

2.3.1 Interest on Loan and Terminal Benefits of CSPTCL

The Objector submitted that in the Final True-up Petition for FY 2019-20, CSPTCL has claimed different amount of Interest on Loan and Terminal Benefits to employees as compared to the numbers reflecting in the Audited Accounts of FY 2019-20. The Objector requested the Commission to prudently check the submission for Interest on Loan and Terminal Benefits to employees in the ARR claimed by CSPTCL.

Petitioner's Reply

CSPTCL submitted that Interest on Loan has been claimed as per the provisions of CSERC MYT Regulations, 2015, wherein normative Debt:Equity ratio of 70:30 is considered. However, in Audited Accounts, the actual loan amount is considered and hence, there is difference in Interest on Loan as per the Audited Accounts and as claimed in the True-Up Petition.

Further, as per Note 22 of the Audited Accounts, P&G contribution has been shown as Rs. 109.6 Crore and the detailed break-up of the same is given in Note 35. As per this Note, the actual contribution to P&G Fund is Rs. 46.37 Crore inclusive of SLDC and the balance amount pertains to interest cost, service cost and actuarial valuation. Hence, CSPTCL has claimed the contribution to P&G Fund at Rs. 45.26 Crore only as approved by the Commission.

Commission's View

The Commission has done the prudence check on submission of CSPTCL for Interest on Loan and has allowed the same on normative basis, which is as per provisions of CSERC MYT Regulations, 2015. Further, the contribution to P&G Fund is allowed on same principle as approved in the tariff order dated February 28, 2019.

2.3.2 High Short-Term Open Access (STOA) Charges and Transmission Losses

The Objector submitted that the intra-State and inter-State Transmission Losses of 3% and 2.88%, respectively, and Short-Term Open Access (STOA) Charges of 32.94 paisa/kWh, as proposed by CSPTCL are on the higher side as compared to other States. The Objector cited the example of Himachal Pradesh, Uttarakhand, Jharkhand, Punjab and Madhya Pradesh wherein Transmission Losses are much lower as compared to Chhattisgarh. Further, the STOA Charges in these States are also lower than the Charges proposed by CSPTCL. The Objector hence, requested the Commission to rationalise the Transmission Charges and Transmission Losses for FY 2021-22.

Petitioner's Reply

CSPTCL submitted that Transmission Charges and Losses for intra-State Open Access are decided by the Commission, hence, it has no comments on the same.

CSPDCL submitted that the Objector's submission on inter-State and intra-State Transmission Losses for FY 2021-22 are baseless as the same is considered on the basis of the Tariff Order dated 30th May, 2020. These are used to project the expenditure and revenue for FY 2021-22, which is subjected to final true-up in accordance with CSERC MYT Regulations, 2015.

The objections to STOA Charges are related to tariff design, which is the prerogative of the Commission under Section 62 of the Electricity Act, 2003. The aforesaid Charges apply to Open Access consumers and has no relation to the Charges paid by consumers of the Distribution Licensee. CSPDCL submitted that all these charges contribute to the NTI of the Distribution Licensee and any reduction in these Charges would be detrimental to the consumers at large.

Commission's View

The inter-State Transmission Losses are considered based on the actual 52-week Transmission Losses, as per the standard methodology adopted across the country. Neither CSPDCL nor CSPTCL have any control over the inter-State Transmission Losses, which are the Transmission Losses of the inter-State network.

The Commission has considered the intra-State Transmission Loss for FY 2021-22 as 3% in line with the Transmission Loss approved for FY 2020-21 in the tariff order dated 30th May, 2020. The actual Transmission Losses shall be considered at the time of truing up for FY 2021-22, subject to prudence check.

The STOA Charges have been approved based on the methodology adopted in the past tariff orders. The detailed computation has been given in subsequent Chapter of this order. These Charges contribute to the NTI of the Distribution Licensee and are adjusted to reduce the tariff of the retail consumers.

2.4 Objections for CSLDC

2.4.1 High Operating Charges of CSLDC

The Objector submitted that the Operating Charges of Rs. 2000 per transaction per day are very high. The Objector cited examples of States like Delhi, Sikkim, Haryana, Uttar Pradesh and Jammu & Kashmir, wherein these charges are Rs. 1000 per transaction per day. The Objector requested the Commission to reduce the Operating Charges and make it at par with other States.

Petitioner's Reply

CSLDC submitted that it comes under the Western Region Load Despatch Centre (WRLDC). The other States like Maharashtra and Madhya Pradesh connected with WRLDC have Operating Charges of Rs. 2250 per transaction per day and Rs. 3000 per transaction per day, respectively. CSLDC submitted that the comparison should be made with States under the same Regional Load Despatch Centre (RLDC) i.e WRLDC.

CSPDCL submitted that the SLDC Operating Charges are related to tariff design, which is the prerogative of the Commission under Section 62 of the Electricity Act, 2003. The aforesaid charges apply to Open Access consumers, and has no relation to the Charges paid by the consumers of the Distribution Licensee. All these charges contribute to NTI and any reduction in these charges would be detrimental to tariff applicable to consumers at large.

Commission's View

SLDC Operating Charges for STOA consumers are reasonable and shall be continued in this financial year.

2.5 Objections for CSPDCL

2.5.1 Separate Tariff Rates for Defence Establishment

The Objector submitted that Military Engineering Services (MES) is a Deemed Licensee in States like Delhi, Haryana and Punjab and a separate Tariff Schedule is being provided by the respective State Electricity Regulatory Commission (SERC). The Objector requested to revise the current Tariff Schedule rates for MES and provide Deemed Licensee tariff schedule rate for Defence Establishments.

Petitioner's Reply

CSPDCL submitted that the contentions raised are not related to the Tariff Petition as the objections were raised much prior to the filing of the Tariff Petition. Further, no submission has been made in support of the contention of Deemed Licensee status. CSPDCL submitted that the Commission is the statutory authority to consider the proposal, however, CSPDCL's ARR and Revenue should be protected from any consequential impact.

Commission's View

The licensing provisions including deemed licensee status has been prescribed in the Electricity Act, 2003. The Act has clearly authorised persons who can transmit, distribute, supply and undertake trading in electricity. Regarding determination of tariff of retail consumers, Section 62 (3) of Act specifies that while determining tariff the Appropriate Commission shall not show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.

The Commission has considered the same and accordingly, reasonable tariff has been decided in the Tariff Schedule for such class of consumers. Further, a discount of 15% on Energy Charges shall be applicable for defence establishments under Government of India.

2.5.2 Fisheries to be included in Agriculture

The Objector submitted that fisheries have been given the status of agriculture by the Hon'ble Chief Minister on 21.11.2020, hence, Fisheries should be included in the agricultural category and not under agricultural allied activities category. Further, the Department of Finance has approved the contention by providing support in line with the declaration of the Hon'ble Chief Minister.

Petitioner's Reply

CSPDCL has provided no reply on this objection.

Commission's View

The Commission is of the view that that fisheries are appropriately categorised under agricultural allied activities category, and there is no need to include them under agriculture category.

2.5.3 Payment of Pension, Gratuity and other Retirement Benefits by Power Companies

The Objector submitted that the corpus of the Pension Trust of the State was Rs. 4,500 Crore in 2019. Due to the increase in number of retired personnel, the yearly expense of the Fund has increased to Rs. 960 Crore. Further as per assessment, the Trust requires Rs. 14,000 crore to fund the entire expenses. As the Power Companies do not provide timely contribution, the P&G are funded through the interest on the accumulated capital. The Objector suggested to introduce contributory scheme for P&G Trust as applicable in the case of Coal India Limited.

Another Objector suggested that as per Companies Act, 2013 and Income Tax Act, 1967, expenses towards P&G should be considered on accrual basis. Further, there is a net deficit of Rs. 1,186 Crore in the P&G Fund as on FY 2019-20. The Objector requested not to give undue advantage to some class of HT consumers by keeping low/unchanged/relaxed tariff, and the contribution towards P&G Fund should be increased, as expenses will increase considering the decision of the Central

Government on the Dearness Allowance (DA) from January 2020 to June 2021, which is likely to be released in July 2021, with an expected increase of 15-16%.

Another Objector stated that previously 10% contribution was allowed for the P&G Fund for employees appointed post 01.04.2004, presently, the Central Government has revised the contribution from 10% to 14% and requested the Commission to make projection for the same in the Tariff of FY 2021-22.

Another Objector stated that the P&G Fund should have Rs. 15,000 Crore in order to service the entire pension liability and requested the Commission to give strict directive to the Power Companies to regularly contribute to the Trust and to ensure the amount is paid by the Trust.

Another objector stated that the Government of India (GOI) has raised DA by 11% since July 2021 and around 5% increase in DA is expected in September 2021, which totals to 16% DA increase during current financial year. The objector prayed that Commission should consider the aspect of raise in DA and requirement of gratuity and pension fund while deciding the Tariff.

Petitioner's Reply

CSPDCL submitted that the contribution to P&G Trust is governed by Regulation 32 of the CSERC MYT Regulations, 2015, and the tariff order issued by the Commission cannot exceed the provisions of CSERC MYT Regulations, 2015.

The consideration of P&G contribution on accrual basis requires amendment in the CSERC MYT Regulations, 2015.

A Review Petition vide Petition No. 51 of 2019 is under consideration with Commission, which covers the issue of contribution to P&G Trust for FY 2019-20 and the matter is in the stage of final hearing.

CSPDCL further submitted that the proposal of the petitioner may be suitably considered while fixing the tariff.

Commission's View

Regulation 32 of the CSERC MYT Regulations, 2015 provides for Contribution to P&G Fund for each year of the MYT Control Period. The Commission has accordingly considered the Contribution to P&G Fund for FY 2021-22 by escalating the P&G Contribution approved in CSERC MYT Order for FY 2020-21 by the average CPI rate recorded over last five years. Further, the Commission has trued-up the excess/deficit between the estimated and actual contribution/interest income from P&G Fund. The Commission has addressed the issue of P&G Contribution for FY 2021-22 and the deficit of FY 2019-20 in subsequent Chapters of this order.

2.5.4 Consumer with Captive Power Plant

The Objector suggested that consumers having a Captive Power Plant should pay additional Demand Charges at the rate of Rs. 20/kVA/month only to the extent of quantum of power availed over and above its Contracted Demand, while energy consumed corresponding to excess supply should be billed at normal tariff.

Petitioner's Reply

CSPDCL submitted that the Commission vide tariff order dated 30th May 2020 has already provided relaxation in additional charges in case of consumers exceeding Contracted Demand (other than HV-7 category) having minimum contract demand of 150 MVA with captive generating plant capacity of at least 150 MW. Since, the aforesaid relaxation is still applicable as per prevailing tariff order, there is no need for additional relaxation.

Commission's View

The Commission vide tariff order dated 30th May 2020 has already implemented the above-suggested change, while approving the Tariff Schedule for FY 2020-21. These changes have been retained in this tariff order.

2.5.5 Rebate for Supply at High Voltage

The Objector suggested that rebate should be given to consumers getting supply at 400/220/132 kV.

Petitioner's Reply

CSPDCL submitted that the suggestion is related to determination of tariff, which is the prerogative of the Commission.

Commission's View

The Commission has already implemented differential tariffs within a consumer category based on the supply voltage, and consumers taking supply at higher voltages are required to pay lower tariff, as compared to consumers taking supply at lower voltages. Thus, the above-suggested change has already been implemented in the State of Chhattisgarh. These changes have been retained in this tariff order.

2.5.6 Load Factor Rebate

The Objector suggested that Load Factor rebate should be allowed in the energy charges corresponding to the electricity consumed beyond the cut off load factor. The quantum of load factor rebate (30%) allowed to Railways is huge and is resulting in very low realization of Average Billing Rate (ABR).

Petitioner's Reply

CSPDCL submitted that the suggestion is related to determination of tariff, which is the prerogative of the Commission.

Commission's View

The detailed rationale and philosophy adopted by the Commission, including Load Factor rebate applicable to selected categories, is given in Chapter 11 of this order.

2.5.7 POC Charges

Some Objectors requested to maintain the POC Charges at 4 paisa/kWh, as POC charges are levied on Captive Generating Plants (CGP's) to compensate for the impact caused by CGP's who are operating in parallel to the State grid. As there is no capacity addition by CGP's, the POC charges also should not be increased.

Petitioner's Reply

CSPDCL submitted that the suggestion is related to determination of tariff, which is the prerogative of the Commission. CSPDCL submitted that the reason and justification for increment in POC charges are detailed at Para 8.3 of the Tariff Petition filed by the Petitioner. Further, the rate of POC charges is not related with the capacity of the generator as claimed by the objector.

Commission's View

In the tariff order dated 30th May 2020, the Commission has ruled that Parallel Operation Charges shall be payable by CPP to CSPDCL for its captive and non-captive load as per the Order dated 05th April, 2019 passed in Petition No. 09 of 2018. The Commission has revised the POC Charges by adopting the same principles on the latest applicable amounts.

2.5.8 Retail Tariff Proposal

The Objector stated that CSPDCL has not submitted any retail tariff proposal in the Petition, so it is difficult to file the objections/suggestions. Hence, the Petition should be dismissed.

The Objector submitted that the Commission is mandated to fix non-discriminatory retail tariff under Section 62(3) of the Electricity Act, 2003, therefore, the Commission is requested to fix non-discriminatory tariff.

Tariff of agriculture category consumers is higher than the domestic category consumers therefore tariff of agriculture category consumers needs to be rationalized.

The Objector submitted that the approved Revenue Gap of CSPDCL should be recovered by equal increase in tariff of all categories of consumers.

Petitioner's Reply

CSPDCL submitted that the objection that CSPDCL has not submitted any retail tariff proposal is incorrect as the Petitioner has requested the Commission to determine the retail tariff on the basis of the approved Revenue Gap after prudence check.

CSPDCL submitted that the Objector has misconceived the statutory provisions of Section 62(3) of the Electricity Act, 2003, which stipulates the basis on which the Commission may differentiate amongst the consumers while determining the retail tariff.

CSPDCL submitted that the suggestion is related to determination of tariff, which is the prerogative of the Commission and the proposal by the Petitioner may be suitably considered while fixing the tariff, subject to protection of CSPDCL's approved ARR for FY 2021-22, and the principles stipulated in the Tariff Policy related to fixing tariff within the permissible range of ±20% of the Average Cost of Supply (ACoS).

Commission's View

The Commission has rationalised the cross subsidy between tariff categories, while deciding the category-wise Tariff for FY 2021-22, as elaborated in the Tariff Philosophy Chapter in this Order. The Commission has continued with the practice of differentiating amongst the consumers while determining the retail tariff in accordance with Section 62(3) of the Electricity Act, 2003, viz., consumers' load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which supply is required or the geographical position of any area, the nature of supply, and the purpose for which the supply is required.

2.5.9 Cross Subsidy

The Objector stated that as per Electricity Act, 2003, cross subsidy needs to be reduced progressively and requested for reduction in cross-subsidy for CSPDCL.

Another Objector stated that the financial condition of CSPDCL is bad and the Company has incurred losses of about Rs. 7000 Crore in last ten years. The consumption in Domestic and Farm Sector at present is 24% and 19%, respectively, whereas the contribution to revenue is quite less. The Domestic and Farm sector is being billed at 64% of cost of supply and three years back these sectors were being billed at about 80% of cost of supply. The objector stated that Rs. 1865 Cr. Revenue deficit/ under recovery is observed for the steel sector in last twenty years.

Petitioner's Reply

CSPDCL submitted that the suggestion is related to determination of tariff, which is the prerogative of the Commission and the proposal by the Petitioner may be suitably considered while fixing the tariff.

Commission's View

The Commission has rationalised the cross subsidy between tariff categories, while deciding the category-wise Tariff for FY 2021-22, as elaborated in the Tariff Philosophy Chapter in this Order.

2.5.10 Voltage-wise cost of Supply

The Objector submitted that Hon'ble APTEL in its Judgment in Appeal No. 102 of 2010 dated 30th May 2011, provided the guidelines for calculation for cost of supply calculation. CSPDCL is continuously following the same method for calculating the cost of supply and has proposed tariffs accordingly, without considering the development in metering network and availability of actual voltage-wise losses. Due to this, the consumers which are having connectivity with 220 kV network are compelled to bear both the transmission as well as distribution loss.

Petitioner's Reply

CSPDCL submitted that the suggestion is related to determination of tariff, which is the prerogative of the Commission.

Commission's View

The approach of the Commission regarding determination of Voltage-wise Cost of Supply is given in Chapter 11 of this order. The Commission has already implemented differential tariffs within a consumer category based on the supply voltage, and consumers taking supply at higher voltages are required to pay lower tariff, as compared to consumers taking supply at lower voltages. These changes have been retained in this tariff order also.

2.5.11 Tariff for Different Categories

The Objector suggested that oil mills should be included in LV 5.1 category instead of LV 5.2 category. Further, the Objector requested to abolish Demand Charges for consumers of 0-25 HP category due to the current COVID-19 situation.

Another Objector submitted that mushroom cultivation shall be included under HV-5 category, i.e., Agriculture category instead of HV-3 Category.

Another Objector stated that tariff of HV-3 category is higher compared to other categories. The Objector requested not to have different tariff rates in HV and make the tariff same for all the categories. Further, it was submitted that food processing industries should be included in HV-8 Category.

Another Objector suggested that for Cold Storage and Agriculture Consumers, there is a huge difference in the LV and HV category tariffs, hence, there are less number of consumers in HV category. This tariff differentiation between LV and HV category should be reduced to encourage increase in consumers of HV Category. Further, all agricultural related industries such as Cold storage and processing units should be under HV-5 Category and Tariff of such category should be reduced to encourage agricultural work.

Another Objector stated that Other Industries in HV category are charged different tariffs as compared to the Steel Industries. The Objector requested that the other HV industries should be covered under HV-1 Category. Further, it was requested that

Demand Charges for HV-3 category should be reduced by 50% of the current Charges as there is 30% penalty on consumption after 6 pm in the evening.

Another Objector requested the following:

1. LV-1 category should include:
    a) Lights, fans and other household equipment in Gauthan/Gaushalas;
    b) E-Rickshaw charging facility of both HV and LV consumers;
    c) Janseva Kendra from where Government Schemes are run;
    d) Free facilities like prayer hall, gymnasium, club house within the housing society;
    e) Small business within the house, as currently, if a small business is run, the whole house is billed under non-residential category.
2. LV-3 category should include:
    a) Filling water in pond in summer;
    b) Fish hatcheries;
3. It is requested to increase the rebate from 10% to 20% for the agricultural pumps, which are not subsidized.
4. Penalty for exceeding Contract Demand should be calculated on hourly basis and penal charges should be levied according to the number of hours and not for the whole month.

Petitioner's Reply

CSPDCL submitted that suggestion of the Objector to include mushroom cultivation under HV-5 category instead of HV-3 category is justified. CSPDCL submitted that the electricity usage for the purpose of food processing does not match with the purpose of IT Industry. Furthermore, shifting of Other Industries to HV-1 category is also not acceptable, because this category is designed specifically for Railways to run their traction load.

CSPDCL submitted that the contentions of the Objector on Demand Charges are not clear and therefore, CSPDCL has no comments to offer. However, CSPDCL clarified that existing tariff design under HV and LV stipulates detailed provisions to bill the cases where the supply exceeds Contract Demand.

Further, CSPDCL submitted that usage of domestic power for non-domestic or any kind of commercial purposes is not acceptable under Section 126 of the Act.

CSPDCL submitted that the suggestion for changing the charges for exceeding

Maximum Demand is not acceptable as per Clause 2.1 of the Electricity Supply Code.

CSPDCL also submitted that it has not proposed any Tariff Schedule in the Tariff Petition. Further, CSPDCL submitted that according to the Electricity Act, 2003, the Commission has the power to determine the retail electricity tariff.

Commission's View

The Commission after considering the views and suggestions of the Objectors has rationalised the tariff categories and approved the revised Tariff for FY 2021-22. The philosophy and rationale adopted by the Commission is detailed in Chapter 11 of this order.

2.5.12 Power Purchase Cost

The Objector stated that the cost of power purchase from Central Generating Stations (CGS) is 379 Paisa/kWh, whereas cost of short-term power purchase is 319 paisa/kWh. If short-term power is purchased through Power Exchanges instead of CGS, power purchase cost shall be reduced.

Another Objector stated that CSPDCL is required to consider the voltage-wise power purchase rate and needs to consider the actual cost of purchase for different category of consumers instead of uniform rate for power purchase.

Petitioner's Reply

CSPDCL submitted that it is a misconception that the short-term power purchase through Power Exchange is cheaper than CGS rate, as 90% of the demand is met through long-term PPAs and short-term power is limited to meet day-to-day exigencies. CSPDCL clarified that the reasons for the higher cost of power purchase from CGS is due to the liability of capacity charges for power stations, which remain idle due to the adoption of Merit Order Despatch (MOD).

Further, CSPDCL submitted that voltage-wise power purchase rate is related to determination of tariff, which is the prerogative of the Commission.

Commission's View

The Commission agrees with the submission made by CSPDCL. Considering the quantum of energy required by CSPDCL, it would not be possible to meet the entire demand from short-term market. Further, power purchase rates from Power

Exchanges/short-term market depends on the quantum of power and time at which the power is procured, and the demand-supply situation prevailing in the day ahead market. On the other hand, CSPDCL is bound to pay fixed charges to CGS stations as per the provisions of PPA, irrespective of the actual energy offtake. The MOD stack is prepared on the basis of variable cost of power and not on the basis of total cost of power. As power purchase rate at Power Exchange is single-part tariff, it is likely to be costlier than the variable cost of power purchase from CGS sources. Hence, a direct comparison of short-term rates with CGS rates is not appropriate.

2.5.13 Revenue Surplus

The Objector requested that standalone Surplus arriving out of final true up of FY 2018-19 may be used to provide relief to the consumers in the form of reduced energy charges.

Petitioner's Reply

CSPDCL submitted that surplus of FY 2018-19 cannot be considered in isolation as there is deficit after the provisional True-up of FY 2019-20 where the surplus of FY 2018-19 is also factored in.

Commission's View

The Commission has adjusted the Revenue Gap/(Surplus) arrived at based on final true-up of FY 2018-19 and FY 2019-20, with the stand-alone Revenue Gap/(Surplus) of FY 2021-22, and the revised tariffs designed based on the cumulative Revenue Gap/(Surplus) as per the methodology adopted in previous tariff orders.

2.5.14 Private Hospitals, Clinics and Diagnostic Centres

The Objector requested that private hospitals, clinics, and diagnostic centres should be put in LV-5 from LV-2 or HV-3 category. Hospitals, clinics, and diagnostic centres are not like any other business establishments as they are set up for the betterment of life. Further, the Objector requested for a separate category in the tariff structure for such private medical facilities like hospitals/clinics/diagnostic centres and Tariff for this category should be less than the tariff applicable for industrial category to encourage setting up of new facilities and to reduce the treatment cost of the private hospitals/clinics/diagnostic centres.

Further, separate Tariff/ concessions should be applicable for the less developed area such as Jagdalpur, Sarguja for ensuring proper setting up of new hospitals/clinics/diagnostic facilities similar to Laghu Udyog sector in these areas.

Petitioner's Reply

CSPDCL submitted that the applicant has requested to consider re-categorization of the tariff applicable to private hospitals from existing LV-2/HV-3 category to LV-1/ HV-6 for the sole purpose of reducing its establishment expenditure. The aforesaid reason would not be justified as the Commission has already allowed a rebate of 5% in energy charges for these institutions in the last tariff order for FY 2020-21. Acceptance of this request may consequently increase the burden on other consumers, which needs to be discouraged. CSPDCL submitted that hospitals run by charitable trusts/Non-Profit Organizations/Societies registered under Firms and Societies Act are already billed on LV-1/HV-6 domestic/residential tariff.

Further, CSPDCL submitted that such type of Industries comes under the consumer category having ability to cross-subsidize the vulnerable sections of the society, therefore, this fact may be considered while determining the tariff of these consumers subject to protection of its ARR for FY 2021-22.

Commission's View

The Commission after considering the views and suggestions of all objectors has rationalised the tariff categories and approved the revised Tariff for FY 2021-22. The philosophy and rationale adopted by the Commission is detailed in Chapter 11 of this order.

2.5.15 Issues related to Agriculture Consumption

The Objector submitted that CSPDCL has over-reported Agriculture Consumption for FY 2018-19. CSPDCL has reported a consumption of 4,401 MU instead of 4,301 MU reported in R-15 report, showing excessive consumption of 100 MU. Further, sales forecast for FY 2021-22 for Agriculture Consumers is on lower side compared to sales reported for FY 2019-20, whereas the number of consumers has increased during this period. The Objector stated that CSPDCL has projected lower consumption of Agriculture Pumps during FY 2021-22 to show lower revenue artificially. Energy meters of Agriculture Pumps are not read regularly, and lakhs of such connections are served without meter. The Objector requested the Commission to direct CSPDCL to prepare time-bound plan for release of pending pump set connections of farmers.

The Objector requested that the report on the Study of Agricultural Consumption and action taken on large number of defective energy meters should be made available along with the tariff order for FY 2021-22.

Further, the Objector suggested that a Suo-Motu Petition be registered in matters relating to Agriculture Category, viz., their actual consumption, issue of defective meters, un-metered supply, assessment of consumption, etc.

The Objector requested the Commission to direct CSPDCL to provide 100% meters to all consumers, and immediately replace all burnt/damaged transformers, take meter reading at least once in three months as directed previously and curb the practice of mass billing on assessed consumption.

Further the Objector requested the Commission to approve actual sales during FY 2018-19, FY 2019-20 and Sales Forecast for FY 2021-22 on the basis of realistic data and to consider Rs.382.85 Crore as additional revenue during FY 2018-19 from sale to Agriculture Category, as done in the previous tariff order.

The Objector suggested that a high-power State level committee be constituted to report and advice the Commission on pending issues relating to farmers of the State with the following members:

a) Representative of the Commission – Chairperson;
b) Representative of Farmers;
c) Representative of CSPDCL not below the rank of CE;
d) A person experienced in consumer advocacy and possessing knowledge of legal, technical and financial issues.

Petitioner's Reply

CSPDCL submitted that the sales considered under agricultural category is taken from its revenue statement (R-15) for FY 2018-19. The sales considered in true up part are extracts of revenue statement, which is based on meter readings/assessments as per the provisions of Supply Code. The assessment of FY 2021-22 is based on the considerations approved by the Commission in the tariff order dated 28th February 2019.

CSPDCL submitted that the revenue considered by CSPDCL is based on audited accounts. The billing to agriculture category consumers also includes the directions given by Govt. of Chhattisgarh towards Krishak Jivan Jyoti Yojna (KJJY) scheme issued vide order No. 2131/F-21/08/2009/13/2/UE/KJJY dated 19th September 2013. The order is equally binding on CSPDCL in compliance to the Company's Articles of Association, wherein State Government directions carry overriding effect over other functions and duties. Resultantly, the revenue considered in the Tariff Petition is the effect of implementation of the aforesaid scheme.

Commission's View

The Commission has verified the sales to the agricultural category in FY 2018-19 and FY 2019-20, based on the R-15 submitted by CSPDCL, and the same has been considered in the true-up of respective years. The Commission has already issued directions to CSPDCL for improvement in its agricultural metering.

Further, in line with the approach adopted in the previous order, the Commission has considered notional revenue from sale to agricultural category for FY 2018-19 and FY 2019-20, based on the approved ABR and the sales reported by CSPDCL.

The methodology adopted by the Commission for projecting the sales to the agriculture category for FY 2021-22 has been elaborated in Chapter 10 of this Order.

2.5.16 UDAY Scheme and Distribution Losses

The Objector submitted that after the MoU between GoI, GoCG and CSPDCL under the UDAY Scheme, the Commission had amended the CSERC MYT Regulations, 2015 and specified the distribution loss trajectory in line with the UDAY Scheme. The Commission in past Tariff Orders, has been approving the distribution losses as per these amended Regulations.

CSPDCL in the Memorandum of Understanding under UDAY Scheme has agreed to following loss trajectory:

Year	2015-16	2016-17	2017-18	2018-19
AT&C Loss	21.00	18.93	18.00	15.00

The Objector requested the Commission to consider the AT&C Loss agreed by CSPDCL under UDAY Scheme while allowing distribution losses at 33 kV and below for FY 2018-19, FY 2019-20 and FY 2021-22 and share loss against non-achievement of Distribution/AT&C Losses in accordance with CSERC MYT Regulations, 2015. Further, Objector requested to allow AT&C Loss of maximum 15% for FY 2018-19 and FY 2019-20 and even lower for upcoming years as provided in MYT order read with CSERC MYT Regulations, 2015 and MoU of UDAY Scheme.

Further, in the True-up Petition of FY 2018-19 and FY 2019-20, CSPDCL has claimed Distribution Loss below 33 kV as 18.95% and 18.98%, respectively. In the Tariff Petition for FY 2021-22, CSPDCL has claimed Distribution Loss below 33kV as 16.00%.

The Energy Balance considered by CSPDCL in the true-up Petitions for FY 2018-19 and FY 2019-20 and in the Tariff Petition for FY 2021-22 are erroneous since quantum of Net Power Purchase is not matching with Energy Balance.

One Objector requested that the inefficiency of CSPDCL in terms of non-reduction of distribution loss should not be passed on to the consumers.

Petitioner's Reply

CSPDCL submitted that the request of the Objector has no basis because CSPDCL has not claimed any incentive towards over-achievement of performance during true-up years. CSPDCL expects to achieve the target lower than the level specified in CSERC MYT Regulations, 2015 due to its committed efforts and therefore, the benefit of the same would certainly be passed on to the consumers of the State. Further, substitution of AT&C losses over 33 kV distribution loss is strongly opposed on the grounds that AT&C losses considers collection efficiency while the distribution loss is technical in nature. For the above reason, AT&C losses and distribution losses stand on different footing and therefore, cannot be substituted. CSPDCL submitted that for the same reason, the collection efficiency has not been considered by the Commission under performance indices of Distribution Business.

CSPDCL submitted that true up data in respect of energy sales/power purchase is based on actual meter readings of power purchase/energy availability at periphery of distribution network. Further, the Objector has not considered the different time gap involved between the billing cycles of power purchase and consumer billing cycle. CSPDCL submitted that billing cycle of consumers involves more than 56.10 lakh LT consumers (FY 2018-19) spread across the State and it is difficult to issue simultaneous bills to all consumers at any one given time due to constraints in meter readings, while power purchase bills follow definite time period of each month.

Further CSPDCL submitted that the achievement of line loss up to 33 kV level during the MYT Control Period from FY 2016-17 to FY 2020-21 is following a reducing trajectory and therefore, the submission of the Objector in this regard is not based on fact hence not acceptable.

Commission's View

The energy loss trajectory approved by the Commission in the MYT order was higher as compared to agreement entered in UDAY Scheme by the Distribution Licensee. In view of this an amendment was notified in CSERC MYT Regulations, 2015. For true-up for FY 2018-19 and FY 2019-20, the Commission has considered Distribution Losses based on actual energy sales and purchase and considered the Distribution Losses agreed in the UDAY Scheme by the licensee. The detailed rationale for the same has been provided in Chapter 6 of this order. Further, the efficiency losses on account of non-achievement of the distribution loss trajectory approved in the respective tariff orders, despite inclusion of assessed sales, has been computed and shared between CSPDCL and the consumers, in accordance with the CSERC MYT Regulations, 2015.

For FY 2021-22, the Commission has approved the target of 16 % for Distribution Losses. The power purchase quantum has been matched with the energy requirement as per the approved Energy Balance. The detailed approach of the Commission is discussed in Chapter 10 of this order.

2.5.17 Higher Cost of Renewable Power and Lower Quantum of Concessional Power Purchase

The Objector submitted that CSPDCL has been purchasing Renewable Energy (RE) at a cost, higher than that approved by the Commission. Also, CSPDCL has not provided any explanation for lower quantum of concessional power purchase. This has caused an additional burden of approximately Rs.78 Crore during FY 2018-19 and Rs. 110 Crore during FY 2019-20 to the consumers. Further, the information provided in the present Petition does not match with additional information and data (RE PPA Details) submitted by CSPDCL itself. The Objector submitted that CSPDCL has not informed about the action taken against defaulting IPPs. Further, CSPDCL has signed an agreement with Solar Energy Corporation of India (SECI) for purchase of

Solar Power of 500 MW at a very low rate of Rs. 2.57/kWh and supply of such power is expected to commence in March 2021. However, the projected average purchase cost of Solar Power in FY 2021-22 is Rs. 5.16/kWh, whereas it should be Rs. 4.50/kWh.

Petitioner's Reply

CSPDCL submitted that purchase of RE is in compliance to statutory provision under Renewable Purchase Obligation (RPO). The power purchase and procurement process is regulated by the Commission. Accordingly, PPAs including quantum and rates are approved by the Commission. The discrepancy on average rates as pointed out by Objector is irrelevant because the purchase rates for biomass stations during FY 2018-19 is at the rates to be determined by the Commission. The expenditure for FY 2019-20 is provisional and hence, is likely to undergo changes due to pending audit. Hence CSPDCL has no comments to offer at this stage in this regard. As regards the cost of biomass and small hydel, the deviation is due to cess, duty and water charges (applicable only to small hydel) along with delayed payment surcharge. Further, the payments to solar generators are strictly as per tariff determined by the appropriate Commission.

Further, CSPDCL submitted that it has no direct contractual relations with the concessional power generator as the power is supplied by CSPTrdCL through a back-to-back agreement.

Commission's View

The Commission has considered the quantum and rate of purchase from RE sources and Concessional Power sources, for FY 2018-19 and FY 2019-20, as elaborated in subsequent chapter of this Order. The Commission has considered the quantum and rate of purchase from RE sources and Concessional Power sources, for FY 2021-22, as elaborated in Chapter 10 of this Order.

2.5.18 Banking of Power

The Objector submitted that CSPDCL has neither shown any reason for not returning 1,061.15 MU of power banked with it although it had surplus power, nor has it submitted the "Power Banking Passbook". The quantum of such Banked Power is quite high and is purchased in one year and used/sold in later years or vice-versa. Purchase cost of such power may be as high as Rs.800 Crore to Rs. 1,000 Crore evaluated at Average Power Purchase Cost. If the quantum and cost of such Banked Power is not accounted in the same Financial Year as done by Himachal Pradesh State Electricity Board Ltd. (HPSEBL), it is going to create several problems relating to accounting and may lead to statutory lapses. In the months of June, July, August, December, January, power availability with CSPDCL is quite comfortable, still power is procured through banking and generally in the months of March, April, May, October, when the demand is more than availability, such power is returned through banking. This raises the question about appropriate utilization of Power Banking facility.

The Objector requested the Commission that the quantum of Banked Power should be treated as Stock in Hand and cost of such Banked Power should be accounted in the same financial year. Further, CSPDCL should be directed to maintain a ‘Power Banking Pass Book’ having details like Banking Partner/s, Banked Quantum, date and time of such banked quantity, effective UI rates on such time, agreed date and time for Reverse Banking, etc.

Petitioner’s Reply

CSPDCL submitted that it is complying with the directions issued by the Commission in the Tariff Order dated 28th February 2019 regarding banking of power. As per the directives, a separate passbook of all banking transactions in terms of banking availed and returned is maintained on annual basis. CSPDCL further submitted that opening balance of FY 2017-18 is zero and CSPDCL returned 234.87 MU in FY 2019-20.

Commission’s View

While undertaking the final true-up for FY 2018-19 and FY 2019-20, the Commission sought all relevant details of banking of power and has approved the quantum of banked power after due prudence check, as elaborated in Chapter 6 of this Order.

2.5.19 Non-Compliance of directives

The Objector submitted that CSPDCL has not submitted any kind of status report towards compliance of directives issued by the Commission and requested the Commission to take stern action for such non-compliance and to direct CSPDCL for immediate compliance without allowing more time.

Petitioner's Reply

CSPDCL submitted that the Commission has already registered a Suo-motu Petition bearing Petition No. 53 of 2020 towards compliance of directives by CSPDCL. This Petition contains the directives included in Tariff Order dated 28th February 2019. CSPDCL has already submitted updated status on each of the directives.

Commission's View

The Commission has registered the Suo-motu Petition No. 53 of 2020 on this issue.

2.5.20 Intra-State Transmission Charges paid to CSPTCL

The Objector submitted that there is huge ambiguity, non-reconciliation, and excess provision of Rs. 626.93 Crore in the intra-State Transmission Charges paid to CSPTCL during FY 2018-19, FY 2019-20, and FY 2021-22. Further, CSPDCL has claimed other transmission charges of Rs. 44.14 Crore in total, despite the Commission's directive in previous tariff order to segregate other transmission charges in two heads, i.e., Inter-State Transmission Charges and Intra-State Transmission Charges. The Objector requested the Commission to disallow excess provision of Rs.626.93 Crore claimed for intra-State Transmission Charges for FY 2018-19, FY 2019-20 and FY 2021-22, disallow Other Transmission Charges of Rs. 44.1 Crore claimed in True-up of FY 2018-19 and disallow any Late Payment Charges with respect to inter-State or intra-State Transmission Charges.

Petitioner's Reply

In pursuance to the queries raised by the Commission, subsequent to the filing of Tariff Petition, CSPDCL has submitted a detailed reconciliation of Transmission Charges for FY 2018-19 and FY 2019-20 as claimed in its Tariff Petition. Further, the claim of Transmission Charges is based on accounting figures supported by trial balance entries in SAP system. Transmission Charges are integral part of power purchase expenses, which is designated as uncontrollable expenditure under Regulation 11.1(f) read with Regulation 10.5 of the CSERC MYT Regulations, 2015.

Commission's View

The Commission has undertaken prudence check and due reconciliation of the amounts reflecting in Audited Accounts of CSPTCL and details submitted by

CSPDCL and accordingly approved the Transmission Charges as detailed in subsequent Chapter of this Order.

2.5.21 Concealment of Energy Sold and Actual Revenue Receipts from Retail Sale

The Objector submitted that Revenue Receipts claimed in the Provisional True-up for FY 2019-20 is less than Rs. 335.79 Crore as compared to what is reported in R-15 format. Similarly, CSPDCL has shown lower revenue from Retail Sale to LV3-Agriculture Category by Rs. 271.49 Crore. The Objector requested the Commission to prudently check concealed revenue of Rs.335.79 Crore received from retail sale of power during FY 2019-20 and consider additional revenue of Rs.271.49 Crore from sale of power to LV-3 Agriculture Category in accordance with prescribed Energy Charges under prevailing tariff order.

Petitioner's Reply

CSPDCL submitted that actual revenue realised from LV-3 Agriculture Consumers is less due to flat rate billing system implemented to this category of consumers under KJJY of State Govt. implemented vide order No. 2131/F-21/08/2009/13/2/UE/KJJY dated 19th September, 2013.

Commission's View

The Commission has performed prudence check on the revenue recovered from consumers and has only considered the revenue reflected in Audited Accounts. Further, in line with previous Tariff Orders, the Commission has addressed the issue of additional notional revenue from LV-3 Category Consumers in Chapter 6 of this Order.

2.5.22 Non-Tariff Income of CSPDCL

The Objector submitted that in the Final True-up Petition for FY 2018-19, CSPDCL has claimed Non-Tariff Income of Rs.224.85 Crore, which is not matching with the Audited Balance Sheet of FY 2018-19. The Objector requested the Commission to consider Non-Tariff Income of CSPDCL as Rs.409.95 Crore during FY 2018-19 and prudently check revenue suppression of Rs.185.10 Crore.

Petitioner's Reply

CSPDCL submitted that the contentions of the Objector on revenue suppression of

Rs.185.10 crore under Non-Tariff Income is not acceptable considering the detailed justification given in Para 5.57 of the Tariff Petition and the reply to data gaps submitted through letter No. 2771 dated 3rd March 2021.

Commission's View

The Commission has undertaken prudence check on the information submitted by CSPDCL in its Tariff Petition and subsequently in data gaps reply with regard to Non-Tariff Income. The Commission has also verified the amount reflecting in Audited Accounts under Non-Tariff Income. The Commission has considered the Non-Tariff Income after due prudence check, based on the reconciliation submitted by CSPDCL. The Commission has addressed the issue of Non-Tariff Income of CSPDCL in Chapter 6 of this Order.

2.5.23 Quantum & Cost of Power Purchased from CSPGCL

The Objector submitted that although the entire power of CSPGCL is purchased by CSPDCL, it is observed that during FY 2019-20, net generation by CSPGCL differs from quantum of power purchased by CSPDCL by 153.07 MU. It is also observed that there is huge difference in the cost of power purchased from CSPGCL during FY 2018-19 and FY 2019-20. CSPDCL has considered an escalation of 5% growth over the energy charges approved by the Commission in the Tariff Order for FY 2020-21. Such imaginary projection is not permissible as CSPDCL is empowered to recover any actual escalation in the energy charges for its power purchase by way of Variable Cost Adjustment (VCA) Charges.

The Objector requested the Commission to prudently examine lower quantum of power purchase from CSPGCL by 153.07 MU against such power claimed by CSPDCL during FY 2019-20. The Objector also requested to prudently examine the cost of power purchase from CSPGCL claimed by CSPDCL and excess provision of Rs.400.54 Crore in FY 2018-19 and Rs. 19.40 Crore in FY 2019-20. The Objector further requested to check excess provision of Rs.390.07 Crore claimed by CSPDCL for FY 2021-22.

Petitioner's Reply

CSPDCL submitted that the bills raised by CSPGCL are for supply of 16,916.45 MU, which includes supply from conventional and RE stations of CSPGCL during FY 2019-20. The difference of 153.07 MU is the difference between scheduled and actual generation.

Further, CSPDCL has submitted detailed reconciliation of payment made by CSPDCL to CSPGCL, CSPTCL and SLDC in respect of FY 2018-19 and FY 2019-20. The reconciliation reveals that after including the Delayed Payment Surcharge, which shall not be considered as expenditure as per provisions of CSERC MYT Regulations, 2015, the payments made by CSPDCL to CSPGCL, CSPTCL and SLDC during FY 2018-19 and FY 2019-20 matches with the income of respective Companies.

Commission's View

The Commission has verified the reconciliation given by CSPDCL and has accordingly approved the quantum and cost of power purchased from CSPGCL in the final true-up for FY 2018-19 and FY 2019-20. Further, the Commission has considered the power purchase from CSPGCL stations for FY 2021-22 in line with the approved energy charges and fixed charges for each station of CSPGCL. The details of Power Purchase quantum and Cost from CSPGCL stations for FY 2021-22 is addressed in Chapter 10 of this Order.

2.5.24 Quantum and Cost of Power Purchased from CGS

The Objector submitted that during FY 2018-19 and FY 2019-20, quantum and cost of power purchased from CGS differs by Rs. 48.11 Crore between provisional True up Petition and additional submission made by CSPDCL. CSPDCL has considered an escalation of 5% growth over the energy charges approved by the Commission in the Tariff Order of FY 2020-21, for projecting the power purchase costs for FY 2021-22. Such imaginary projection is not permissible as CSPDCL is empowered to recover any actual escalation in the energy charges for its power purchase by way of VCA Charges.

The Objector requested the Commission to

a) Prudently examine cost of power purchase from CGS as claimed by CSPDCL during FY 2018-19 and excess provision of Rs. 425.05 Crore.
b) Prudently examine cost of power purchase from CGS as claimed by CSPDCL during FY 2019-20 and excess provision of Rs. 48.11 Crore.
c) Prudently examine quantum of power purchase from CGS as claimed by CSPDCL during FY 2019-20 and excess purchase of 14.91 MU.

d) Prudently examine cost of power purchase from CGS as claimed by CSPDCL during FY 2021-22 and excess provision of Rs.150.50 Crore.

e) Not to allow any Delayed Payment Surcharge under ARR.

Petitioner's Reply

CSPDCL submitted that additional submission by CSPDCL is in pursuance to data gaps raised by the Commission, wherein directions were to bifurcate the amount of Fixed Charges and Energy Charges within the claimed amount. The information nowhere includes other components of billing, such as water charges, cess, and duty etc. Hence, the difference identified by the objector is misconceived. VCA calculations contended by Objector is not a part of submissions made by CSPDCL in the present Tariff Petition and VCA computations are administered as per the directions given by the Commission in the Tariff Orders. Further, the contentions on energy charges for power purchase from CGS for FY 2021-22 is baseless considering the justification provided for estimation of quantum, rate and amount of power purchase from CGS sources.

Commission's View

The Commission has verified the details provided by CSPDCL and has accordingly approved the quantum and cost of power purchased from CGS stations in the final true-up for FY 2018-19 and FY 2019-20. The approach adopted by the Commission for projecting quantum and cost of power purchase from CGS stations for FY 2021-22 is detailed in Chapter 10 of this Order

2.5.25 Burden of Short Recovery of ABVTPP Power Cost on Retail Consumers

The Objector submitted that CSPDCL has an agreement with Telangana for back-to-back supply of power generated by ABVTPP after adding trading margin of 7 paise per unit. CSPDCL has done under-recovery of cost amounting to Rs. 75.58 Crore. Further, average cost of generation claimed by CSPGCL during FY 2019-20 is substantially high, even higher than cost of short-term power purchased by CSPDCL. The purchase of power from ABVTPP for Retail Sale is inflating Retail Tariff. The Objector requested the Commission to consider ARR of ABVTPP on reduced PAF and disallow excess claim of Capacity Charges of Rs. 531.12 Crore during FY 2019-20 and requested the Commission not to load any under-recovery from sale of power to Telangana below cost of generation.

Petitioner's Reply

CSPDCL submitted detailed explanation to specific query raised by the Objector in view of the back-to-back arrangement for sale of power purchased from ABVTPP to Telangana. Based on demand supply gap within the State, part of power available from ABVTPP is at times utilised within the State to serve its own consumers. It is also clarified that the power purchase cost from CSPGCL includes the proportionate capacity charges and per unit energy charges for the units utilised to supply energy within the State.

Commission's View

The Commission has verified the details provided by CSPDCL and has accordingly approved the quantum and cost of power purchased from CGS stations, including ABVTPP, in the final true-up for FY 2018-19 and FY 2019-20. Further, the recovery of Fixed Charges by ABVTPP has been allowed in accordance with the CSERC MYT Regulations, 2015, as elaborated in Chapter 3 of this Order. For true-up, the Commission has approved sale of surplus power to Telangana after due prudence check, as detailed in Chapter 6 of this order.

2.5.26 Preparation of R-15 and Status of Defective Meters and Assessed Billing Cases

The Objector submitted that there is no uniformity in the submission of CSPDCL with respect to R-15. There are also several database and calculation errors due to which the very purpose of having R-15 has been lost. Further, the number of Defective Meters and Assessed Billing Cases are largely pending and from the R-15 data it is quite evident that CSPDCL is not sure about actual Energy Consumption. It is very clear that Meter Reading is not done on regular basis and number of Defective Meters are on increase despite several directives and Orders from the Commission. The Objector requested the Commission to inspect SAP data directly and regularly for better feedback and control.

Another objector submitted that R-15 for FY 2018-19, FY 2019-20 and FY 2020-21 depicts an average Load Factor of about 34% for Steel Rolling Mills, which is erroneous and does not represent the actual picture.

Petitioner's Reply

CSPDCL submitted that status of defective meters and cases of excess billing in R-15 are as per the provisions of the Supply Code Regulations. The replacement of stopped defective meters depends upon several factual constraints such as location of agriculture and BPL connections at distant places, prolonged locked premises, and resistance of consumers towards meter replacement. Further, CSPDCL follows the directions of the Commission from time to time and also complies with the provisions of Tariff Order for preparation of R-15 data.

Commission's View

The Commission has done prudence check on R-15 data submitted by CSPDCL and accordingly approved the sales of CSPDCL. Further, the Commission observed that the number of defective meters and billing based on assessment is still on the higher side despite various directives given by the Commission in previous tariff orders. The Commission hence, directs CSPDCL to submit a time bound action plan to phase out defective meters and assessment billing, along with the next MYT/Tariff Petition.

2.5.27 Retail Tariff of HV4-Steel Industries

The Objector submitted that under the COVID-19 circumstances, Steel Industries have been hit hard and are unable to run at normal production levels due to various reasons. As a result, the consumption of Industries has gone down from 6155.57 MU in FY 2019-20 to 2224.40 MU in FY 2020-21. Considering the seriousness of the situation, the State Government has announced Tariff Subsidy for Steel Industries having load of 2,500 kVA or above. Further, some of the neighbouring States have announced electricity tariff quite lower/competitive to the existing tariff in Chhattisgarh. It is largely feared that trade and manufacturing activities may shift from Chhattisgarh to other States, which may prove deterrent for the development of Chhattisgarh. The Objector prayed for the following:

i. A separate Tariff Sub-Category under HV4-Steel Industries be formed for Bulk Consumers having load of 2,500 kVA or above and having annual load factor of 60% and above;

ii. Average Billing Rate of CSPDCL should be within range of Voltage-wise Cost of Supply (FY 2020-21- Rs.5.34/kWh for 33kV supply);

iii. Suitable Bulk Consumption Incentive be given over and above Load Factor Incentive based on Orissa Pattern;

iv. Power-off hours to be increased to average 60 hours per month, considering shutdowns and weekly-off days;

v. On incremental consumption above FY 2019-20 levels, reasonable incentive be given based on Maharashtra pattern;

vi. Only Night-Tariff be introduced to encourage consumption during surplus period with single-part fixed unit rate and allowing 12 hours working (suggestions submitted separately);

vii. TOD Tariff Hours to be reset as under:

Period	Existing	Proposed
Normal Hours	500 to 1800 hrs (13 hrs)	600 to 1800 hrs (12 hrs)
Peak Hours	1800 to 2300 hrs (5 hrs)	1800 to 2200 hrs (4 hrs)
Off-Peak Hours	2300 to 500 hrs next day (6 hrs)	2200 to 600 hrs next day (8 hrs)

viii. Fine tuning of TOD Tariff focused on demand and availability gap be prescribed (Punjab pattern):

	Existing TOD Energy Charge			Proposed TOD Energy Charge		
Quarter	**Normal**	**Peak**	**Off-Peak**	**Normal**	**Peak**	**Off-Peak**
FY19-20	**05-18 hrs**	**18-23 hrs**	**23-05 hrs**	**06-18 hrs**	**18-22 hrs**	**22-06 hrs**
	13 hrs	**5 hrs**	**6 hrs**	**12 hrs**	**4 hrs**	**8 hrs**
Q1	100%	120%	75%	100%	120%	80%
Q2	100%	120%	75%	100%	120%	70%
Q3	100%	120%	75%	100%	115%	65%
Q4	100%	120%	75%	100%	125%	75%
Average	100%	120%	75%	100%	120%	72.50%

ix. Advance Payment Rebate equivalent to Delayed Payment Surcharge (presently 1.5% of the bill per month or part) may be given to encourage advance payment of energy bills, which will improve cash-flow of CSPDCL.

Another Objector submitted CSPDCL has projected a standalone profit of Rs. 2050 Cr. at current Tariff for FY 2021-22, considering the following factors:

i. Increase in revenue of HV-4 Category from Rs. 639 Crore to Rs. 857 Crore.
ii. Increase in connected load of HV-4 Category from 1576 MW to 1908 MW
iii. Increase in number of consumers of HV-4 Category from 461 to 540
iv. Decrease in Distribution losses from 16.91% to 12.07%
v. Decrease in Power Purchase cost from Rs. 4.10 / unit to Rs. 3.82/unit
vi. Decrease in Renewable Power Purchase cost from Rs. 6.54/ unit to Rs. 4.95/unit

The objector pointed out that the current Tariff of HV-4 Category is exorbitantly high, which is making the sector non-competitive and reliant on subsidy from the State

Government. Further, electricity Tariff for Steel Industry in steel producing zones such as Durgapur, Jindal, Raigarh, and Maharashtra is in the range of Rs. 3.75/ unit to Rs. 4.65 / unit compared to Rs. 6.60/ unit of Chhattisgarh. The objector prayed for the following:

i. A separate Tariff Sub-Category under HV-4 Steel Industries be formed for Bulk Consumers having load of 2,500 kVA or above who do not have captive power plants or who have captive power plant of maximum 1 MW;

ii. Load factor incentive for this category should be calculated from 45% to a maximum of 70% with a rebate of 1% for every point of load factor achieved up to a maximum rebate of 25% on achieving load factor of 70%.

iii. Extension of off-peak hours from 11 p.m. – 5.00 p.m. to 11 p.m. – 7 p.m. and seasonal TOD in line with Punjab should be applicable to this category.

iv. Off peak discount should be increased from 25% to 40% for night time usage.

v. Special 2% cash discount should be introduced for payment of electricity bill within 5th of every month or within 2 days of bill generation.

vi. Power-off hours should be increased from 30 hours to 96 hours per month.

vii. Optional night Tariff could be introduced from 8 p.m.to 8 a.m., where consumers can opt for the said Tariff twice a year, in which electricity charges should be at a discount of 40% and demand charges should be half of the normal demand charges, and electricity charges beyond stipulated time should be charged at 140%.

Another Objector prayed that all /any type of Steel Industries should be kept in the same Tariff Category and the Tariff for HV-4: Steel Industries should be reduced by Rs. 1.50 / unit from the current Tariff applicable.

Another Objector prayed that the Tariff for HV-4: Steel Industries at 132 kV should be reduced to Rs. 5.30 / kVAh from Rs. 5.45/ kVAh.

Petitioner's Reply

The Petitioner submitted that the contention of standalone profit of Rs. 2050 Cr. to support the stakeholders' proposal is incorrect and therefore need not be taken into consideration. CSPDCL submitted that the present Petition carries true up gap of past 2 years, i.e., FY 2018-19 and FY 2019-20 amounting to deficit of more than Rs. 6000

Crore approximately. The aforesaid standalone profit and its connected requests for determination of retail tariff of applicant's consumer category needs to be considered together with this true-up deficit. CSPDCL further submitted that the retail tariff determination is the prerogative of the Commission under Section 62 of the Electricity Act, 2003.

The Petitioner further submitted that the load factor incentive, re-determination of ToD hours, off peak ToD discount, cash payment discount, power off hours re-determination, and optional night tariff are the factors controlling the average billing rate of applicants' tariff category, which is power intensive in nature and affects the licensees' revenue at large. CSPDCL prayed to the Commission to consider the aforesaid requests subject to protection of CSPDCL's approved ARR for FY 2021-22 and in light of the fact that mini-steel plants and sponge iron manufacturing units come under the consumer category having ability to cross-subsidize the vulnerable sections of society, therefore, these facts may also be considered to determine the tariff of these consumers.

Commission's View

The Commission has addressed the issue of Load Factor Rebate for HV4-Steel Industries Category along with other terms and conditions of tariff in Chapter 12 of this Order. The TOD tariff has also been revised as elaborated in the Chapter 11 on Tariff Philosophy. The category-wise tariffs have been determined in such a manner that the cross-subsidy between categories is reduced, while at the same time, the approved revenue requirement of CSPDCL is also met through application of the revised tariffs.

2.5.28 Sale/Consumption of Surplus Power within the State

The Objector submitted that the Commission had directed CSPDCL to come up with a proposal for optimum utilisation of surplus power within the State through appropriate incentive mechanism by 30th November 2019. CSPDCL has neither submitted any such proposal by 30th November 2019 nor along with subsequent Tariff Petitions. It is also observed that CSPDCL is paying capacity charges to about 4-5 CGS without drawing any power from them due to surplus availability. It is also observed that about 20% of the total net power procurement is disposed of by CSPDCL to other States at very low realization (below average procurement cost) and the burden of such disposal of power to other States is borne by the consumers of

Chhattisgarh by way of higher tariff. Further, the Commission had registered a Suo-motu Petition (P.No.59/2020) on representation of Industries to find ways to utilize surplus power within the State. In Order dated 10th December 2020, the Commission had directed Industries to take up the matter during the processing of the Tariff Petition for FY 2021-22 and directed CSPDCL to submit detailed data and proposal to achieve above objective.

The Objector suggested to develop a mechanism such that:

a) Consumers may get benefit of surplus power at cheaper rates (which is otherwise sold/surrendered to other States at loss-making rate) over and above their existing consumption;

b) Having slight better realization from Retail Consumers comparing to Rs. 3.87/kWh (gross average power purchase cost), Revenue of CSPDCL will be better;

c) State Government will be benefited by way of additional taxes and revenue on any possible increase in production of Industries;

d) Public may be benefited by way of more employment due to increased production.

Further, the objector proposed a special night tariff for steel industries as under:

Demand Charges	Rs.180 per kVA
Energy Charges	60% of normal tariff of Rs. 5.85/kWh, i.e., Rs.3.51/kWh
Special TOD Tariff	Normal Hours- 11 pm to 11 am (12 hrs)
	Day Hours-11am to 6pm (7 hrs) 125% of Normal Tariff of Rs. 5.85/kWh
	Peak Hours- 6pm to 11pm (5 hrs) 150% of normal tariff of Rs. 5.85/kWh
State Subsidy	Rs. 0.80/kWh
Load Factor Incentive	Not applicable
Other Terms & Conditions	1. For a connection using supply for 24 hours and availing other tariff option, sub-meter for part of plant opting Only Night Tariff should be provided 2. There should be choice to switch over to other option, applicable from next billing cycle

The Objector further prayed that measures can be designed in such a manner that it may prove beneficial to CSPDCL by way of sale of surplus power at profit-making rate when there is no demand of such power in inter-State market and also to Steel Industries of the State by way of lower tariff when they are badly suffering from economic slowdown and after-effects of COVID-19 pandemic.

Petitioner's Reply

CSPDCL submitted that it has specifically pointed out that there exists only TOD surplus ranging between 100 MW to 1000 MW in the system during off peak hours in the winter. The proposal submitted by the Objector does not match with the aforesaid TOD surplus and is hence, liable to be dismissed.

Commission's View

In the present Order, the Commission has made a reasonable assessment of the surplus quantum to be sold in the Power Exchanges for FY 2021-22, and has considered some short-term purchase from Power Exchanges to meet the energy requirement. However, during the year, there are bound to be mismatches between demand and supply, and CSPDCL should strive to maximise the revenue from such sale of surplus power.

2.5.29 Retail Tariff Proposal for LV Industries

The Objector submitted the following Tariff Proposal for LT Industries under LV-5 Tariff Category:

a) Rural incentive of 5% on Energy Charges be continued;
b) Existing Adivasi Area Incentive for Bastar and Sarguja be continued;
c) 10% rebate in energy charges to women self-help group be continued;
d) Food processing industries to be given 5% rebate on energy charges in line with 5% rebate to Rice Mills;
e) Only Night Tariff may be introduced to encourage consumption during off peak night hours;
f) Load factor incentives may be introduced similar to HT category;
g) Power Factor incentive may be increased and should be applicable step-wise on each percent improvement;
h) Existing Supply Affording Charges (SAC) to be reduced;

i) Possibility for bearing SAC by DISCOMs under Capital Expenditure plan should be explored;

j) SAC charges should be liberal for LT consumer converting to HT connection;

k) Energy Security Deposit should be 1.5 times average monthly consumption instead of 2 times.

Another Objector suggested the following measures to encourage consumption of surplus power by industrial consumers:

a) Option 1: Only night may be designed at a fixed tariff of Rs. 4/unit for 12 hours.

b) Industrial consumers may be allowed to consume more power compared to previous year's average consumption at Rs. 4/ unit.

Petitioner's Reply

CSPDCL submitted that the applicant's prayer on surplus power is mainly based on surplus sale estimated by CSPDCL in its Tariff Petition for FY 2021-22. It is necessary to clarify that aforesaid estimation of surplus sale is only on TOD basis and need not be taken into consideration for sale of power to consumers as the latter may require RTC surplus. CSPDCL further submitted that it has not given any specific proposal for retail tariff determination. It is further submitted that the retail tariff determination is the prerogative of the Commission under Section 62 of the Electricity Act, 2003.

Commission's View

The Commission has addressed the issue on terms and conditions related to tariff for LV-5 LT Industries Category in Chapter 12 of this Order. The existing rebates to this category have been continued. As regards SAC, the same is the subject matter of a separate Petition before the Commission, and requires amendment of the Supply Code Regulations, and cannot be addressed in this Order.

2.5.30 Rolling Mill and Mini Steel Plants

The Objector stated that mini steel plants have a load factor of 75-80% whereas steel rolling mills have load factor of only 15-20%. As both steel plants and rolling mills are considered in the same category of HV-4 since 1st April 2017, it creates a confusion when CSPDCL reports high consumption for HV4 category. This affects the ARR and retail supply tariff and also creates confusion in ABR computation. Further, it is requested that ABR of low load factor steel rolling mills should be brought within 20% of ACoS. Thus, Objector has requested for a separate category in the Tariff for low load factor industries (up to 35%) having demand charges of Rs. 50/kVA/Month and electricity consumption, ABR and CSS of Low Load Factor Steel Rolling Mills should be determined separately. Further, the Objector proposed for a special night tariff for Rs. 4/kWh for 12 hours considering availability of surplus power within the State.

Another Objector prayed for the following for low load factor rolling mills:

a) Demand charges of Rs. 180/ kVA should be reduced to Rs. 50 / kVA

b) The Tariff applicable to Rolling mill should be equal to Steel Industries, i.e., Rs. 5.85/ unit and not Rs. 6.35 / unit.

c) Electricity duty should be reduced to 3% from 6%

Another Objector submitted that if the Tariff of mini steel plants is reduced, the State Government will not provide subsidy and the burden of revenue recovery will be distributed on the other categories. Hence, the Tariff for the Mini Steel Plants should not be reduced.

Petitioner's Reply

CSPDCL submitted that the contentions about availability of surplus power for utilization within the State is a misconception. There exists TOD surplus but not Round-the-Clock (RTC) surplus, and hence, it would not be relevant for 24x7 supply to consumers within the State. Based on demand supply gap during off peak hours during winter season, the TOD surplus ranges between 100 MW to 1000 MW. CSPDCL submitted that the basis drawn by objector to create new tariff category for low load factor steel rolling mills is also misconceived. Furthermore, low load factor industries identified as separate HV-5 tariff category have been merged with HV-3 and HV-4 industries in the Tariff Order for FY 2017-18 after a conscious decision. A separate dispensation of 35% load factor limit for billing of demand and energy charges specifically for rolling mills, was allowed in the Tariff Order for FY 2019-20. Objectors have not furnished any new facts or analysis to undo the whole exercise of merger of tariff categories and existing retail tariff design already contains a sub-category with specific demand charges and energy charges on the basis of load factor.

The suggestion to revise demand charges is within the prerogative of the Commission under Section 62 of the Electricity Act, 2003.

Further CSPDCL submitted that the applicant's prayer with regard to reduction of demand charges from Rs. 180 per kVA per month to Rs.50 per kVA per month requires no consideration in light of the fact that it may lead to reduction in revenue towards fixed charges, which are relatively lower than the capacity charges billed to distribution licensee by generator. Further, the prayer with regards to reduction of Electricity Duty from 6% to 3% is the sole prerogative of the State Government and not related to the Petitioner.

Further, CSPDCL submitted that the retail tariff determination is the prerogative of the Commission under Section 62 of the Electricity Act, 2003. Further, the State Commission is guided by the principles of Tariff Policy notified by Govt. of India under Section 3 of the Electricity Act, 2003, which stipulates that retail supply tariff of consumer categories should be fixed within the limits of +20% of Average Cost of Supply (ACOS). It is pertinent to mention here that the Objector comes under the consumer category having ability to cross subsidize the vulnerable sections of society, therefore, this factor may be considered while determining the tariff of these consumers.

Commission's View

Based on representations by the consumers and after due deliberations with CSPDCL, in the Tariff Order for FY 2017-18, a conscious decision was taken to merge the low load factor industries of HV Steel Rolling Mill with HV Steel Industry. Further, separate dispensation of 35% load factor limit for billing of demand and accordingly energy charges specifically for rolling mills, has been allowed in the Tariff Order for FY 2019-20.

2.5.31 Special Rebate for Poha Industry

The Objector submitted that there are 200 to 250 small-scale poha industry based on agricultural produce (Paddy), which creates 20,000 to 25,000 jobs directly or indirectly, and 90% of the production is exported outside the state. The Poha industry in the State is lagging behind other States in production cost and to maintain competitiveness, it needs co-operation of the Government. At present, the industry is charged in the tariff category of Steel Industry. With special rebates of 5% of the electricity rate, the Poha industry's competitiveness can be increased and Poha industry can become a major generator of employment in the State.

Thus, the Objector prayed for following incentives for Poha industry –

1. The Poha industry should be provided 10% incentive in line with the 5% incentive provided to power intensive industries;
2. 50% discount should be provided to Poha industry in electricity rates so it can survive in this competitive market;
3. No incentive is provided for maintaining Power factor above 95% in HT as is provided in LT. HT consumer should be provided 50 to 75 paisa per unit incentive for maintaining power factor above 95%;
4. 15 Paisa per unit incentive is provided for maintaining Power Factor above 95% in LT category. It is prayed to increase it to 20 Paisa per unit;
5. There are many irregularities in VCA Charges. Prayer to simplify it and grant a concession for Poha industry;
6. Fixed charges for HT consumers of Poha industry to be made Rs. 150 per kW from Rs. 375 per kW;
7. Fixed charges for LT consumers of Poha industry to be made Rs. 50 per kW from Rs. 110 per kW;
8. Meter rent charged per month should be ended by taking a lump sum.

The Objector also submitted that there should be a separate category of tariff for Food Processing Industries. The efficiency gain from such reduction in electricity tariff would directly benefit farmers in terms of their value of produce and would increase employment in the State.

Petitioner's Reply

CSPDCL submitted that the aforesaid contentions are related to retail tariff determination, which is the prerogative of the Commission under Section 62 of the Electricity Act, 2003. However, CSPDCL highlighted the relevant provisions of Tariff Policy, which stipulates that retail tariff should be within limits of ±20% of Average Cost of Supply (ACoS).

Commission's View

The detailed rationale and tariff philosophy adopted by the Commission, while determining the category-wise tariff for FY 2021-22, is given in Chapter 11 of this order.

2.5.32 Promotional Electricity Tariff for ‘Export Oriented Units’

The Objector submitted that ‘export-oriented units’ like Textile Industry need to be encouraged by providing promotional Retail Tariff in line with Industrial Policy 2019-24 declared by Government of Chhattisgarh and tariff similar to IT Industries should be levied.

Thus, the Objector requested to include ‘Export Oriented Units’ under LV-7 and HV-9 category, which is applicable for IT industries.

Petitioner’s Reply

CSPDCL submitted that under existing tariff design, the HV-9 tariff is applicable to Information Technology Industries having minimum Contract Demand of 50 kW, whereas the applicant’s industry is export oriented unit, which is presently billed under Other Industries & General Purpose category applicable to all purposes not covered specifically under any other HV tariff category.

CSPDCL further submitted that retail tariff determination is the prerogative of the Commission under Section 62 of the Electricity Act, 2003 and such type of Industries comes under the consumer category having ability to cross-subsidize the vulnerable sections of the society, therefore, this fact may be considered while determining the tariff of these consumers subject to protection of its ARR for FY 2021-22.

Commission’s View

The Commission has considered the submissions made by the Textile Industry. In order to promote such industries as they regenerate employment in the State, as a special measure, the Commission has modified the HV-9 category to include Export Oriented Textile Industry also. It is also pertinent to note that on starting production such industries will start consuming power, which is in the interest of licensee also. However, the HV-9 category shall now be levied two-part tariff with reduced Demand Charges and Energy Charges, so that they are cross-subsidised to some extent.

The detailed rationale and tariff philosophy adopted by the Commission, while determining the category-wise tariff for FY 2021-22, is given in Chapter 11 of this order.

2.5.33 Reduced electricity rate/separate Tariff Category for Oxygen Gas Plants

The Objector submitted that Oxygen Gas producing Plants are very important to everyone’s life. Electricity being the major contributor in cost for purification and bottling of oxygen gas, it is inevitable that with higher electricity charges, the selling price for oxygen goes up accordingly. Hence, the Objector requested to bifurcate and make a separate priority tariff exclusively for oxygen and other gas manufacturing units to facilitate reduction in manufacturing cost and benefitting the end users like Hospitals and Steel Industry. The Objector proposed Demand Charges of Rs. 250/kVA instead of Rs. 350/kVA and Energy Charges of Rs. 4.50/kWh instead of existing Rs. 6.36/kVAh for such separate tariff category. The Objector pointed out that the State has very limited number of oxygen producing plants, hence, the revision in tariff would not considerably affect the revenue of CSPDCL.

Petitioner’s Reply

CSPDCL submitted that retail tariff determination is the prerogative of the Commission under Section 62 of the Electricity Act, 2003. However, CSPDCL highlighted that the Tariff Policy is applicable for determination of retail tariff, wherein the Commission is required to keep the consumer tariff within the limits of ± 20% of ACoS.

Commission’s View

Oxygen has multiple uses, i.e., it is used in steel making and also for saving human life during treatment at hospitals. There are two different manufacturing routes for producing oxygen, namely as an integral process of steel making under a steel manufacturing unit and as an isolated unit for manufacturing. At present for oxygen plants operating in isolation, HV-3 tariff is levied whereas oxygen plants operating as an integral part of a steel making industry are getting supply at the tariff applicable for the steel plant itself. To protect the interest of the consumers operating the oxygen plants in isolation, it is proposed to provide a rebate of 10% for such exclusive oxygen plants operating up to 33 kV supply voltage, which will make the product commercially viable for the hospitals and provide incentives to tap the potential available for operating oxygen plants in isolation. The detailed rationale and tariff philosophy adopted by the Commission, while determining the category-wise tariff for FY 2021-22, is given in Chapter 11 of this order.

2.5.34 High Penal Charges for Excess MD

The Objector submitted that in CSERC order high penal charges are levied against excess Maximum Demand as per sanctioned load, whereas the Tariffs approved by the Madhya Pradesh Electricity Regulatory Commission (MPERC) does not provide for high penalty. Further, excess demand penalty surcharge is not printed on the electricity bills issued by CSPDCL.

The Objector hence, requested the Commission to make the penalty provision for excess demand similar to MPERC Tariff Order. The Objector requested the Commission to direct CSPDCL to give printed information of any excess demand penalty imposed by it in the electricity bill issued by CSPDCL.

Petitioner's Reply

CSPDCL did not submit any reply to this objection.

Commission's View

The detailed rationale and tariff philosophy adopted by the Commission, while determining the category-wise tariff for FY 2021-22, is given in Chapter 11 of this order.

2.5.35 Power Factor incentive and penalty for LT category

The Objector submitted that the LV-2.2 category consumers having sanctioned load less than 15 kW are not provided with Power Factor incentive, which is equally important as a huge amount of capital is invested for installation of LT Capacitors at individual sites. Further, objector submitted that MPERC does not differentiate based on sanctioned load for Power Factor incentive. Power Factor penalty should also be considered slab-wise similar to Power factor incentive.

Petitioner's Reply

CSPDCL would like to submit that the Commission after taking into consideration the objections and suggestions raised by the Objector during the regulatory process of Tariff Order for FY 2019-20 has already revised the Power Factor incentive to all categories of LV where Power Factor surcharge is applicable. Resultantly, the Power Factor incentive is payable on recording of average monthly Power Factor equal to and above 85%.

The scheme of Power Factor incentive and surcharge under existing tariff design is applicable to non-domestic category of consumers having Contract Demand/Connected Load of 15 kW and above. CSPDCL is accordingly implementing the Power Factor incentive and surcharge as per the terms of the tariff order.

CSPDCL further submitted that the approach followed by other SERCs does not carry any binding force on present regulatory process as the incentives and surcharges depend upon the consumer profile, load profile and consumption profile, which varies from State to State.

CSPDCL further submitted that under Section 62 of the Electricity Act, 2003, the Commission has the power to differentiate the consumer tariff on the basis of Power Factor, Load Factor, voltage, consumption of electricity, time at which supply is required, geographical position of the area, nature of supply and purpose for which supply is required.

Commission's View

The detailed rationale and tariff philosophy adopted by the Commission, while determining the category-wise tariff for FY 2021-22, is given in Chapter 11 of this Order. The detailed Tariff Schedule applicable for FY 2021-22 is given in Chapter 12 of this Order.

2.5.36 Additional Information relating to Tariff Petitions

The Objector submitted that they needed the following additional information, which is not available on the website of the Commission to enable them to provide comments/suggestions/objections:

1. Audited Balance Sheet for FY 2018-19 for CSPDCL and un-audited Balance Sheet for FY 2019-20 for CSPDCL along with all notes, annexures and enclosures;
2. Audited Balance Sheet of Pension & Gratuity Fund for FY 2018-19 and FY 2019-20;
3. Monthly Bill raised by CSPDCL for power supplied to Telangana for FY 2018-19 and FY 2019-20;
4. Bills raised by CSPTCL for intra-State Transmission Charges for FY 2018-19 and FY 2019-20;

5. Bills for Inter-State Transmission Charges payable by CSPDCL for FY 2018-19 and FY 2019-20;
6. Bills for Power Purchased from NTPC and NSPCL during FY 2018-19 and FY 2019-20;
7. Details of other charges of Rs 194.55 Crore paid in FY 2018-19 for power purchase by CSPDCL;
8. Soft copy of R-15 (LT and HT both) for FY 2018-19, FY 2019-20 and FY 2020-21 (till December 2020);
9. Category-wise Revenue earned by CSPDCL during FY 2018-19 and FY 2019-20; 10. Details of Subsidy/financial add received from State Government during FY 2018-19 and FY 2019-20;
10. Details of RE Purchase during FY 2018-19 and FY 2019-20 and details of other charges of Rs 250.62 Crore during FY 2018-19;
11. Details of Late Payment Surcharge, if any, paid to NTPC, CSPGCL and any other power supplier during FY 2018-19 and FY 2019-20;
12. Study Report on consumption of Agriculture Consumers as directed by the Commission in the Tariff Order for FY 2019-20.

Petitioner's Reply

CSPDCL submitted that the Objector instead of raising any objections and suggestions has sought additional information through his letter no. CMSPA/2021-22/142 dated 15th February 2021. It is submitted that publication of approved gist through Public Notice intending to invite objections and suggestions has been done on 24th January 2021. CSPDCL's Tariff Petition was also posted in the public domain. Further, CSPDCL has also submitted additional information sought through data gaps during the notice period.

Hence, CSPDCL has no comments to offer in response to the aforesaid letter as no objections and suggestions have been raised on CSPDCL's Tariff Petition by the objector at this point of time.

Commission's View

The Tariff Petition along with Petition formats and Annexure were uploaded on the website of the Commission and CSPDCL from the date of notification of Public Notice. The Commission has obtained the necessary data and information from CSPDCL for undertaking the due diligence and prudence check. The replies submitted by CSPDCL along with supporting documents were also subsequently uploaded on the website of the Commission and CSPDCL, for ready reference of the consumers.

2.5.37 Railways Tariff

The Objector submitted that the Railways should be provided with favourable formulation of tariff. The reasons provided by the Objector are as follows:

1. It is a base load consumer with 30 to 40% load factor in average;
2. It is a Deemed Licensee. So, it can always avail electricity through Open Access;
3. Surplus Power is available with CSPDCL. Railway being a Deemed Licensee should be treated at par with CSPDCL and the power sold to Railways should be at Average Power Purchase Cost;
4. Important role played by Railways in development of the State;
5. Article 287 of the Constitution of India forbids States from imposing any kind of tax on the consumption or sale of electricity, which is consumed by Railways;
6. Railways is playing a very important role in sustainable development of the State utilising energy efficient measures. By further rationalising tariff, it would help Railways justify the expenditure.

The Objector hence, requested the Commission to take necessary steps so that all upcoming Rail projects become financially viable, and reduce tariff of HV-1 Category considering the adverse impact of COVID-19 pandemic situation in current financial year.

The Objector also requested to reduce the Tariff for HV-3 category, which is the category for Railways for its Non-Traction Load in HT Connection and requested to consider LV-6 category for connections of Non-Traction load in LT.

Petitioner's Reply

CSPDCL submitted that the present position of Railways is a consumer like any other that takes supply from CSPDCL under the terms of the Supply Agreement. Further, traction connections of Objector under HV-1 tariff category are already benefited through load factor incentive in energy charges, which already helps Railways to reduce their input cost.

As regards consideration of non-traction load of Railways under public utility category, the issue is related to tariff design, which falls under statutory functions of the Commission under Section 62 of the Act. Under a conscious decision, the Commission had framed specific tariff for bulk supply at one point for establishments applicable to consumers like Railway load other than traction load. The bifurcation of Demand Charges and Energy Charges is based on the Load Factor, which has commercial implications. Undisputedly optimum usage of contract demand is under the control of the consumer. The proposal to include non-traction load under public utility category LV-6 may observe constraints of simultaneous HV/LV supply in the premises.

Commission's View

The detailed rationale and tariff philosophy adopted by the Commission, while determining the category-wise tariff for FY 2021-22, is given in Chapter 11 of this Order. The detailed Tariff Schedule applicable for FY 2021-22 is given in Chapter 12 of this order.

3 FINAL TRUE-UP FOR FY 2019-20 FOR CSPGCL

3.1 Background

The Commission notified the CSERC MYT Regulations, 2015 for the third MYT Control Period from FY 2016-17 to FY 2020-21 on September 9, 2015. Subsequently, the Commission notified the first amendment to CSERC MYT Regulations on June 16, 2017. The Commission issued the MYT Order on April 30, 2016 approving the ARR of existing Generating Stations, viz., HTPS, KTPS (East), DSPM TPS, 500 MW Korba West TPP, and Hasdeo Bango Hydro power plant of CSPGCL for the Control Period from FY 2016-17 to FY 2020-21. Further, the Commission vide its Order dated July 7, 2018 had approved the ARR and Generation Tariff of ABVTPP (Marwah) for the MYT Control Period. The Annual Fixed Charges (AFC) for all the plants of CSPGCL was further revised in the Tariff Order for FY 2019-20.

The Commission, vide Tariff Order dated May 30, 2020, undertook the final true-up for FY 2017-18 and FY 2018-19 for CSPGCL. CSPGCL has now filed this Petition for true-up of FY 2019-20 for its existing thermal generating stations, viz., KTPS (East), HTPS, DSPM TPS, 500 MW Korba West TPP, ABVTPP, and Hasdeo Bango Hydro power plant in accordance with the CSERC MYT Regulations, 2015.

Regulation 10.4 of the CSERC MYT Regulations, 2015 provides as under:

"10.4. The scope of the truing up shall be a comparison of the performance of the generating company or STU/transmission licensee or distribution licensee or SLDC with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of the following:

(a) A comparison of the audited performance of the applicant for the previous financial year(s) with the approved forecast of such previous financial year(s), subject to the prudence check including pass-through of impact of uncontrollable factors;

(b) Review of compliance with directives issued by the Commission from time to time;

(c) Other relevant details, if any."

In accordance with the above Regulation, the Commission, in the present Order, Commission has undertaken true-up of ARR for FY 2019-20 on the basis of Audited Accounts of CSPGCL.

In this Chapter, the Commission has analysed all the elements of actual expenditure and revenue of CSPGCL for FY 2019-20 and considered the final true-up of expenses and revenue in accordance with Regulation 10 of the CSERC MYT Regulations, 2015. The Commission has approved the sharing of gains and losses on account of controllable factors between CSPGCL and its beneficiaries, in accordance with Regulation 13 of the CSERC MYT Regulations, 2015.

3.2 Generation Capacity of Existing Generating Stations

The details of the existing generating stations are shown in the Table below:

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

Sr. No.	Particulars	No. of Units & Capacity in MW
1	Korba East Thermal Power Station (KTPS)	2x120 = 240 MW
2	Hasdeo Thermal Power Station (HTPS)	4x210 = 840 MW
3	1x500 MW Korba West Thermal Power Plant (KWTPP)	1x500 =500 MW
4	Dr. Shyama Prasad Mukherjee Thermal Power Station (DSPM)	2x250=500 MW
5	Mini Mata Hasdeo Bango Hydro Electric Project	3x40=120 MW
6	Atal Bihari Vajpayee Thermal Power Plant (ABVTPP), Janjgir Champa	2x500 = 1000 MW

3.3 Plant Availability Factor (PAF)

CSPGCL's submission

The actual Plant Availability Factor (PAF) for CSPGCL's stations for FY 2019-20 is shown in the Table below:

Table 3-2: Actual PAF for FY 2019-20 as submitted by CSPGCL

Station	FY 2019-20
KTPS	62.66%
HTPS	69.71%
DSPM	93.14%
KWTPP	80.21%
ABVTPP	49.05%

As regards to KTPS, CSPGCL submitted that lower availability is due to effect of ageing. The plant has already completed about 40 years of life and these two operational Units are the last Units, which have survived for such long duration. CSPGCL further submitted that performance is a function of investment and there has been almost no capital investment in plant and machinery during last five years.

As regards HTPS, CSPGCL submitted that Generator Transformer (GT) of Unit 3 failed in February 2019, which was in continuous operation since 1983, and hence the Unit was taken out of operation from April 2019 to mid of July 2019.

As regards DSPM, CSPGCL submitted that it has met the availability criteria as per the targets specified by the Commission.

As regards, KWTPP, CSPGCL submitted that apart from short supply of coal, the Unit was under Capital Overhaul (COH) for about 46 days since January 22, 2020. CSPGCL further submitted that the Expert Committee appointed by the Central Electricity Authority (CEA) had recommended such periodic COH for coal-based plants.

As regards ABVTPP, CSPGCL submitted that due to various factors such as lower receipt of coal from SECL, poor quality of coal, ash evacuation, damage of compressor blade of generator rotor of Unit 2, backing down instructions due to lower demand, etc., has resulted in lower PAF for FY 2019-20.

Commission's View

The actual PAF of the generating stations for FY 2019-20 as submitted by CSPGCL, supported by CSLDC's certificate have been examined. The Commission has considered the actual PAF as per CSLDC's certificate for FY 2019-20 for determining sharing of gains and losses.

As regards to KTPS, the Commission has considered Normative Annual Plant Availability Factor (NAPAF) for FY 2019-20 as 70.00%, as approved in the MYT order dated April 30, 2016.

As regards to HTPS, the Commission in the final true up of FY 2017-18 and FY 2018-19, approved NAPAF at 78.69%. The Commission also considered same NAPAF for FY 2020-21. The relevant extracts of the Tariff Order dated June 30, 2020, are as follows:

"In view of the above, the Commission observes that ESP augmentation plan has been changed. In MYT order, CSPGCL sought approval of outage of two units simultaneously for two years. Now, CSPGCL has taken outage of one unit at a time and thus for four years for units. The Commission accords the approval for change in ESP augmentation plan and accordingly revised NAPAF as discussed in earlier para. Accordingly, the Commission approves NAPAF of 78.69% for FY 2017-18 and FY 2018-19 after final true-up. The same NAPAF would continue for FY 2020-21 too."

Accordingly, the Commission has considered the NAPAF for HTPS at 78.69% for Truing-up of FY 2019-20.

As regards to DSPM and KWTPP, the Commission has considered the NAPAF of 85% as per the MYT order for the purpose of true-up for FY 2019-20.

As regards to ABVTPP, in the order dated July 7, 2018, the Commission has approved NAPAF at 76.50% for the MYT Control Period. The Commission has accordingly considered the NAPAF at 76.50% for true-up of FY 2019-20.

The station-wise NAPAF claimed and actual PAF approved by the Commission in the true-up of FY 2019-20 are shown in the Table below:

Table 3-3: Approved Plant Availability Factor for FY 2019-20

Station	NAPAF claimed	Actual PAF approved by Commission
KTPS	70.00%	62.66%
HTPS	78.69%	69.71%
DSPM	85.00%	93.14%
KWTPP	85.00%	80.21%
ABVTPP	76.50%	49.05%

3.4 Auxiliary Energy Consumption

CSPGCL's Submission

CSPGCL has submitted the actual Auxiliary Energy Consumption (AEC) for its stations for FY 2019-20, as shown in the Table below:

Table 3-4: Auxiliary Energy Consumption for FY 2019-20 as submitted by CSPGCL

Station	FY 2019-20	
	MYT Order	CSPGCL's Submission
KTPS	11.25%	11.48%
HTPS	9.70%	9.59%
DSPM	9.00%	7.92%
HBPS	1.00%	0.30%
KWTPP	5.25%	5.51%
ABVTPP	5.25%	6.27%

CSPGCL submitted that during FY 2019-20, all other generating stations except KTPS, KWTPP and ABVTPP have achieved AEC better than the specified norms.. CSPGCL also submitted that AEC has increased for KTPS due to ageing of two Units.

Commission's View

In this Order, normative AEC for truing up has been considered as approved in the MYT Order. Further, AEC for ABVTPP has been considered as approved vide order dated July 7, 2018.

For the purpose of sharing of efficiency gains and losses, the actual AEC as submitted by CSPGCL for FY 2019-20 has been considered. Further, the normative AEC for FY 2019-20, as shown in the Table below, has been considered for computation of normative net generation:

Table 3-5: Approved Auxiliary Energy Consumption for FY 2019-20

Station	FY 2019-20		
	MYT Order	Actual	Normative approved
KTPS	11.25%	11.48%	11.25%
HTPS	9.70%	9.59%	9.70%
DSPM	9.00%	7.92%	9.00%
HBPS	1.00%	0.30%	1.00%
KWTPP	5.25%	5.51%	5.25%
ABVTPP	5.25%	6.27%	5.25%

3.5 Gross Generation and Net Generation

CSPGCL's Submission

CSPGCL submitted that the actual gross generation and net generation for FY 2019-20 for its generating stations which is shown in the Table below:

Table 3-6: Actual Gross Generation and Net Generation for FY 2019-20 as submitted by CSPGCL (MU)

Station	Gross Generation	Net Generation
KTPS	1,308.75	1,158.49
HTPS	5,160.56*	4,665.84
DSPM	3,847.85	3,543.23
HBPS	236.71	235.99
KWTPP	3,539.15	3,344.15
ABVTPP	4,356.03	4,082.84
Total	**18,449.08**	**17,030.54**

**Revised submitted by CSPGCL*

Commission's View

The billing mechanism has been changed from October 2014, wherein three-part ABT billing is done based on declared capacity and corresponding scheduled energy, and the deviations from the schedule are governed through Deviation Settlement Mechanism (DSM). The above figures submitted by CSPGCL are the actual generation and not the scheduled generation. For the purpose of sharing of efficiency gains and losses, the Commission has duly verified the monthly statements submitted by CSPGCL. The actual gross generation and net generation is based on actual metered data and the normative gross generation and net generation has been arrived based on normative figures approved in the Tariff Order, as shown in the Table below:

Table 3-7: Approved Gross Generation and Net Generation for FY 2019-20 (MU)

Station	Normative		Actual	
	Gross Generation	Net Generation	Gross Generation	Net Generation
KTPS	1,475.71	1,309.69	1,308.75	1,158.49
HTPS	5,806.19	5,242.99	5,160.56	4,665.84

Station	Normative		Actual	
	Gross Generation	Net Generation	Gross Generation	Net Generation
DSPM	3,733.20	3,397.21	3,847.85	3,543.23
HBPS	274.00	271.26	236.71	235.99
KWTPP	3,733.20	3,537.21	3,539.15	3,344.15
ABVTPP	6,719.76	6,366.97	4,356.03	4,082.84
Total	**21,742.06**	**20,125.33**	**18,449.08**	**17,030.54**

3.6 Gross Station Heat Rate

CSPGCL's Submission

CSPGCL submitted the actual Gross Station Heat Rate (GSHR) for FY 2019-20 for existing generating stations, as shown in the following Table:

Table 3-8: GSHR for FY 2019-20 (kcal/kWh)

Station	FY 2019-20
KTPS	2751.72
HTPS	2691.43
DSPM	2411.41
KWTPP	2444.52
ABVTPP	2484.08

CSPGCL submitted that DSPM and KTPS performed as per norms and achieved the targets. The GSHR target was not achieved for HTPS, as the total received coal during the year was about 93% of the normative required coal for this station. Partial loading on the machines due to coal shortages resulted in higher GSHR. GSHR for KWTPP was higher due to necessary COH, which was carried out for 46 days on recommendation of the Expert Committee appointed by CEA. Deterioration of GSHR in ABVTPP was on account of various reasons such as:

- *Lower Coal receipt from SECL*: ABVTPP is covered under Bridge Linkage policy of Government of India (GoI), wherein Coal India does not sign any Fuel Supply Agreement (FSA) and signs only Memorandum of

Understanding (MOU) on best effort basis. Thus, the Bridge Linkage policy itself stipulates maximum coal supply sufficient only for about 57.375% PLF. Further, while the MOU for FY 2017-18 was for 3.784 Million Tonnes per Unit, for FY 2019-20, Coal India has further reduced it to about 3.2666 Million Tonnes (a reduction of 0.5174 Million Tonnes).

- *Poor Quality of Coal:* While the MOU assured coal supply between G-10 to G-12 grade, however, very large number of rakes were lower than G-12 grade. The worst was supply from Korri-Chhapar mines of Coal India, as almost all rakes were of lower than G-12 grade and their average was G-15 grade.
- *Ash evacuation Problem:* During the year, Units also faced problems on account of ash evacuation. The lower quality of coal also aggravated the problem. Units operated at partial loads and sometimes had to be stopped also due to problem related to ash evacuation.
- *Damage of Generator rotor Compressor Blades of Unit 2:* On January 9, 2020, Unit 2 was stopped due to abnormality in hot and cold gas temperature. On examination, it was found that Generator rotor hydrogen compressor blades were damaged. As compressor blades are encased and do not require any separate operational procedure or any routine/capital maintenance, the failure was uncontrollable, i.e., beyond CSPGCL action. Due to lockdown, the work got further hampered and finally the machine could be brought back on bar in the month of July 2020.
- *Backing Down:* Even at part loads, (mostly due to lower demand in system) sometimes the Unit had to face backing down as per CSLDC instructions. This also further contributed to deterioration of parameters.

Commission's View

As regards GSHR of ABVTPP, the Commission in its order dated July 7, 2018, has approved GSHR of 2378.42 kcal/kWh, which is based on design heat rate and as per the provisions of CSERC MYT Regulations, 2015. The Commission has considered the same GSHR for the purpose of true-up for FY 2019-20.

After due verification, the actual GSHR as submitted by CSPGCL for FY 2019-20 has been considered for the computation of actual Fuel Cost and the normative GSHR as approved in MYT Order dated April 30, 2016 has been considered for computation of normative Fuel Cost. GSHR for thermal power stations as approved by the Commission for FY 2019-20 are shown in the Table below:

Table 3-9: Approved GSHR for FY 2019-20 (kcal/kWh)

Station	Normative	Actual
KTPS	3,110.00	2,751.72
HTPS	2,650.00	2,691.43
DSPM	2,500.00	2411.41
KWTPP	2,375.00	2444.52
ABVTPP	2,378.42	2484.08

3.7 Secondary Fuel Oil Consumption

CSPGCL's Submission

CSPGCL has submitted the actual Secondary Fuel Oil Consumption (SFOC) for FY 2019-20 as shown in the Table below:

Table 3-10: SFOC submitted by CSPGCL FY 2019-20 (ml/kWh)

Station	MYT Order	Actual
KTPS	2.00	1.20
HTPS*	0.90	0.58
DSPM	0.50	0.17
KWTPP	0.50	0.53
ABVTPP	0.50	0.55

** HTPS revised normative values are as per Order dated 28.02.2019.*

Commission's View

The Commission in the MYT order has approved SFOC of 1.0 ml/kWh for HTPS as against SFOC norm of 0.8 ml/kWh as specified in the CSERC MYT Regulations, 2015. In the Tariff Order dated February 28, 2019; Based on ESP augmentation works, these norms were revised. In the previous Tariff Order, the Commission reiterated that the same norms shall continue to be applicable till FY 2020-21. Accordingly, the Commission approves normative SFOC of 0.90 ml/kWh for HTPS in the true-up of FY 2019-20. Normative SFOC for all the other power stations is considered same as approved in the MYT order for Control Period.

Further, the Commission observes that all generating stations except KWTPP and ABVTPP have achieved norms for SFOC. For the purpose of sharing of efficiency gains/losses, actual SFOC has been considered vis-a-vis normative SFOC for computation of normative fuel cost, as shown in the Table below:

Table 3-11: Approved SFOC for FY 2019-20 (ml/kWh)

Station	Normative	Actual
KTPS	2.00	1.20
HTPS	0.90	0.58
DSPM	0.50	0.17
KWTPP	0.50	0.53
ABVTPP	0.50	0.55

3.8 Transit Loss

CSPGCL's Submission

CSPGCL has submitted the actual transit loss as shown in the following Table:

Table 3-12: Transit loss as submitted by CSPGCL for FY 2019-20

Station	FY 2019-20
KTPS	1.06%
HTPS	0.20%
DSPM	0.15%
KWTPP	0.20%
ABVTPP	0.69%

Commission's View

Based on the documents submitted by CSPGCL, the Commission has duly verified the actual transit loss by considering monthly coal quantum received. The actual transit loss for FY 2019-20 has been considered as submitted by CSPGCL for the purpose of sharing of efficiency gains and losses, while the normative transit loss for FY 2019-20 has been considered as approved for MYT Control Period, for computation of normative fuel cost, as shown in the Table below:

Table 3-13: Approved Transit loss for FY 2019-20

Station	Normative	Actual
KTPS	1.15%	1.06%
HTPS	0.20%	0.20%
DSPM	0.20%	0.15%
KWTPP	0.20%	0.20%
ABVTPP	0.80%	0.69%

3.9 Calorific Value and Price of Fuel

CSPGCL's Submission

CSPGCL submitted the actual Calorific Value (CV) and price of fuels for FY 2019-20, as shown in the following Table:

Table 3-14: Actual Calorific Value and Price of fuels for FY 2019-20

Station	Coal		Secondary Fuel	
	Calorific Value (kcal/kg)	Actual Price of Fuel (Rs. /MT)	Calorific Value (kcal/kL)	Actual Price of Fuel (Rs. /kL)
KTPS	3396.69	1776.52	10000	51291.21
HTPS	3625.08	1843.79	10000	49879.59
DSPM	3485.92	2070.79	10000	51144.99
KWTPP	3592.06	1843.79	10000	49879.59
ABVTPP	3411.14	2281.80	10000	49548.47

Commission's View

As per information available, common facility is used for transportation of coal for HTPS and KWTPP. In the previous Tariff Petitions, CSPGCL had submitted that the landed price of coal has been considered on integrated basis and the same rate has been used for computation of fuel cost for both the plants. The Commission in True-up of FY 2019-20 accordingly considers the submission of CSPGCL for landed price of coal for HTPS and KWTPP.

The Commission observes that, during the period under true up, third-party sampling of coal was undertaken. The third-party sampling is done by Central Institute of Mining and Fuel Research (CIMFER), a constituent laboratory under the aegis of

Council of Scientific and Industrial Research (CSIR), New Delhi, which aims to provide R&D inputs for the entire coal-energy chain encompassing exploration, mining and utilization. The third-party sampling at loading end on behalf of the power plant and the Coal Companies, is being done in accordance with issued by the Ministry of Coal, Government of India the Guideline bearing No. 23011/48/2013-CPD dated November 26, 2015. As per the Guideline, the fee paid shall be equally borne by both the Parties. Consequent to the Guidelines and Standard Operating Procedure (SOP), a supplementary agreement was signed between SECL, CSPGCL and CIMFER. As per the settled position, the Government Guidelines qualify as Change in Law and as per Regulations, the impact of Change in Law is a pass through. The third-party sampling has started since FY 2017-18, and the cost of third-party sampling has been included in the cost of coal. For timely pass through of such cost through FCA, minor modification in the FCA format was allowed and the revised formats were annexed with Tariff order for FY 2020-21.

Further, the Commission sought details of fuel quantum received, calorific value of fuel and landed price of fuel on monthly basis for FY 2019-20. The details submitted by CSPGCL have been duly verified. The Commission has considered the actual fuel prices as submitted by CSPGCL for computation of actual fuel cost and actual fuel price at normative transit loss for computation of normative fuel cost for FY 2019-20. The calorific value of fuel and price of fuel considered by the Commission for computation of actual and normative fuel cost for FY 2019-20 is shown in the Table below:

Table 3-15: Approved Calorific Value and Price of fuels for FY 2019-20

Station	Coal			Secondary Fuel	
	Calorific Value (kcal/kg)	Actual Price at Normative Transit Loss (Rs. /MT)	Actual Price of Fuel (Rs. /MT)	Calorific Value (kcal/kL)	Actual Price of Fuel (Rs. /kL)
KTPS	3396.69	1,775.37	1776.52	10000	51291.21
HTPS	3625.08	1,843.85	1843.79	10000	49879.59
DSPM	3485.92	2,071.98	2070.79	10000	51144.99
KWTPP	3592.06	1,843.85	1843.79	10000	49879.59
ABVTPP	3411.14	2,284.34	2281.80	10000	49548.47

3.10 Fuel Cost

CSPGCL's Submission

The Table below shows the fuel cost claimed by CSPGCL in the True-up of FY 2019-20:

Table 3-16: Actual Fuel Cost for FY 2019-20 (Rs. Crore)

Station	Normative	Actual
KTPS	253.48	195.61
HTPS	806.02	719.84
DSPM	563.18	554.14
KWTPP	463.47	452.41
ABVTPP	1,084.69	734.17
TOTAL	**3,170.84**	**2,656.18**

Commission's View

Based on the approved performance parameters, calorific values of fuels and fuel prices, the normative and actual fuel cost has been computed for FY 2019-20 as shown in the Table below:

Table 3-17: Approved Fuel Cost for FY 2019-20 (Rs. Crore)

Station	Normative	Actual
KTPS	253.48	195.61
HTPS	806.02	719.84
DSPM	563.18	554.14
KWTPP	463.47	452.41
ABVTPP	1,084.69	734.17
TOTAL	**3,170.84**	**2,656.18**

3.11 Annual Fixed Charges for CSPGCL

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

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

Less:

(f) Non-Tariff Income

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

3.12 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 as approved in the True-up for FY 2018-19. The additional capitalization for FY 2019-20 has been considered in line with actual capitalisation for FY 2019-20 against the Schemes approved in Capital Investment Plan Order dated March 16, 2016 in Petition No. 05 of 2016.

As regards to DSPM, CSPGCL submitted that capitalization of LP rotor amounting to Rs. 18.65 Crore has already been considered by the Commission in True up for FY 2018-19. The Commission has also accorded approval for the same vide para 3.12 of Tariff order dated July 03, 2020. Hence, for the purpose of true up of FY 2019-20, the same has not been considered, even though the amount is reflecting in audited accounts of FY 2019-20.

As regards KWTPP, CSPGCL submitted that the amount of liquidated damages (LD) of Rs. 45 Crore as agreed to be recovered from M/s BHEL was already considered in True-up of FY 2018-19 by the Commission. The Commission had considered the same vide para 3.12 of Tariff order dated July 03, 2020. Accordingly, the same has not been considered in true-up of FY 2019-20, even though the amount is reflecting in audited accounts of FY 2019-20.

Commission's View

The station-wise additional capitalisation submitted by CSPGCL and additional capitalisation incurred have been duly scrutinised. After due prudence check, the Commission has considered the additional capitalisation for KTPS, HTPS, DSPM and Hasdeo Bango.

As regards DSPM, it is observed that additional capitalisation of Rs. 18.65 Crore towards LP rotor is reflecting in audited accounts of FY 2019-20. Since the Commission has considered the cost of LP rotor in Truing-up of FY 2018-19, the same amount has been disallowed in true-up of FY 2019-20.

As regards KWTPP, it is observed that liquidated damages (LD) of Rs. 45 Crore is reflecting in audited accounts of FY 2019-20. Since the Commission has considered the recovery of LD in FY 2018-19, the same has been disallowed in true-up of FY 2019-20.

As regards ABVTPP and KWTPP, CSPGCL has requested the Commission to extend the cut-off date for additional capitalisation till March 31, 2022 owing to the uncontrollable and unforeseeable conditions arising due to the COVID-19 pandemic, which is a force majeure event. CSPGCL submitted that the additional capitalisation claimed till the cut-off date is within the additional capitalisation ceiling approved vide Tariff order dated July 07, 2018. The Commission accordingly approves the additional capitalisation claimed in True-up of FY 2019-20. The additional capitalisation approved for FY 2019-20 for all the power stations are shown in the Table below:

Table 3-18: Approved Additional Capitalisation in true up for FY 2019-20 (Rs. Crore)

Station	MYT Order	Petition	Approved
KTPS	1.20	10.44	10.44
HTPS	66.25	105.03	105.03
DSPM	2.00	8.95	8.95
HBPS	0.00	0.00	0.00
KWTPP	3.00	1.62	1.62
ABVTPP	-	141.94	141.94
Total	**72.45**	**267.99**	**267.99**

3.13 Means of Finance for Additional Capitalisation

CSPGCL's submission

CSPGCL submitted that the actual equity addition towards additional capitalisation is higher than 30%, except for KWTPP and ABVTPP. However, in line with Regulations 17.1 and 17.3 of the CSERC MYT Regulations, 2015, normative debt:equity ratio of 70:30 has been considered for the additional capitalisation in FY 2019-20 for all generating stations except KWTPP and ABVTPP. The Debt:Equity ratio for KWTPP is considered at 82.86:17.14 and for ABVTPP, it is considered at 87.56:12.44 in line with the actual debt:equity ratio.

Commission's View

The Commission has considered the normative debt:equity ratio of 70:30 in accordance with provisions of CSERC MYT Regulations, 2015 for all generating station except for ABVTPP and KWTPP. The excess equity in capitalisation has been considered as normative loan. As regards KWTPP, the Commission has considered the debt:equity ratio as submitted by CSPGCL. As regards ABVTPP, since the additional capitalisation is within the approved project cost, the equity in additional capitalisation is considered in the same ratio as approved in order dated July 07, 2018. The approved means of finance for additional capitalisation for FY 2019-20 is shown in the Table below:

Table 3-19: Approved Means of Finance for existing stations for FY 2019-20 (Rs. Cr.)

Station	CSPGCL Petition			Approved		
	Equity	Debt	Total	Equity	Debt	Total
KTPS	3.13	7.31	10.44	3.13	7.31	10.44
HTPS	31.51	73.52	105.03	31.51	73.52	105.03
DSPM	2.68	6.26	8.95	2.68	6.26	8.95
HBPS	-	-	0.00	-	-	0.00
KWTPP	0.28	1.35	1.62	0.28	1.35	1.62
ABVTPP	17.65	124.29	141.94	17.65	124.29	141.94
Total	**55.26**	**212.73**	**267.99**	**55.26**	**212.73**	**267.99**

3.14 Depreciation

CSPGCL's Submission

CSPGCL submitted that Depreciation for DSPM and KWTPP has been computed by applying weighted average depreciation rate on the average regulatory GFA. The weighted average rate of depreciation has been computed by applying category-wise scheduled rates specified in Regulation 24.4 of CSERC MYT Regulations, 2015 on average GFA. The deprecation submitted by CSPGCL for DSPM is shown in the Table below:

Table 3-20: Depreciation for DSPM for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Particulars	DSPM	
	Tariff Order	CSPGCL's Petition
Opening GFA		2,361.66
Additional Capitalization		8.95
Closing GFA		2,370.61
Average GFA		2,366.13
Weighted Average Rate of Depreciation		5.47%
Depreciation	**128.99**	**129.52**

The deprecation submitted by CSPGCL for KWTPP is shown in the Table below:

Table 3-21: Depreciation for KWTPP for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Particulars	KWTTP	
	Tariff Order	CSPGCL's Petition
Opening GFA		3,599.27
Additional Capitalization		1.62
Closing GFA		3,600.89
Average GFA		3,600.08
Weighted Average Rate of Depreciation		5.16%
Depreciation	**192.58**	**185.65**

As per the settled methodology adopted by the Commission in the previous orders, for HTPS, CSPGCL has computed the average depreciation rate on assets added after April 1, 2010. The deprecation submitted by CSPGCL for HTPS is shown in the Table below:

Table 3-22: Depreciation for HTPS for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Particulars	MYT Order	CSPGCL's Petition
Opening GFA on additional capitalization from FY 2010-11 onwards		441.31
Additional Capitalization during the year		105.03
Closing GFA		546.34
Average GFA		493.83
Depreciation rate (%)		5.32%
Depreciation for the year	**28.08**	**26.27**

The depreciation for KTPS has been done computed by adopting the principles approved by the Commission in the previous order and considering the remaining years of operation of the plant. The deprecation submitted by CSPGCL for KTPS is shown in the Table below:

Table 3-23: Depreciation for KTPS for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Particulars	Tariff Order	CSPGCL's Petition
Opening GFA as per Order		688.36
Additional Capitalisation		10.44
Closing GFA		698.80
90% of GFA		627.15
Accumulated Depreciation up to last year		513.33
Balanced Depreciable value		113.82
Balance useful life		1.75
Depreciation for the year	**53.95**	**65.04**

The depreciation for Hasdeo Bango Hydel plant has been computed in accordance with the first proviso of the Regulation 24.4 and also in line with the methodology adopted in the MYT Order, by spreading the balance depreciable value over the balance useful life of the plant. The deprecation submitted by CSPGCL for HBPS is shown in the Table below:

Table 3-24: Depreciation for HBPS for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Particulars	Tariff Order	CSPGCL's Petition
Opening GFA		109.90
Additional Capitalisation		-
Closing GFA		109.90
Accumulated Depreciation up to last year		69.73
90% of GFA excluding land		98.91
Balance amount to be depreciated		29.18
Remaining Useful Life		11.00
Depreciation for the year	**2.65**	**2.65**

CSPGCL submitted that Depreciation for ABVTPP has been computed by applying weighted average depreciation rate on the average regulatory GFA. The weighted average rate of depreciation has been computed by applying category-wise scheduled rates specified in Regulation 24.4 of CSERC MYT Regulations, 2015 on average GFA. CSPGCL submitted the depreciation for ABVTPP for FY 2019-20 which is shown in the Table below:

Table 3-25: Depreciation for ABVTPP as submitted by CSPGCL for FY 2019-20

Particulars	Order dt 7th July 2018	CSPGCL's Petition
Opening GFA		8518.90
Additional Capitalization		141.94
Closing GFA		8660.84
Average GFA		8589.87
Weighted Average Rate of Depreciation		5.36%
Depreciation	**475.06**	**460.03**

Commission's View

The Commission has already approved the methodology for computation of depreciation for existing Generating Stations in the MYT order and same was considered for KTPS. The Commission was allowing the depreciation based on scheduled depreciation rate as specified in CSERC MYT Regulations till FY 2015-16. However, in the MYT Order, the Commission has changed the methodology and approved Depreciation over the balance useful life of the Units by considering the anticipated closure of all its Units by FY 2020-21. CSPGCL submitted that the expected date of decommissioning of KTPS was March 31, 2021. However, Chhattisgarh Environment Control Board (CECB) has extended the consent to operate the plant till December 31, 2020 only. Accordingly, CSPGCL has now proposed to de-commission the plant by December 31, 2020 and has accordingly adjusted the balance useful life and depreciation. In view of the above, the Commission continues with the methodology of depreciation as approved in MYT order and approves the depreciation over the revised balance useful life of the plant as submitted by CSPGCL for FY 2019-20. As per the Regulations, Land has not been considered for depreciation.

For HTPS, the Commission in its previous orders has already allowed full recovery of the balance depreciable value of old capital cost of the assets. Hence, no balance depreciation value for original capital cost has been considered. For the additional capitalisation after 2010, the depreciation on average GFA and depreciation rate based on scheduled depreciation rates of 5.32% for FY 2019-20 have been considered.

For DSPM, the Commission has computed depreciation based on scheduled rates specified in the CSERC MYT Regulations, 2015. Depreciation has been computed by applying the weighted average depreciation rate of 5.47% on average GFA.

In case of KWTPP, the depreciation rate has been considered based on the actual depreciation reported in the audited accounts for FY 2019-20, which has been applied on the revised opening GFA and asset addition during the year approved in this Order.

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

For ABVTPP, the depreciation rate has been considered based on the actual depreciation reported in accounts, which has been applied on the revised opening GFA and asset addition during the year approved in this Order.

In view of the above, the Commission approves the Depreciation for FY 2019-20 after final true-up, as shown in the Table below:

Table 3-26: Depreciation approved for CSPGCL for FY 2019-20 (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM TPS	Hasdeo Bango	KWTPP	ABVTPP
Opening GFA	688.36	441.31	2,361.66	109.90	3,599.27	8,518.90
Additional Capitalization	10.44	105.03	8.95	-	1.62	141.94
Closing GFA	698.80	546.34	2,370.61	109.90	3,600.89	8,660.84
Average GFA		493.83	2,366.13	109.90	3,600.08	8,589.87
Average Rate of Depreciation		5.32%	5.47%	-	5.16%	5.36%
Balance Depreciation to be recovered	113.81	-	-	29.18	-	-
Balance Useful Life	1.75	-	-	11.00	-	-
Depreciation	**65.04**	**26.27**	**129.52**	**2.65**	**185.65**	**460.03**

3.15 Return on Equity

CSPGCL's submission

CSPGCL has computed RoE as per Regulation 22 of the CSERC MYT Regulations, 2015 for FY 2019-20. CSPGCL submitted that it has paid Minimum Alternate Tax (MAT) during the financial year under review at 17.472%. Accordingly, CSPGCL has grossed up the base rate of RoE of 15.50% by applying the formula provided under Regulation 22.3 for its existing Thermal and Hydel Power Plants on permissible equity for FY 2019-20. CSPGCL further submitted that with such grossing up of RoE rate by MAT, no separate claim has been made for Income Tax paid in FY 2019-20. CSPGCL submitted the station-wise RoE for FY 2019-20 as shown in the Table below:

Table 3-27: Return on Equity for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Particulars	**KTPS**	**HTPS**	**DSPM**	**Hasdeo Bango**	**KWTPP**	**ABVTPP**
Permissible Equity in Opening GFA	213.10	388.68	703.28	37.72	616.98	1059.51
Equity addition during the year	3.13	31.51	2.68	0.00	0.28	17.65
Permissible Equity in Closing GFA	216.23	420.19	705.96	37.72	617.26	1077.16
Rate of return on Equity	18.78%	18.78%	18.78%	18.78%	18.78%	18.78%
Return on Equity	**21.99**	**75.96**	**132.34**	**7.08**	**115.90**	**200.65**

Commission's View

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

*"**22. RETURN ON EQUITY***

22.1 Generation and Transmission: Return on Equity shall be computed in rupee terms on the equity base determined in accordance with Regulation 17. Return on equity shall be computed on pre-tax basis at the base rate of maximum 15.5 % to be grossed up as per Regulation 22.3 of these Regulations.

…

22.3 The rate of return on equity for each year of the control period shall be computed by grossing up the base rate with the prevailing MAT rate of the base year: Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee or distribution licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the Control Period shall be trued up separately for each year of the Control Period. In case, no tax is payable during the financial year, the tax rate for the purpose of truing up shall be taken as nil.…"

The RoE for FY 2019-20 has been approved in the MYT order dated April 30, 2016.

For existing stations, the closing equity approved in true-up for FY 2018-19 has been considered as the opening equity for FY 2019-20. The addition of equity has been considered as equivalent to equity amount approved towards additional capitalisation. RoE has been computed as per Regulation 22 of the MYT Regulations, 2015.

In line with the approach adopted in previous Tariff orders, the grossing up of base rate of RoE with the applicable tax rate has not been considered. The base rate of RoE of 15.50% has been considered as specified in the MYT Regulations, 2015.

For KTPS, ROE has been computed based on effective capacity during the year after considering the retirement of Units.

RoE approved for FY 2019-20 is shown in the tables below:

Table 3-28: Approved Return on Equity for FY 2019-20 (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP	ABVTPP
Opening Equity	213.10	388.68	703.28	37.72	616.98	1059.51
Equity addition during the year	3.13	31.51	2.68	0.00	0.28	17.65
Closing Equity	216.23	420.19	705.96	37.72	617.26	1077.16
Rate of return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	**18.15**	**62.69**	**109.22**	**5.85**	**95.65**	**165.59**

Further, the Commission noted that CSPGCL has not claimed any Income Tax for FY 2019-20 since it has claimed pre-tax RoE, which is grossed up after consideration of MAT amount actually paid during FY 2019-20. However, since the Commission has not considered pre-tax RoE rate for computation of RoE for FY 2019-20, the Commission has allowed the actual Income Tax paid during FY 2019-20, as reflecting in the Audited Accounts of FY 2019-20, in line with the approach adopted in previous orders. The Commission accordingly approves the Income Tax of Rs. 70.68 Crore for FY 2019-20 for CSPGCL. The Commission has considered the amount of Income Tax approved for FY 2019-20 in the Table for computation of final Revenue Gap for FY 2019-20.

3.16 Interest and Finance Charges

CSPGCL's submission

CSPGCL submitted that Interest and Finance charges have been computed as per Regulation 23 of the CSERC MYT Regulations, 2015 for FY 2019-20. The depreciation for the year has been deemed to be equal to the repayment for the year and normative interest on loan has been calculated on the normative average loan during the year by applying the weighted average rate of interest of actual loan portfolio at the beginning of the year.

CSPGCL added that weighted average rate of interest for each project has been computed in accordance with Regulation 23.5. The timely payment rebate, as applicable, has also been considered. The savings from refinancing have been claimed in accordance with the methodology adopted by the Commission in previous Order/s.

The Interest and Finance charges submitted by CSPGCL for FY 2019-20 are shown in the Table below:

Table 3-29: Interest & Finance Charges as submitted by CGPGCL for FY 2019-20 (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP	ABVTPP
Opening Normative loan	0.00	103.93	388.50	2.42	1991.00	6210.35
Repayment during the period	65.04	26.27	129.52	2.42	185.65	460.03
Debt Addition during the year	7.31	73.52	6.26	0.00	1.35	124.29
Closing Net Normative Loan	0.00	151.19	265.24	0.00	1806.69	5874.61
Weighted Average Interest Rate (%)	11.19%	11.22%	10.25%	9.92%	9.90%	9.90%
Interest Expense for the Period		14.31	33.50	0.12	188.00	598.23
Sharing of net savings for re-financing		-	2.36	-	17.98	55.59
Financing and Other Charges	0.06	0.21	0.13	0.00	0.13	0.26
Total Interest Expenses	**0.06**	**14.53**	**36.00**	**0.12**	**206.10**	**654.08**

Commission's View

The Commission has computed Interest and Finance charges for FY 2019-20 as per Regulation 23 of CSERC MYT Regulations, 2015.

For existing stations, the closing net normative loan balance approved after True-up for FY 2018-19 has been considered as opening net normative loan balance for FY 2019-20. The debt addition has been considered as equal to debt amount approved in this Order towards additional capitalisation for FY 2019-20. The deprecation has been considered as repayment during the year.

The actual weighted average interest rate as on April 1, 2019 have been considered as per accounts and documentary evidences as submitted by CSPGCL. Accordingly, the station-wise weighted average rate of interest has been considered for FY 2019-20.

Further, as per Regulation 23.8 of the CSERC MYT Regulations, 2015, the savings in re-financing shall be shared between the beneficiaries, i.e., CSPDCL, and CSPGCL in the ratio of 2:1. The Commission in past tariff orders, while undertaking true-up for FY 2017-18 and FY 2018-19, has adopted a methodology for sharing the savings of re-financing. The same methodology has been continued in the present order. Accordingly, net savings have been computed separately and allowed in addition to Interest and finance charges. Further, the Commission notes that CSPGCL confirmed that no additional cost has been incurred by CSPGCL for re-financing of loan, hence, the same has not been considered.

In view of the above, the Interest and Finance charges approved by the Commission for FY 2019-20 are shown in the Tables below:

Table 3-30: Interest & Finance Charges approved for FY 2019-20 (Rs. Cr.)

Particulars	KTPS	HTPS	DSPM	Hasdeo Bango	KWTPP	ABVTPP
Opening Net Normative Loan	0.00	103.93	388.50	2.42	1991.00	6210.35
Repayment during the period	65.04	26.27	129.52	2.42	185.65	460.03
Debt Addition during the year	7.31	73.52	6.26	0.00	1.35	124.29
Closing Net Normative Loan	0.00	151.19	265.24	0.00	1806.69	5874.61
Weighted Average Interest Rate (%)	11.19%	11.22%	10.25%	9.92%	9.90%	9.90%
Interest Expense for the Period		14.31	33.50	0.12	188.00	598.23
Add: Sharing of net savings for re-financing		-	2.36	-	17.98	55.59
Add: Financing and Other Charges	0.06	0.21	0.13	0.00	0.13	0.26
Total Interest Expenses	**0.06**	**14.53**	**36.00**	**0.12**	**206.10**	**654.08**

3.17 Normative Operation and Maintenance (O&M) expenses

CSPGCL's Submission

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

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

CSPGCL also submitted that it has computed the normative O&M expenses in the similar manner as approved in the MYT Order and previous True up Order. For the purpose of normalization of O&M expenses for FY 2019-20, CSPGCL has considered WPI variation and CPI variation as shown in the following Table:

Table 3-31: CPI and WPI Index considered by CSPGCL

Particulars	FY 2019-20
WPI Variation	7.53%
CPI variation	1.68%
Average (60:40)	5.19%

CSPGCL further submitted that the normative O&M Expenses for KWTPP, whose COD was later than April 1, 2010, have been computed as per the Regulation 38.5.1.1 of the CSERC MYT Regulations 2015, normalizing the same with actual weighted average rate of inflation.

CSPGCL submitted that it has not considered the productivity linked incentive as part of employee expenses for regulatory purposes, as per the methodology settled in the previous order. In the accounts, the actual leave encashment expenses have been settled against the provision made in the previous year. In the previous orders, the Commission has taken a view that for the true-up purpose, instead of provisions, only actual expenses/income shall be considered. Accordingly, actual leave encashment has been considered as part of employee cost within O&M Expenses. The cost incurred on coal transport has been reduced from the O&M Expenses and added to the fuel cost. CSPGCL has also not claimed the amount of expenses towards donations and Corporate Social Responsibility (CSR) as reflecting in its audited accounts in line with the methodology adopted by the Commission in previous Tariff Orders.

CSPGCL further submitted that as per Regulations, contribution to the Pension & Gratuity (P&G) trust has not been considered as part of O&M expenses in the MYT Order and CSPGCL has followed the same approach.

The O&M Expenses submitted by CSPGCL for FY 2019-20 is shown in the Table below:

Table 3-32: O&M Expenses for FY 2019-20 submitted by CSPGCL (Rs. Cr.)

Station	Petition
KTPS	142.51
HTPS	283.70
DSPM	152.33
HBPS	7.04
KWTPP	96.21
ABVTPP	208.00
Total	**889.79**

Commission's View

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

"38.5 Operation and Maintenance expenses

… … …

Employee Cost

c) *The employee cost, excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, for the base year i.e. FY 2016-17, shall be derived on the basis of the normalized average of the actual employee expenses excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2016-17, subject to prudence check by the Commission.*

d) *The normalization shall be done by applying last five year average increase in Consumer Price Index (CPI) on year to year basis. The average of normalized net* *present value for FY 2011-12 to FY 2015-16, shall then be used to project base year value for FY 2016-17. The base year value so arrived, shall be escalated by the above inflation rate to estimate the employee expense (excluding impact of pension fund contribution and pay revision, if any) for each year of the Control Period.*

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

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

A&G Expenses and R&M Expenses

e) *The administrative and general expenses (excluding water charges) and repair and maintenance expenses, for the base year i.e. FY 2016-17, shall be derived on the basis of the normalized average of the actual administrative and general expenses (excluding water charges) and repair and maintenance expenses, respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2016-17, subject to prudence check by the Commission. Any expense of non-recurring nature shall be excluded while determining normalized average for the previous five (5) years.*

f) *The normalization shall be done by applying last five year average increase in Wholesale Price Index (WPI) on year to year basis. The average of normalized net present value for FY 2011-12 to FY 2015-16, shall then be used to project base year value for FY 2016-17. The base year value so arrived, shall be escalated by the above inflation rate to estimate the administrative and general expense and repair and maintenance expenses for each year of the Control Period.*

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

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

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

Regulation. The above Regulation specifies that at the time of truing up, the O&M Expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.

Accordingly, the Commission has computed the normative O&M expenses for FY 2019-20 by applying the actual inflation on base O&M expenses for FY 2018-19 as approved in previous True-up Order, by considering the actual CPI and WPI for FY 2019-20 over CPI and WPI of FY 2018-19. For FY 2019-20, the Commission has considered escalation factor of 7.53% for employee expenses and 1.68% for R&M expenses and A&G Expenses. Further, as regards to KWTPP and ABVTPP, the normative O&M expenses have been determined in accordance with the norms specified in the MYT Regulations, 2015, with escalation factor considered as 5.19% for FY 2019-20.

As regards to KTPS, the Commission in the MYT Order had reduced normative O&M expenses based on retirement plan of each Unit. However, actual retirement is different. Hence, for the purpose of computation of normative O&M Expenses for KTPS, the Commission has considered actual retirement of Units and accordingly reduced the normative O&M Expenses.

Accordingly, the normative O&M Expenses computed for FY 2019-20 are as shown in the Table below:

Table 3-33: Approved Normative O&M Expenses for FY 2019-20 (Rs. Cr.)

Particulars	FY 2019-20	
	MYT Order*	Revised Normative Expenses
KTPS	196.21	168.55
HTPS	416.09	357.28
DSPM	200.47	171.89
Hasdeo Bango	17.76	15.26
KWTPP	126.15	102.71
ABVTPP	215.28	205.42

**Includes impact of Wage Revision (Interim Relief)*

As regards to the actual O&M Expenses, the Commission sought reconciliation of actual O&M Expenses submitted in the Petition vis-à-vis O&M Expenses reported in audited accounts. The Commission has considered the actual O&M Expenses as submitted by CSPGCL after due prudence check.

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

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

> *"Provided further that employee cost shall not be factored in for sharing of gains or losses on account of operations and maintenance expenses…"*

Accordingly, the Commission approves the actual Employee Expenses as per audited Accounts for FY 2019-20, and Employee cost is not considered for sharing of gains or losses. The sharing of gains and losses has been undertaken in subsequent section of this chapter.

In this Order, the Commission approves the O&M expenses based on audited accounts for FY 2019-20. The normative and actual O&M Expenses approved by the Commission is shown in the following Table:

Table 3-34: Approved O&M Expenses for FY 2019-20 (Rs. Cr.)

Particulars	FY 2019-20	
	Actual	Normative
KTPS	142.51	168.55
HTPS	283.70	357.28
DSPM	152.33	171.89
Hasdeo Bango	7.04	15.26
KWTPP	96.21	102.71
ABVTPP	208.00	205.42

3.18 Pension and Gratuity Contribution

CSPGCL's Submission

CSPGCL submitted that as per Tariff Order dated February 28, 2019, the Commission had approved Gratuity and Pension Fund Trust Contribution by all the State Power Companies as Rs. 441.91 Crore for FY 2019-20. Out of the same, CSPGCL's share was determined as Rs. 120.45 Crore. CSPGCL has contributed the same and hence, claimed the same amount in true-up. CSPGCL further submitted the plant-wise allocations considered as shown in the Table below:

Table 3-35: Pension and Gratuity Contribution for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Station	MYT Order*	CSPGCL's Petition
KTPS	42.71	42.71
HTPS	44.22	44.22
DSPM	7.26	7.26
HBPS	2.95	2.95
KWTPP	7.16	7.16
ABVTPP	16.15	16.15
Total	**120.45**	**120.45**

Note: * - As revised in Tariff Order for FY 2019-20

Commission's View

The P&G contribution of Rs. 120.45 Crore, including contribution for ABVTPP, has been approved for CSPGCL for FY 2019-20 in the Tariff Order dated February 28, 2019. The Commission has considered the same in the Truing-up for FY 2019-20.

3.19 Interest on Working Capital

CSPGCL's Submission

CSPGCL submitted that the Interest on Working Capital (IoWC) for FY 2019-20 has been computed in accordance with Regulation 25 of the CSERC MYT Regulations, 2015, considering the interest rate equal to the applicable Base Rate of State Bank of India as on April 1, 2019 plus 350 basis points, i.e., 12.55%. CSPGCL submitted the interest on working capital as shown in the Table below:

Table 3-36: IoWC for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Station	FY 2019-20	
	MYT Order	CSPGCL's Petition
KTPS	13.06	11.95
HTPS	31.70	30.45
DSPM	24.65	23.26
HBPS	0.66	0.82

Station	FY 2019-20	
	MYT Order	**CSPGCL's Petition**
KWTPP	17.68	19.10
ABVTPP	46.58	41.77
Total	**134.33**	**127.36**

Commission's View

The Commission has computed the IoWC for FY 2019-20 as per Regulation 25 of the MYT Regulations, 2015. The rate of interest has been considered as 12.55% for FY 2019-20 as per the provisions of MYT Regulations, 2015. The revised normative O&M expenses have been considered for computation of Working Capital requirement. The actual revenue billed, excluding the Gap/Surplus of the previous year/s, has been considered as receivables for computation of working capital requirement. Further, in line with the approach adopted in the past orders, DSPM has been considered as a pithead station, and one-month cost of coal has been considered. Accordingly, the IoWC approved by the Commission after truing up for FY 2019-20 is shown in the Table below:

Table 3-37: Approved IoWC for CSPGCL for FY 2019-20 (Rs. Cr.)

Particulars	MYT Order	Petition	Approved
KTPS	13.06	11.95	11.95
HTPS	31.70	30.45	30.45
DSPM	24.65	23.26	23.26
HB	0.66	0.82	0.82
KWTPP	17.68	19.10	19.10
ABVTPP	46.58	41.77	41.77

3.20 Non-Tariff Income

CSPGCL's submission

CSPGCL submitted the Non-Tariff Income as per Regulation 38.6 of the CSERC MYT Regulations, 2015 for FY 2019-20 for its existing Stations. Delayed Payment Surcharge has not been taken into account while determining the Non-Tariff Income for FY 2019-20 as per well-settled principle in previous orders. The station-specific income has been booked to the respective station, and income appearing against HO and CAU has been allocated to generating stations on the basis of installed capacity.

The Non-Tariff Income submitted by CSPGCL for FY 2019-20 is shown in the Table below:

Table 3-38: Non-Tariff Income for FY 2019-20 as submitted by CSPGCL (Rs. Cr.)

Station	MYT Order	CSPGCL's Petition
KTPS	9.26	1.91
HTPS	18.13	7.15
DSPM	10.50	3.71
HBPS	0.00	0.03
KWTPP	4.92	3.03
ABVTPP	0.00	6.38
Total	**42.81**	**22.21**

Commission's View

The Commission approves the station-wise Non-Tariff Income based on actuals as per the Audited Accounts for the purpose of truing up for FY 2019-20, as shown in the Table below:

Table 3-39: Approved Non-Tariff Income in True-up for FY 2019-20 (Rs. Cr.)

Particulars	MYT Order	Petition	Approved
KTPS	9.26	1.91	1.91
HTPS	18.13	7.15	7.15
DSPM	10.50	3.71	3.71
KWTPP	0.00	3.03	3.03
HB	4.92	0.03	0.03
ABVTPP	0.00	6.38	6.38
Total	**42.81**	**22.21**	**22.21**

3.21 Statutory Charges

CSPGCL's Submission

CSPGCL submitted that as per the CSERC MYT Regulations, 2015, the water charges are pass through on reimbursement basis, and the same has been recovered accordingly. Further, CSPGCL has claimed the SLDC Charges as pass through element separately. CSPGCL submitted that Rs. 132.80 Crore as Water Charges and Rs. 6.66 Crore as SLDC Charges have been claimed for FY 2019-20.

Further, CSPGCL has reduced expenses of Rs. 0.53 Crore incurred towards Petition filing fees and publication expenses in FY 2019-20 from O&M expenses and has claimed them separately.

Commission's View

For the purpose of the truing up for FY 2019-20, the Commission has considered Statutory Charges based on audited accounts for FY 2019-20.

3.22 Aggregate Revenue Requirement for CSPGCL for FY 2019-20

The Summary of ARR for KTPS, HTPS, DSPM, HBPS, ABVTPP, and KWTPP for FY 2019-20 is shown in the following Table:

Table 3-40: Approved ARR for CSPGCL's Generating Stations for FY 2019-20 (Rs. Cr.)

Particulars	KTPS			HTPS			DSPM			KWTPP			Hasdeo Bango			ABVTPP		
	MYT Order	Petition	Approved	MYT Order	Petition	Approved	MYT Order	Petition	Approved	MYT Order	Petition	Approved	MYT Order	Petition	Approved	MYT Order	Petition	Approved
Depreciation	60.55	65.04	65.04	39.46	26.27	26.27	129.23	129.52	129.52	192.58	185.65	185.65	2.65	2.65	2.65	475.06	460.03	460.03
Interest & Finance Charges	-	0.06	0.06	34.32	14.53	14.53	38.53	36.00	36.00	263.16	206.10	206.10	0.15	0.12	0.12	690.98	654.08	654.08
Return on Equity	18.98	21.99	18.15	73.83	75.96	62.69	108.47	132.34	109.22	91.83	115.90	95.65	5.85	7.08	5.85	171.42	200.65	165.59
O&M Expenses	183.75	142.51	142.51	383.91	283.70	283.70	195.04	152.33	152.33	122.68	96.21	96.21	16.48	7.04	7.04	215.28	208.00	208.00
Impact of Wage Revision	12.46	0.00	0.00	32.18	0.00	0.00	5.43	0.00	0.00	3.47	0.00	0.00	1.28	0.00	0.00		0.00	0.00
Additional R&M Expenses	0.00	0.00	0.00	0.52	0.47	0.47	0.00			0.00			0.00					
Interest on Working Capital	13.07	11.95	11.95	31.73	30.45	30.45	24.67	23.26	23.26	17.68	19.10	19.10	0.66	0.82	0.82	46.58	41.77	41.77
Less: Non-Tariff Income	9.26	1.91	1.91	18.13	7.15	7.15	10.50	3.71	3.71	4.92	3.03	3.03	0.00	0.03	0.03	0.00	6.38	6.38
Total Annual Capacity Charge	**279.56**	**239.65**	**235.81**	**577.82**	**424.23**	**410.96**	**490.87**	**469.74**	**446.62**	**686.48**	**619.94**	**599.69**	**27.06**	**17.69**	**16.45**	**1599.32**	**1558.15**	**1523.09**
Cost of Coal	216.05	187.53	187.53	624.29	704.92	704.92	433.22	550.81	550.81	341.38	443.12	443.12	-	-	-	874.45	722.21	722.21
Cost of Oil	9.52	8.08	8.08	19.07	14.92	14.92	6.02	3.33	3.33	7.26	9.28	9.28	-	-	-	12.58	11.96	11.96
Total Energy Charges	**225.57**	**195.61**	**195.61**	**643.36**	**719.84**	**719.84**	**439.24**	**554.14**	**554.14**	**348.64**	**452.41**	**452.41**	**-**	**-**	**-**	**887.03**	**734.17**	**734.17**
Pension and Gratuity Contribution	60.16	42.71	42.71	62.28	44.22	44.22	10.23	7.26	7.26	10.08	7.16	7.16	4.16	2.95	2.95	22.75	16.15	16.15
Net prior period (income)/expenses	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-
Aggregate Revenue Requirement	**565.29**	**477.97**	**474.13**	**1283.47**	**1188.30**	**1175.02**	**940.35**	**1031.14**	**1008.02**	**1045.20**	**1079.51**	**1059.26**	**31.23**	**20.64**	**19.40**	**2509.10**	**2308.47**	**2273.41**

3.23 Sharing of Gains and Losses

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

"11. CONTROLLABLE AND UN-CONTROLLABLE FACTORS

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

(a) Force Majeure events;

(b) Change in law

... ...

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

...

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

...

(f) Variation in Wires Availability and Supply Availability"

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

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

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

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

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

The mechanism for sharing of aggregate net gain on account of over achievement in reference to the target set in tariff order for efficiency linked controllable items other than energy losses computed in accordance to Regulation 7l shall be passed on to the beneficiary / consumer(s) and retained by the generating company or the licensee or SLDC, as the case may be, in the ratio of 50:50 or as may be specified in the Order of the Commission passed under these Regulations.

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

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

13.2. The mechanism for sharing of aggregate net loss on account of under achievement in reference to the target set in tariff order for efficiency linked controllable items shall be passed on to the beneficiary / consumer(s) and retained by the generating company or the licensee, as the case may be, in the ratio of 50:50 or as may be specified in the Order of the Commission passed under these Regulations."

CSPGCL's Submission

CSPGCL submitted that Regulation 13 specifies the method for sharing of gains and losses. Further, in compliance to Regulations 32 and 35 of MYT Regulations, 2015, CSPGCL has segregated the P&G Fund Contribution from AFC and considered it as a separate line item. Further, CSPGCL submitted that it has excluded Employee Cost from O&M Cost for the purpose of sharing of Gains / Losses as per Amendment to the MYT Regulations, 2015 dated June 16, 2017. CSPGCL submitted that it has followed the methodology followed in previous orders for sharing of Gains/Losses. CSPGCL has also submitted that DSM charges has been shared in the 50:50 ratio for FY 2019-20 which is in line with previous order,. CSPGCL submitted the sharing of gains of Rs. 228.24 Crore for FY 2019-20.

Commission's View

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

The sharing of gains and losses after final True-up for FY 2019-20 is as shown in the Table below:

Table 3-41: Approved Sharing of Gains and Losses for final True-up for FY 2019-20 for CSPGCL's Generating Stations

Particulars	Units	KTPS	HTPS	DSPM	KWTPP	ABVTPP
Fixed Charges @ NPAF						
Installed capacity	MW	240.00	840.00	500.00	500.00	1000.00
NPAF	%	70.00%	78.69%	85.00%	85.00%	76.50%
Actual PAF achieved (billed)	%	62.66%	69.71%	93.14%	80.21%	49.05%
Normative aux. consumption	%	11.25%	9.70%	9.00%	5.25%	5.25%
Actual aux cons	%	11.48%	9.59%	7.92%	5.51%	6.27%
Normative aux. consumption	MU	166.02	563.20	335.99	195.99	352.79
Actual aux cons	MU	150.26	494.75	304.62	194.99	273.19
Normative Net Generation	MU	1309.69	5242.99	3397.21	3537.21	6366.97
Actual net generation	MU	1158.49	4665.84	3543.23	3344.15	4082.84
Total generation available for Fuel Cost recovery	**MU**	**1158.49**	**4665.84**	**3543.23**	**3344.15**	**4082.84**
Fixed Cost (norm-wise)						
Depreciation	Rs Cr	65.04	26.27	129.52	185.65	460.03
Interest on Loan and Finance charges	Rs Cr	0.06	14.53	36.00	206.10	654.08
Return on Equity	Rs Cr	18.15	62.69	109.22	95.65	165.59
Interest on Working Capital	Rs Cr	11.95	30.45	23.26	19.10	41.77
O & M Expenses	Rs Cr	168.55	357.28	171.89	102.71	205.42
Less - Non-Tariff Income	Rs Cr	1.91	7.15	3.71	3.03	6.38
Fixed Cost allowed on Normative Basis	**Rs Cr**	**261.84**	**484.07**	**466.18**	**606.19**	**1520.52**
Fixed cost expenditure excluding O&M	Rs Cr	93.29	126.79	294.29	503.48	1315.10
Normative Fixed Cost (Cr. Rs/% of PAF) excluding O&M	Rs Cr./%PAF	1.33	1.61	3.46	5.92	17.19
Pro-rata Fixed cost allowable from Actual PAF	Rs Cr	83.51	112.32	322.47	475.11	843.21

Particulars	Units	KTPS	HTPS	DSPM	KWTPP	ABVTPP
Fixed cost gain from normative cost	**Rs Cr**	**(9.78)**	**(14.47)**	**28.18**	**(28.37)**	**(471.89)**
Total Gain/(Loss)	**Rs Cr**	**(496.33)**				
R&M and A&G expenses						
Normative R&M and A&G Cost allowed	Rs Cr.	45.69	116.97	91.54	58.55	117.09
Normative R&M and A&G Cost (Cr. Rs/% of PAF)	Rs Cr./%PAF	0.65	1.49	1.08	0.69	1.53
Pro-rata R&M and A&G cost allowable from actual PAF	Rs Cr.	40.90	103.62	100.31	55.25	75.08
Actual R&M and A&G expenditure	Rs Cr.	50.38	105.67	70.05	57.53	104.63
Difference of recovery and expenditure	**Rs Cr**	**(9.48)**	**(2.05)**	**30.25**	**(2.28)**	**(29.56)**
Total Gain/(Loss)	**Rs Cr**	**(13.12)**				
Secondary Fuel Cost						
Normative SFC	Rs Cr	15.14	26.06	9.55	9.31	16.65
Normative SF Cost derived from NPLF	Rs/kwh	0.12	0.05	0.03	0.03	0.03
Secondary fuel cost recovery from actual generation	Rs Cr	13.39	23.20	9.96	8.80	10.68
Actual SFC incurred	Rs Cr	8.08	14.92	3.33	9.28	11.96
Savings due to performance improvement	**Rs Cr**	**5.31**	**8.27**	**6.63**	**(0.48)**	**(1.28)**
Total Impact of Savings/Excess Expenditure due to SFC	**Rs Cr**	**18.44**				
Coal Cost (primary fuel)						
Normative Coal Cost	Rs Cr	238.34	779.95	553.63	454.16	1068.04
Normative ECR (Coal)	Rs/kwh	1.82	1.49	1.63	1.28	1.68
Normative fuel cost on actual sent out	Rs Cr	210.82	694.10	577.43	429.38	684.89
Actual fuel cost	Rs Cr	187.53	704.92	550.81	443.12	722.21
Coal Cost Surplus/(deficit)	**Rs Cr**	**23.29**	**(10.83)**	**26.62**	**(13.75)**	**(37.33)**
Total Impact of Savings/Excess Expenditure due to Coal	**Rs Cr**	**(11.99)**				
Total plant wise impact of gain/ loss	**Rs Cr**	**9.34**	**(19.07)**	**91.68**	**(44.88)**	**(540.06)**
Total Impact of Savings/Excess Expenditure	Rs Cr	**(502.99)**				
Gains/(Losses) for Hasdeo Bango	**Rs Cr**	**1.11**				
Plant-wise impact of DSM Charges	**Rs Cr**	**(1.45)**	**22.50**	**12.09**	**7.59**	**18.09**
Total Impact of DSM Charges	**Rs Cr**	**58.82**				
Net total Impact Savings/Excess Expenditure	**Rs Cr**	**(443.06)**				
Net applicable Gain/(Loss) to CSPGCL on 50:50 basis	**Rs Cr**	**(221.53)**				

From the above table, it is seen that CSPGCL has incurred loss of Rs. 443.06 Crore in FY 2019-20. 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 Accordingly, the Commission approves the loss of Rs. 221.53 Crore for FY 2019-20, after undertaking the sharing of gains and losses.

3.24 Revenue Gap/(Surplus) for CSPGCL for FY 2019-20

Commission's View

The Commission has considered the revenue from sale of power based on the Audited Accounts submitted by CSPGCL for FY 2019-20.

The Water Charges and SLDC Charges have been considered separately for FY 2019-20. The revenue from DSM Charges has been apportioned for respective Generating Station.

The Commission has considered the Income Tax of Rs. 70.68 Crore approved in earlier section of this Order separately in the Revenue Gap/(Surplus) Table for FY 2019-20.

CSPGCL submitted that the during FY 2016-17, no Income Tax was paid, and no Tax liability appeared in the audited accounts of that year. The Commission accordingly had not considered any tax payment in the True-up of FY 2016-17. CSPGCL at that time had prayed that in case any liability arises for Income Tax of FY 2016-17, the same may be allowed in future True-up. So, CSPGCL has now paid the Income Tax of Rs. 26.02 Crore corresponding to FY 2016-17 and has therefore, claimed the same in True-up of FY 2019-20. The Commission has verified the amount of Income Tax paid against FY 2016-17, which is reflecting in the Audited Accounts of FY 2019-20. The Commission accordingly allows the recovery of Income Tax for FY 2016-17 in the True-up of FY 2019-20. The amount has been considered separately in the total ARR of CSPGCL.

In view of the above, the Revenue Gap/(Surplus) for CSPGCL for FY 2019-20 after final truing up has been approved as shown in the Table below:

Table 3-42: Revenue Gap/(Surplus) after True-up for FY 2019-20 for CSPGCL (Rs. Cr.)

Particulars	Petition	Approved
ARR for KTPS	477.97	474.13
ARR for HTPS	1,188.30	1,175.02
ARR for DSPM TPS	1,031.14	1,008.02
ARR for KWTPP	1,079.51	1,059.26
ARR for ABVTPP	2,308.47	2,273.41
ARR for Hasdeo Bango	20.64	19.40
Total ARR for Generating Stations of CSPGCL	**6,106.03**	**6,009.25**
Sharing of Gain/(Losses)	(228.24)	(221.53)
Petition Filing Fee	0.526	0.53
Impact of APTEL Judgement and Revenue Gap	348.76	348.76
Water and SLDC Charges	144.60	144.60
Income Tax for FY 2019-20	-	70.68
Income Tax for FY 2016-17	26.02	26.02
Total ARR	**6,397.70**	**6,378.31**
Revenue from sale of power for KTPS	506.56	506.56
Revenue from sale of power for HTPS	1,228.04	1,228.04
Revenue from sale of power for DSPM TPS	1,077.36	1,077.36
Revenue from sale of power for KWTPP	1,040.41	1,040.41
Revenue from sale of power for ABVTPP	1,743.93	1,743.93
Revenue from sale of power for Hasdeo Bango	26.03	26.03
Revenue from Sale of Power	**5,622.33**	**5,622.33**
Water, SLDC charges & start up power for recovery	144.60	144.60
Recovery Impact of APTEL Judgment and previous year Revenue Gap	348.76	348.76
Total Recovery and Revenue	**6,115.70**	**6,115.70**
Standalone ARR Gap/(Surplus)for the year	**282.00**	**262.61**

The Commission approves Standalone Gap of Rs. 262.61 Crore after Truing-up of FY 2019-20.

The Commission has considered carrying cost on the Revenue Gap arrived after final Truing-up of FY 2019-20. The Commission has considered the interest rates as Base rates plus 350 basis points for FY 2019-20 as specified in the Regulations.

Table 3-43: Revenue Gap after True-up for FY 2019-20 for CSPGCL along with carrying cost (Rs. Cr.)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Opening Gap/(Surplus) for the year	-	279.09	311.60
Gap/(Surplus) for the year	262.61	-	-
Closing Gap/(Surplus)	262.61	279.09	-
Interest Rate (%)	12.55%	11.65%	11.65%
Carrying Interest/Cost for the year	16.48	32.51	18.15
Total Closing Gap/(Surplus)	**279.09**	**311.60**	**329.75**

Accordingly, the Revenue Gap including carrying cost, which is required to be factored in the revenue requirement of CSPDCL for FY 2021-22 works out to Rs. 329.75 Crore.

The Commission hence approves cumulative Revenue Gap of Rs. 329.75 Crore up to FY 2021-22 for CSPGCL. CSPGCL is allowed to recover the same in 8 equal monthly instalments from August 2021. This revenue gap has been adjusted in ARR of CSPDCL for FY 2021-22 as discussed in subsequent chapter.

4 FINAL TRUE-UP OF ARR FOR FY 2019-20 FOR CSPTCL

4.1 Background

The Commission notified the CSERC MYT Regulations, 2015 for the third MYT Control Period from FY 2016-17 to FY 2020-21 on September 9, 2015. Subsequently, the Commission notified the First Amendment to CSERC MYT Regulations, 2015 on June 16, 2017. The Commission issued the MYT Order on April 30, 2016 approving the ARR of CSPTCL for the Control Period from FY 2016-17 to FY 2020-21 and Transmission tariff for FY 2016-17.

Based on the audited accounts of FY 2019-20 CSPTCL has submitted the Petition for final true-up of ARR for FY 2019-20.

Regulation 10.4 of the CSERC MYT Regulations, 2015 specifies as under:

"10.4. The scope of the truing up shall be a comparison of the performance of the generating company or STU/transmission licensee or distribution licensee or SLDC with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of the following:

(d) A comparison of the audited performance of the applicant for the previous financial year(s) with the approved forecast of such previous financial year(s), subject to the prudence check including pass-through of impact of uncontrollable factors;

(e) Review of compliance with directives issued by the Commission from time to time;

(f) Other relevant details, if any."

In accordance with the above Regulation, in the present order, final true-up of ARR for FY 2019-20 is undertaken based on audited accounts as submitted by CSPTCL.

In this Chapter, the Commission has analysed all the elements to identify actual expenditure and revenue of CSPTCL for FY 2019-20 and undertaken the final true-up of expenses and revenue in accordance with Regulation 10 of the CSERC MYT Regulations, 2015. The Commission has approved the sharing of gains and losses on account of controllable factors between CSPTCL and its beneficiaries, in accordance with Regulation 13 of the CSERC MYT Regulations, 2015.

4.2 Transmission System of CSPTCL

The physical status of transmission system of CSPTCL as on March 31, 2019 and March 31, 2020, as submitted by CSPTCL, is shown in the Table below:

Table-4-1: Physical status of transmission system of CSPTCL as on March 31, 2020

Particulars	Units	As on March 31, 2019	As on March 31, 2020
A. EHV Transmission Lines			
400 kV	ckt. km.	1,916	1918
220 kV	ckt. km.	3,746	4032
132 kV	ckt. km.	6657	6802
B. EHV Substations			
400 kV	No.	3	4
220 kV	No.	23	25
132 kV	No.	92	92
C. Transformation Capacity of EHV Substations			
400/220 kV	MVA	2205	2520
220/132 kV	MVA	7790	8660
132/33kV	MVA	8069	8229

4.3 Transmission Losses

CSPTCL's Submission

CSPTCL submitted that based on the actual reading of the energy meters installed at the various points of the State's periphery, the actual transmission loss for FY 2019-20 was 2.96%, as against the Transmission Loss of 3.22% approved for FY 2019-20 in the MYT Order dated April 30, 2016. The computation of the transmission losses submitted by CSPTCL is shown in the Table below:

Table 4-2: Transmission Losses for FY 2019-20 as submitted by CSPTCL

Sr. No.	Particulars	FY 2019-20
1	State Generation Ex-Bus at 132 kV and above (MU)	17,037.41
2a	Import from CTU Grid at CG Periphery at 132 kV and above (MU)	16250.29
2b	Export to CTU Grid at CG Periphery at 132 kV and above (MU)	6721.86
2	Net Drawal from CTU Grid at State Periphery at 132 kV and above (MU)	9,528.43
3	IPPs/CPP Injection in CSPTCL System at 132 kV and above (MU)	1,199.62

Sr. No.	Particulars	FY 2019-20
4	Total Injection at State Grid of STU (MU) (1+2+3)	27,765.46
5	EHV Sales from Sub Station (MU)	2,764.76
6	Net Output to DISCOM (MU)	24,178.00
7	Total Output from CSPTCL System (MU) (5+6)	26,942.75
8	Transmission Loss (MU) (4-7)	822.71
9	Transmission Loss (%) (8/4*100)	2.96%

Commission's View

In the MYT Order dated April 30, 2016, the transmission losses were approved as 3.22% for each year of the Control Period. The details of source-wise actual injection of energy, actual EHV sales and joint meter readings have been examined.

It is observed that there is difference between the EHV sales considered by CSPTCL and CSPDCL. CSPTCL had submitted the reconciliation and clarified that due to incorporation of Bhilai Steel Plant (BSP) export and import in drawal of CTU grid to Chhattisgarh system, BSP consumption is being deducted from EHV sales for determining the transmission losses. Also, the energy sales from 2x500 MW Atal Bihari Vajpayee Thermal Power Plant (ABVTPP) to CSPDCL is being deducted from EHV sales, as CSPDCL purchases electricity generated on ex-bus basis and hence, the electricity so injected into grid can flow anywhere in the grid. Hence, the same has not been considered for computation of transmission losses. Further, as regards the difference observed against total output from CSPTCL system, CSPTCL submitted that it has considered 33 kV output of 132/33 kV power transformer for computation of transmission loss, while CSPDCL has taken the reading of energy export from 33 kV feeders connected to 33 kV bus of EHV substation for computation of distribution loss.

The Commission agrees with the submission of CSPTCL and approves the transmission loss as submitted by CSPTCL.

Accordingly, the Commission approves Transmission Loss of 2.96% for FY 2019-20.

4.4 Operations and Maintenance (O&M) Expenses

CSPTCL's Submission

Employee Expenses

CSPTCL submitted that based on audited accounts, the gross employee expense excluding SLDC expense was Rs. 195.24 Cr. for FY 2019-20 as against the employee expenses of Rs. 201.77 Cr. approved in the MYT Order. The details are shown in the following Table:

Table 4-3: Gross Employee Expenses for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20
		Actual
1	Gross Employee Expenses (CSPTCL + SLDC) excluding Terminal Benefits	203.54
2	Less: SLDC Employee Expenses	8.29
3	**CSPTCL Gross Employee Expenses**	**195.24**

Further, no provision against interim relief has been made in the audited accounts for FY 2019-20. The capitalisation of employee expenses has been considered as Rs. 13.56 Cr. for FY 2019-20. CSPTCL requested the Commission to approve net employee expenses (excluding capitalization) of Rs. 181.69 Cr. (195.24 – 13.56) for FY 2019-20.

CSPTCL submitted the details of sanctioned employee strength, current employee strength, and vacant positions for different class of employees, as on March 31, 2020, which is shown in the Table below:

Table 4-4: Employee strength at CSPTCL as on 31st March 2020

Sr. No.	Particulars	Sanctioned	Working	Vacant
CSPTCL				
1	Class I	160	132	28
2	Class II	241	195	46
3	Class III	1,543	779	764
4	Class IV	1,411	521	620
5	**Total**	**3.085**	**1,627**	**1,458**
SLDC				
1	Class I	20	15	5

Sr. No.	Particulars	Sanctioned	Working	Vacant
2	Class II	24	14	10
3	Class III	23	15	8
4	Class IV	9	2	7
5	**Total**	**76**	**46**	**30**
CSPTCL + SLDC				
1	Class I	180	147	33
2	Class II	265	209	56
3	Class III	1,566	794	772
4	Class IV	1,150	523	627
5	**Total**	**3,161**	**1,673**	**1,488**

A&G Expenses and R&M Expenses

CSPTCL submitted the Administrative & General (A&G) expenses and Repair & Maintenance (R&M) expenses (excluding expenses on account of SLDC) for FY 2019-20, which is shown in the Table below:

Table 4-5: Gross R&M expenses and A&G expenses for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20
		Actual
1	Gross A&G Expenses	56.50
2	Less: SLDC Expenses	0.30
3	**CSPTCL Gross A&G Expenses**	**56.20**
4	Gross R&M Expenses	52.28
5	Less: SLDC Expenses	1.14
6	**CSPTCL Gross R&M Expenses**	**51.14**

CSPTCL considered the capitalisation of A&G expenses as Rs. 1.29 Cr. for FY 2019-20. Further, CSPTCL submitted the comparison of actual O&M expenses vis-a-vis O&M expenses approved in the MYT Order, which is shown in the following Table:

Table 4-6: O&M Expenses as submitted by CSPTCL for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20	
		MYT Order	Petition
1	Gross Employee Expenses	201.77	195.24
2	Gross A&G Expenses	35.24	56.20
3	Gross R&M Expenses	36.12	51.14
4	Interim Wage Relief amount	15.24	-
5	**Gross O&M Expenses (excluding SLDC)**	**288.36**	**302.58**
6	Employee expenses capitalized	-	13.56
7	A&G Expenses capitalized	-	1.29
8	**Net O&M Expenses (excluding SLDC)**	-	**287.73**

Computation of Normative O&M Expenses

CSPTCL submitted that CSERC MYT Regulations, 2015 allows incentive/disincentive for better/under performance in operational norms so that such efforts are appropriately reflected, thereby, ensuring improved efficiency on a sustainable basis. Regulation 13.1 of CSERC MYT Regulations, 2015, as per amendment dated June 16, 2017 specifies as under:

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

Accordingly, the employee expenses have been considered based on actuals and have not been subjected to sharing of gains or losses. CSPTCL requested the Commission to approve actual employee expenses for FY 2019-20 as submitted earlier.

CSPTCL submitted that the normative A&G expenses and R&M expenses for FY 2019-20 have been computed as per the Regulations.

CSPTCL has computed the base normative A&G Expenses and R&M Expenses for FY 2019-20 by considering the normative expenses for FY 2018-19 and Wholesale Price Index (WPI). CSPTCL has computed the base normative A&G expenses and R&M Expenses for FY 2019-20 as Rs. 39.36 Cr. and Rs. 40.34 Cr., respectively.

Additional O&M Expenses

CSPTCL submitted that as per Regulation 47.5(g) of CSERC MYT Regulations 2015, claim for additional O&M expenses on new transmission lines/substations commissioned after March 31, 2016 is permissible. However, practically, it is not possible to isolate the actual O&M Expenses specifically on new transmission lines / substations commissioned after March 31, 2016.

CSPTCL submitted that in Tariff Order dated February 28, 2019, the Commission had benchmarked the approved GFA with the base O&M Expenses allowed for FY 2015-16, and allowed additional O&M expenses in the same proportion for corresponding increase in GFA. CSPTCL submitted that it has adopted the same methodology to compute additional A&G expenses and R&M Expenses for FY 2019-20 on account of new transmission lines and sub-stations. The Additional normative R&M and A&G Expenses computed by CSPTCL are shown in the following Table:

Table 4-7: Additional Normative O&M Expenses for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	Formula	FY 2019-20
1	Average of opening and closing GFA for previous FY 2018-19	A	4,583.41
2	Average of opening and closing GFA for current FY 2019-20	B	4,905.28
3	Increase in GFA (%)	C= (B-A)/A*100	7.02%
4	Normative A&G Expenses	D	39.36
5	Normative R&M Expenses	E	40.34
6	**Additional A&G Expenses on account of increase in GFA**	F = D * C	**2.76**
7	**Additional R&M Expenses on account of increase in GFA**	G = E * C	**2.83**

CSPTCL submitted the normative A&G Expenses and R&M Expenses for FY 2019-20 after adding Additional Normative expenses to base normative expenses which is shown in the Table below:

Table 4-8: Normative A&G Expenses and R&M Expenses for FY 2019-20 (Rs. Cr.)

Particulars	FY 2019-20
Normative A&G Expenses	
Base Normative Expenses	39.36
Additional A&G Expenses	2.76
Total Normative A&G Expenses	**42.12**
Normative R&M Expenses	
Base Normative Expenses	40.34
Additional R&M Expenses	2.83
Total Normative R&M Expenses	**43.17**

CSPTCL submitted the sharing of gain/(loss) for FY 2019-20 which is shown in the following Table:

Table 4-9: Sharing of gain/(loss) on A&G Expenses and R&M expenses for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20		
		Normative	Actual	Gain/(Loss)
A	Net A&G expenses	42.12	54.91	(12.79)
B	Net R&M expenses	43.17	51.14	(7.97)
C	Total Gain/(Loss)	85.29	106.32	(20.76)
D	**CSPTCL share (1/2 of Total Gain/(Loss))**			**(10.38)**

CSPTCL submitted that the prevalent norms for calculation of R&M expenses based on WPI alone are not sufficient and should be linked with the growth in the asset base of the utility, and inflationary increase.

Consideration of Outsourced work under R&M Head

CSPTCL submitted that R&M works for FY 2019-20 have increased due to the reason that EHV sub-station of CSPTCL are being outsourced for operational purpose (including cleaning, watch and ward). The details of the outsourced expenses are as under:

Table 4-10: Details of Outsourced Expenses (Rs. Cr.)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
132 kV Substations	10.35	14.41	24.47	24.63
220 kV Substations	2.65	3.65	6.95	6.75
400 kV sub-station				0.89
Grand total	**13.00**	**18.06**	**31.42**	**32.27**

The reason for considering these expenses under R&M expenses is that these expenses have been incurred on R&M works for EHV sub-stations. There is no separate account head for booking expenditure incurred on outsourced employees. If regular employees of CSPTCL had been deployed for this purpose, then even more expenditure (2 to 3 times) would have to be incurred. Similarly, for economic reasons, it has employed various personnel through outsourcing against vacant posts in ministerial (to be read as *managerial*) cadre and wages of such personnel are booked under A&G head, instead of salaries/employee expenses. The wages are variable and linked to price index. The vacancies created by retirement are mostly filled up through outsourcing. Hence the expenditure incurred in the form of salaries and wages (plus a small profit) to outsourced personnel should be treated as a separate line item and not be subject to sharing of gain/(loss). It is pertinent to mention here that these wages are required to be paid by CSPTCL to outsourced employees against the vacant posts of CSPTCL for day-to-day operation (including cleaning, watch and ward) of existing/new EHV sub-stations/offices, etc. Since the nature of these expenses (wages) are similar to employee expenses for regular employees, CSPTCL requested to consider these expenses at par with employee expenses, only for the purpose of computation of gain and loss of A&G expenses and R&M expenses.

Commission's View

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

*"**47.5 Operation and Maintenance expenses***

Employee Cost

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

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

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

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

A&G Expenses and R&M Expenses

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

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

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

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

In accordance with the above said Regulations, O&M Expenses had been approved in the MYT Order for the Control Period. The above Regulations specify that, at the time of truing up, the O&M Expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.

The Commission has considered escalation factor of 7.53% for employee expenses and 1.68% for R&M expenses and A&G Expenses for FY 2019-20 based on applicable Consumer Price Index (CPI) and Wholesale Price Index (WPI).

Further, Regulation 47.5 (g) of the CSERC MYT Regulations, 2015, specifies to consider the additional O&M expenses on account of new transmission lines/sub-stations commissioned after March 31, 2016. In line with the methodology adopted by the Commission in the previous Order, the Commission has computed the additional O&M expenses by considering approved GFA with the base O&M expenses allowed for the previous year and in the same proportion for corresponding increase in GFA. The Commission has also considered the GFA towards deposit works, as submitted by CSPTCL. The additional normative A&G expenses and R&M expenses on account of new transmission lines and sub-stations for FY 2019-20 are computed which is shown in the Table below:

Table 4-11: Computation of Additional A&G expenses and R&M expenses for FY 2019-20 (Rs. Cr.)

Particulars	Legend/Formula	FY 2019-20
Average of Opening and Closing GFA for FY Previous FY	A	4583.41
Average of Opening and Closing GFA for current FY	B	4904.87
Increase in GFA (%)	C=(B-A)/Ax100	7.01%
Normative A&G Expenses approved for FY	D	39.36
Normative R&M Expenses approved for FY	E	40.34
Additional A&G Expenses on account of increase in GFA for FY	**F=D x C**	**2.76**
Additional R&M Expenses on account of increase in GFA for FY	**G = E x C**	**2.83**

For the purpose of true-up for FY 2019-20, the Commission approves the normative A&G expenses and R&M Expenses including additional A&G expenses and R&M expenses on account of new transmission lines/sub-stations, which is shown in the following Table:

Table 4-12: Approved Normative A&G Expenses and R&M Expenses for FY 2019-20 (Rs. Cr.)

Particulars	MYT Order	Petition	Revised
A&G Expenses	35.24	42.12	42.12
R&M Expenses	36.12	43.16	43.16
Grand total	**71.36**	**85.28**	**85.28**

The Commission has undertaken sharing of gains and losses of normative expenses vis-à-vis actual expenses for FY 2019-20 in accordance with CSERC MYT Regulations, 2015.

The actual Employee expenses have been approved based on audited accounts and clarifications sought from CSPTCL, which is shown in the Table below:

Table 4-13: Approved Actual Employee Expenses for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Gross Employee Expenses (CSPTCL + SLDC) excluding terminal benefits	203.54	203.54
2	Less: SLDC Employee Expenses	8.29	8.29
3	Gross Employee Expenses (excluding SLDC)	195.24	195.24
4	Less: Employee Cost Capitalized	13.56	13.56
5	**Net Employee Expenses**	**181.69**	**181.69**

Further, the Commission observes that CSPTCL while calculating A&G expenses has deducted the capitalization twice. CSPTCL has also booked shortage of inventory, the cost of Corporate Social Responsibility (CSR) activity and penalty charges in A&G Expenses. The Commission is of the view that Utilities are responsible for maintaining their own inventory and any shortage in the same cannot be passed on to the customer. Further, though CSR activity is mandated under the Companies Act, 2013, the Utilities are required to undertake such activity out of their profits and cannot recover the cost of such activity from the consumers. The Commission has hence, disallowed the expenses on account of CSR, shortage of inventory and penalty charges while approving the actual A&G expenses, for the purposes of sharing of gains/losses. Accordingly, the approved actual A&G expenses and R&M Expenses for FY 2019-20 are shown in the following Table:

Table 4-14: Approved Actual A&G Expenses and R&M Expenses for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Gross A&G Expenses	56.50	50.72
2	Less: SLDC Expenses	0.30	0.30
3	**Gross A&G Expenses (Excluding SLDC)**	**56.20**	**50.42**
4	A&G Expenses Capitalized	1.29	1.29
5	**Net A&G Expenses**	**54.91**	**49.13**
6	Gross R&M Expenses	52.28	52.28
7	Less: SLDC Expenses	1.14	1.14
8	**Gross R&M Expenses (Excluding SLDC)**	**51.14**	**51.14**
9	R&M Expenses Capitalized	-	-
10	**Net R&M Expenses**	**51.14**	**51.14**

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

"Provided further that employee cost shall not be factored in for sharing of gains or losses on account of operations and maintenance expenses …"

Accordingly, the Commission approves the Employee Expenses at actuals for FY 2019-20.

Further, the Commission notes that CSPTCL in its subsequent submission, has requested the Commission to consider expenses of outsourcing and sub-contracting manpower as a separate line item instead of under R&M Expenses or A&G expenses, and not subject the same to sharing of efficiency gains or losses. Regarding this issue, the Commission vide its Tariff Order dated February 28, 2019 has held that according to the Regulations, such expenses cannot be a part of employee expenses and service contract. In nature, these expenses shall be booked under A&G expenses instead of R&M expenses.

Accordingly, the sharing of gains and losses in O&M expenses, computed after final true-up for FY 2019-20, is shown in the following Table:

Table 4-15: Sharing of gain/(loss) on A&G Expenses and R&M expenses for FY 2019-20 as approved by the Commission (Rs. Cr.)

Sr. No.	Particulars	Normative	Actual	Gain/ (Loss)
A	Net A&G expenses	42.12	49.13	(7.01)
B	Net R&M expenses	43.16	51.14	(7.98)
C	Total Gain/(Loss)			(14.98)
D	**CSPTCL share (1/2 of Total Gain/(Loss))**			**(7.49)**

4.5 Contribution to Pension and Gratuity Fund

CSPTCL's Submission

CSPTCL submitted that the Commission, in the MYT Order, allowed contribution to Pension and Gratuity (P&G) fund of Rs. 63.75 Crore, which was further revised vide Tariff Order issued by the Commission dated 28th February, 2019 for FY 2019-20 as Rs. 45.26 Crore for FY 2019-20 net of SLDC. Accordingly, CSPTCL has made P&G contribution of Rs. 45.26 Crore.

Commission's View

The Commission approves the actual Contribution to P&G Fund for FY 2019-20 as submitted by CSPTCL, which is shown in the following Table:

Table 4-16: Contribution to P&G Fund for FY 2019-20 as approved by the Commission (Rs. Cr.)

Particulars	MYT Order	Petition	Approved
Contribution to P&G Fund	63.75	45.26	45.26

4.6 Gross Fixed Assets

CSPTCL's Submission

CSPTCL submitted that the Commission, in the MYT Order, had approved the methodology for determination of capital structure into consumer contribution, debt and equity. The capital structure for FY 2019-20 has been considered as follows:

- The opening Capital Works in Progress (CWIP) for FY 2019-20 has been considered equal to the closing CWIP of FY 2018-19;
- Closing CWIP of Rs. 616.62 Cr. has been considered as per the audited accounts and actual loan addition is considered as Rs. 168.05 for FY 2019-20;
- GFA addition of Rs. 397.55 Cr. for FY 2019-20 (net of GFA addition for SLDC) have been considered as per audited accounts;
- Assets generated on account of Consumer Contribution has been taken as Nil, considering their value as Rs.1 only as per Accounting Standard for both years;
- The normative debt:equity ratio has been considered as 70:30 for additional capitalisation during FY 2019-20 as per the CSERC MYT Regulations, 2015.

CSPTCL submitted the Capital Structure for FY 2019-20 which is shown in the following Table:

Table 4-17: Capital Structure submitted by CSPTCL for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	FY 2018-19 True-up Order dt.30.05.2020	FY 2019-20 (Based on final accounts)
A	**GROSS FIXED ASSETS (GFA)**		
1	Opening GFA	4,131.79	4,699.69
2	Opening CWIP	616.62	653.43
3	Opening Capex	4,748.41	5,353.11
4	Capitalization during the year	567.90	397.55
5	Closing GFA	4,699.69	5097.24
6	Closing CWIP	653.43	524.41
7	Closing Capex	5,353.11	5,621.65
B	**GRANTS & CONSUMER CONTRIBUTION**		
1	Opening Grant and Contribution	101.56	101.56
2	Consumer Contribution/Grants during the Year	-	
3	Closing Consumer Contribution	101.56	101.56
4	Consumer Contribution in Opening GFA	46.06	46.06
5	Consumer Contribution in Closing GFA	46.06	46.06
C	**LOAN BORROWED**		
1	Opening Borrowed Loan	2,263.83	2,585.33
2	Loan Borrowed during the Year	321.49	168.05
3	Closing Borrowed Loan	2,585.33	2753.37
4	Borrowed Loan in Opening GFA	2,656.48	3,054.01
5	Borrowed Loan in Closing GFA	3,054.01	3,332.30
D	**Equity**		
1	Opening Gross Equity	2,383.02	2,666.23
2	Equity addition during the Year	283.21	100.49
3	Closing Gross Equity	2,666.23	2,766.72
4	Gross Equity in Opening GFA	1,429.25	1,599.62
5	Gross Equity in Closing GFA	1,599.62	1,718.88
6	Average Gross Equity during the year	1514.43	1,659.25
E	**PERMISSIBLE EQUITY**		
1	Permissible Equity in Opening GFA	1,052.13	1,222.50
2	Permissible Equity in Closing GFA	1,222.50	1,341.76

Sr. No.	Particulars	FY 2018-19 True-up Order dt.30.05.2020	FY 2019-20 (Based on final accounts)
3	Average Gross Permissible Equity during the year	1,137.31	1,282.13
F	**NORMATIVE LOAN**		
1	Opening Normative Loan	377.12	377.12
2	Closing Normative Loan	377.12	377.12
3	Average Normative Loan	377.12	377.12

CSPTCL submitted the means of finance for GFA addition at normative debt: equity ratio of 70:30. Accordingly, CSPTCL submitted the debt amount of Rs. 278.29 Cr. and Equity amount of Rs. 119.27 for FY 2019-20. CSPTCL requested the Commission to approve the capital structure and means of finance including GFA addition for FY 2019-20 as per its submissions.

Commission's View

In the previous Tariff Order, the Commission has approved the closing GFA as Rs. 4,699.69 cr. after true-up for FY 2018-19. The Commission has accordingly considered the same amount as opening GFA for FY 2019-20.

The Commission notes that audited accounts for FY 2019-20 indicate the capitalisation of Rs. 397.55 cr. (including GFA addition of Rs. 0.79 Cr. for CSLDC). Accordingly, the Commission has considered the capitalisation of Rs. 396.76 cr. (net of GFA addition of CSLDC) for FY 2019-20.

As regards the funding of capitalisation, CSPTCL has not considered any grants for FY 2019-20, however, the audited annual account reflects a grant of Rs. 7.98 Cr. from PSDF. The Commission has considered the actual PSDF grant received during FY 2019-20 for funding of capitalisation. Further, normative Debt: Equity ratio of 70:30 has been considered after due reduction of grants as per Regulation 17 of the CSERC MYT Regulations, 2015.

The Commission approves the GFA addition and its funding for FY 2019-20 which is shown in the following Table:

Table 4-18: Approved GFA Addition and Means of Finance for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	GFA Addition	397.55	396.76
	Means of Finance		

Sr. No.	Particulars	Petition	Approved
2	Consumer Contribution	-	7.98
3	Equity	119.27	116.63
4	Debt	278.29	272.15
5	**Total Capitalisation**	**397.55**	**396.76**

4.7 Depreciation

CSPTCL's Submission

CSPTCL submitted that it has computed depreciation of Rs. 232.23 cr. FY 2019-20, in accordance with Regulation 24 of the CSERC MYT Regulations, 2015. CSPTCL requested the Commission to approve the same after final true-up of ARR for FY 2019-20.

Commission's View

The Commission has approved the depreciation in accordance with the approach adopted in the past orders. The closing GFA for FY 2018-19, as approved in the true up for FY 2018-19, has been considered as the opening GFA for FY 2019-20. The additional GFA as well as the addition of Grants and Consumer Contribution in GFA has been considered the Commission. The weighted average depreciation rate of 5.26%, computed on the basis of deprecation rates specified in the CSERC MYT Regulations, 2015, has been considered for FY 2019-20. Depreciation on assets due to Consumer Contribution and grants equates to Rs. 2.63 Cr for FY 2019-20.

Based on details submitted by CSPTCL, it is Commission observed that depreciation on fully depreciated assets during the year is Rs. 22.92 Cr. for FY 2019-20. Accordingly, in this Order, the Commission has considered the deprecation on fully depreciated assets as Rs. 22.92 Cr. FY 2019-20. The depreciation computed by the Commission for FY 2019-20 is shown in the following Table:

Table 4-19: Approved Depreciation for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Opening GFA excluding CSLDC	4,950.87	4,699.69	4,699.69
2	Add: Capitalization during the year	77.61	397.55	396.76
3	GFA at the end of the year excluding CSLDC	5,028.47	5,097.24	5,096.45

Sr. No.	Particulars	MYT Order	Petition	Approved
4	Average GFA for the year	4,989.67	4,898.46	4,898.07
5	Depreciation Rate	5.25%	5.26%	5.26%
6	Depreciation @ applicable rates as per Regulations	261.96	257.57	257.55
7	Less: Depreciation on Consumer Contribution and grants	2.42	2.42	2.63
8	Less: Depreciation on fully depreciated assets	22.18	22.92	22.92
9	**Net Depreciation**	**237.36**	**232.23**	**232.00**

4.8 Interest on Loan

CSPTCL's Submission

CSPTCL submitted that it has calculated interest and finance charges as per Regulation 23 of the CSERC MYT Regulations, 2015. CSPTCL has submitted details of actual loan for FY 2019-20 as per the audited accounts. CSPTCL has considered the approved closing normative loan balance for FY 2018-19 as per the true-up Order, as the opening normative loan balance for FY 2019-20. The debt component of 70% of GFA addition after deduction of grants during FY 2019-20 has been considered as the normative loan addition during the year. The allowable depreciation for FY 2019-20 has been considered as the normative repayment for the current year. The rate of interest has been computed in accordance with Regulation 23.5. The actual weighted average interest rates of 10.05% for FY 2019-20 has been considered for computation of the interest on loan. CSPTCL submitted that it has swapped the NABARD loan by SBI loan at the interest 7.98%. CSPTCL further submitted that the entire benefits arising out of the swapping has been passed on to the beneficiary as per the directives of the Commission in Order dated 28 February, 2019. CSPTCL requested the Commission to approve Interest on Loan of Rs. 196.65 Cr. for FY 2019-20.

Commission's View

The Commission has approved interest on loan capital for FY 2019-20 as per Regulation 23 of the CSERC MYT Regulations, 2015.

The Commission has considered the closing net normative loan balance for FY 2018-19, as approved after True-up, as the opening net normative loan balance for FY

2019-20. The addition of normative loan for FY 2019-20 has been considered based on debt component towards the actual capitalisation of respective years, as considered earlier in this Chapter. The repayment has been considered equal to net depreciation approved for FY 2019-20 in this Order.

The Commission has computed the weighted average rate of interest of 10.02% for FY 2019-20, as per Regulation 23.5 of the CSERC MYT Regulations, 2015.

Accordingly, the interest on loan approved for FY 2019-20 is worked out and shown in the Table below:

Table 4-20: Approved Interest on Loan for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Total Opening Net Loan	2,065.85	1,933.83	1,933.83
2	Repayment during the period	236.73	232.23	232.00
3	Additional Capitalization of Borrowed Loan during the year	54.32	278.29	272.15
4	Total Closing Net Loan	1,883.44	1,979.89	1,973.98
5	Average Loan during the year	1,974.65	1,956.86	1,953.91
6	Weighted Average Interest Rate	12.20%	10.05%	10.02%
7	**Interest Expenses**	**240.92**	**196.65**	**195.75**

4.9 Return on Equity (RoE) and Income Tax

CSPTCL's Submission

CSPTCL has computed Return on Equity (RoE) as per Regulation 22 of the CSERC MYT Regulations, 2015, using the base rate of Return on Equity of 15.50%. The Income Tax has been separately claimed based on actual Income Tax paid during the year. CSPTCL claimed the Income Tax of Rs. 12.74 Cr. for FY 2019-20. CSPTCL has considered the closing permissible equity balance of FY 2018-19, as approved in the true-up Order, as the opening permissible equity balance for FY 2019-20. The equity addition has been considered as 30% of the actual capitalisation during the year. CSPTCL requested the Commission to approve Rs. 198.73 Cr. for FY 2019-20 as RoE. It also requested the Commission to consider the similar approach for CSPTCL for computation of RoE by grossing up RoE with MAT rate of 20.96%, if adopted for CSPGCL and CSPDCL.

Commission's View

Regulation 22 of the MYT Regulations, 2015 specifies that RoE shall be computed by grossing up the base rate with the prevailing MAT rate of the base year for projection purposes. CSPTCL has paid Income Tax of Rs. 12.74 Cr. for FY 2019-20. In the previous Tariff Orders, the Commission has allowed Income Tax paid separately, rather than grossing up the RoE. The Commission notes that CSPTCL has also requested for separate approval of actual Income Tax paid. Accordingly, the Commission has approved RoE at base rate of 15.50% as per Regulation 22 of the CSERC MYT Regulations, 2015 and allowed the Income Tax separately.

For computation of RoE, the closing equity as approved after True-up for FY 2018-19 has been considered as opening equity for FY 2019-20. The equity addition has been considered based on the actual capitalisation as approved earlier in this Order. The Commission approves the RoE for FY 2019-20 as shown in the following Table:

Table 4-21: Approved Return on Equity for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Permissible Equity in Opening GFA	1,296.73	1,222.50	1,222.50
2	Addition of Permissible Equity during the year	23.28	119.27	116.63
3	Permissible Equity in Closing GFA	1,320.01	1,341.76	1,339.13
4	Average Gross Permissible Equity during the year	1,308.37	1,282.13	1,280.82
5	Rate of Return on Equity	15.50%	15.50%	15.50%
6	**Return on Equity**	**202.80**	**198.73**	**198.53**

As regards Income Tax, CSPTCL was asked to submit the detailed computation of Income Tax and documentary evidence related to actual payment, viz., Income tax receipt, challans, etc. for prudence check of Income Tax paid for FY 2019-20. CSPTCL submitted computation of Income Tax, Income Tax challans and other documentary evidences for FY 2019-20. Further, CSPTCL clarified that no adjustment towards MAT credit has been made during FY 2019-20 and no refund of Income Tax was received towards previous years. Based on the scrutiny of the documentary evidences submitted by CSPTCL and Income Tax paid, the Commission approves Income Tax of Rs. 12.74 Cr. for FY 2019-20.

4.10 Interest on Working Capital

CSPTCL's Submission

For computation of Interest on Working Capital (IoWC) for FY 2019-20, CSPTCL has considered one month of O&M expenses, maintenance spares at 40% of R&M expenses, and receivables equivalent to one month of revenue billed for computing the working capital requirement. CSPTCL has considered the interest rate of 12.55% (i.e., 9.05% - SBI Base Rate on 1stApril 2019 plus 350 basis points) for FY 2019-20. CSPTCL requested the Commission to approve IoWC of Rs. 14.12 Cr. for FY 2019-20.

Commission's View

The Commission has computed IoWC in accordance with Regulation 25 of the MYT Regulations, 2015. For computation of working capital requirement as per the formula specified in the CSERC MYT Regulations, 2015, the Commission has considered the revised normative value of O&M expenses as approved in this Order. Further, the receivables have been considered based on the actual revenue billed by CSPTCL during FY 2019-20. The interest rate has been considered as per Regulation 25.4 of the MYT Regulations, 2015, i.e., 12.55% for FY 2019-20. The normative IoWC approved by the Commission is shown in the Table below:

Table 4-22: Approved Interest on Working Capital for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	O&M expenses for One Month	22.76	23.98	22.25
2	Maintenance Spares @ 40% of R&M Expenses	14.45	20.46	17.27
3	Receivables @ 1 Month	85.55	68.07	68.07
4	Total Working Capital requirement	122.76	112.50	107.58
5	Less: Security Deposit from Transmission Users	-	-	-
6	Net Working Capital Requirement	122.76	112.50	107.58
7	Rate of Interest on WC	13.20%	12.55%	12.55%
8	**Net Interest on Working Capital**	**16.20**	**14.12**	**13.50**

4.11 Non-Tariff Income

CSPTCL's Submission

CSPTCL submitted the Non-Tariff Income of Rs. 13.50 Cr. for FY 2019-20 based on audited accounts and requested the Commission to approve the same.

Commission's View

For the purpose of true-up for FY 2019-20, the Commission has considered the Non-Tariff Income for Transmission Business as per Segmental Notes of Accounts for FY 2019-20. Accordingly, the Commission has considered Non-Tariff income of Rs. 13.50 Cr. for FY 2019-20.

The Non-Tariff Income approved in True-up for FY 2019-20 is shown in the Table below:

Table 4-23: Approved Non-Tariff Income for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Non-Tariff Income	22.35	13.50	13.50

4.12 Incentive/Penalty on Transmission System Availability Factor (TSAF)

CSPTCL's Submission

CSPTCL submitted that Target Availability of the transmission system is specified in Regulation 51 of the CSERC MYT Regulations, 2015, for incentive/penalty payable/levied to a Transmission Licensee. In the MYT Order, the Commission has approved the annual Target Availability factor for incentive/penalty as 99% and stipulated the modalities for computation of incentive/penalty on account of actual Transmission System Availability Factor (TSAF).

CSPTCL submitted that it has achieved TSAF of 99.77% for FY 2019-20. Accordingly, CSPTCL has claimed the incentive of Rs. 3.66 Cr. for FY 2019-20.

Commission's View

As regards Incentive/Penalty calculation related to the TSAF, the Commission in the MYT Order has stipulated as under:

"10.3.11 Incentive/Penalty Calculation

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

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

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

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

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

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

The Incentive/Penalty has been allowed in accordance with the above said principle specified in the Regulations.

The Commission has validated the actual TSAF based on CSLDC Certificate submitted for FY 2019-20. The Commission notes that the actual TSAF duly certified by CSLDC is 99.77% for FY 2019-20, which is higher than the Target TSAF. Hence, CSPTCL is entitled for incentive.

Accordingly, the Commission approves the Incentive on account of TSAF for FY 2019-20, as shown in the Table below:

Table 4-24: Approved Incentive for Higher Transmission System Availability for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Annual TSAF (%)	99.77%	99.77%
2	Target TSAF (%)	99.00%	99.00%
3	Maximum TSAF that can be considered for incentive	99.75%	99.75%
4	Incentive/(Penalty)	7.33	7.29
5	**Sharing of gain/(loss) (50%)**	**3.66**	**3.65**

4.13 Aggregate Revenue Requirement (ARR)

Based on the above, the ARR approved after true-up for FY 2019-20 is shown in the Table below:

Table 4-25: Approved ARR after true-up for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Employee Expenses	201.76	195.24	195.24
2	A&G Expenses	35.24	56.20	50.42
3	R&M Expenses	36.12	51.14	51.14
4	Interim Wage Relief	15.24	-	-
5	Less: Capitalization of Employee, R&M and A&G Expenses	-	14.85	14.85
6	Contribution to Pension and Gratuity	63.75	45.26	45.26
7	Depreciation	237.36	232.23	232.00
8	Interest on Loan	240.49	196.65	195.75
9	Interest on Working capital	16.20	14.12	13.50
10	Return on Equity	202.80	198.73	198.53
11	Gain/(Loss) on sharing O&M efficiency	-	(10.38)	(7.49)
12	Incentive on Transmission Availability	-	3.66	3.65
13	Income Tax	-	12.74	12.74
14	**Aggregate Revenue Requirement (ARR)**	**1,048.97**	**980.76**	**975.89**
15	Less: Non-Tariff Income	22.35	13.50	13.50
16	**Net ARR**	**1026.62**	**967.26**	**962.39**

4.14 Revenue Gap/(Surplus) for FY 2019-20

CSPTCL's Submission

CSPTCL submitted the Revenue Gap/(Surplus) for FY 2019-20, as shown in the following Table:

Table 4-26: Revenue Gap/(Surplus) submitted by CSPTCL for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	Amount
1	AFC for FY 2019-20 as approved in MYT Order dated 30.04.2016 and later on revised vide Tariff Order dated 28.02.2019	999.45
2	Surplus adjusted with carrying cost up to FY 2018-19 as approved in Tariff Order dated 28.02.2019	182.61
3	Adjusted ARR for FY 2019-20	816.84
4	Actual ARR determined based on Final True-up for FY 2019-20	967.26
5	**Surplus/(Deficit) (1-4)**	**32.19**

CSPTCL requested the Commission to approve the Revenue Surplus of Rs. 32.19 Cr. for FY 2019-20, and adjust Rs. 40.01 Cr along with carrying cost in the ARR of FY 2021-22.

Further, CSPTCL submitted that as per the CERC Tariff Order dated February 16, 2016 in Petition No. 245/TT/2013, it has executed RSA and Transmission Services Agreement (TSA) with PGCIL on August 2, 2017, for disbursement of transmission charges by PGCIL in CSPTCL account in respect of 220 kV Natural Inter-State Transmission Lines belonging to CSPTCL.CSPTCL submitted that CERC issued the following directive in the aforementioned Order:

"The annual transmission charges allowed for the assets covered in the instant petition shall be considered in the YTC as per the sharing of Inter State Transmission Charges and Losses Regulation 2010 and shall be adjusted against the ARR of the Petitioner approved by the State Commission.''

Accordingly, CSPTCL submitted that it has received total Rs 7.472 Crore from PGCIL towards POC charges during FY 2019-20. CSPTCL has already credited the same to CSPDCL from the month of April'19 to November'19. The amount received against POC charges from December' 19 to March' 2020 is NIL. CSPTCL has requested the Commission to consider the same while approving the True-up of ARR of CSPDCL for FY 2019-20.

Commission's View

The Commission has considered the past gaps approved in the previous Orders in the ARR of FY 2019-20. The Commission has computed the Revenue Gap/(Surplus) after final true-up for FY 2019-20 for CSPTCL which is shown in the Table below:

Table 4-27: Approved Revenue Gap / (Surplus) for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	AFC for FY 2019-20 as approved in MYT order dated 30.04.2016 & later on revised vide tariff order dated 28.02.2019	999.45	999.45
2	Surplus of adjusted with carrying cost up to FY 2018-19 as approved in tariff order dated 28.02.2019	182.61	182.61
3	Adjusted ARR for FY 2019-20	816.84	816.84
4	Actual ARR determined based on Final True-up for FY 2019-20	967.26	962.39
5	**Surplus/(Deficit) (1-4)**	**32.19**	**37.06**

The Commission approves the cumulative Revenue Surplus of Rs. 37.06 Cr. for CSPTCL on account of final true-up for FY 2019-20. The same Revenue Surplus has been adjusted in revenue requirement of CSPTCL for FY 2021-22 along with carrying cost.

The carrying cost on Revenue Surplus approved in final True up for FY 2019-20 has been computed for three years, i.e., from mid-point of FY 2019-20 to mid-point of FY 2021-22. Accordingly, the Revenue Surplus including holding cost, which is required to be factored in the revenue requirement for FY 2021-22, works out to Rs. 46.06 Cr.

As regards the PGCIL Charges, the Commission has considered the same in the True-up of FY 2019-20 for CSPDCL in subsequent Section of this order.

5 FINAL TRUE-UP OF ARR FOR FY 2019-20 FOR CSLDC

5.1 Background

The Commission notified the CSERC MYT Regulations, 2015 for the third MYT control period from FY 2016-17 to FY 2020-21 on September 9, 2015. Subsequently, the Commission notified the First Amendment to CSERC MYT Regulations, 2015 on June 16, 2017. The Commission issued the MYT Order on April 30, 2016 approving the ARR of CSLDC for the Control Period from FY 2016-17 to FY 2020-21 and Transmission tariff for FY 2016-17.

Now, CSLDC has submitted the present Petition for final true-up of ARR for FY 2019-20 based on the Audited Accounts of FY 2019-20.

Regulation 10.4 of the CSERC MYT Regulations, 2015 specifies as under:

"10.4. The scope of the truing up shall be a comparison of the performance of the generating company or STU/transmission licensee or distribution licensee or SLDC with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of the following:

(g) A comparison of the audited performance of the applicant for the previous financial year(s) with the approved forecast of such previous financial year(s), subject to the prudence check including pass-through of impact of uncontrollable factors;

(h) Review of compliance with directives issued by the Commission from time to time;

(i) Other relevant details, if any."

In accordance with the above Regulations, the Commission has undertaken the final true-up of FY 2019-20 for CSLDC based on Audited Accounts and Segmental Notes submitted by CSLDC.

In this Chapter, the Commission has analysed all the elements of actual expenditure and revenue of CSLDC for FY 2019-20 and undertaken the final true-up of expenses and revenue in accordance with Regulation 10 of the CSERC MYT Regulations, 2015. The Commission has approved the sharing of gains and losses on account of controllable factors between CSLDC and its beneficiaries, in accordance with Regulation 13 of the CSERC MYT Regulations, 2015.

5.2 Annual Charges for SLDC

Regulation 74.1 of the CSERC MYT Regulations, 2015 specifies the components of Annual Charges for SLDC as under:

(a) Operation and Maintenance Expenses;

(b) Contribution to Pension and Gratuity Fund;

(c) Return on Equity;

(d) Interest on loan capital;

(e) Depreciation; and

(f) Interest on Working Capital.

5.3 Operation and Maintenance (O&M) expenses

CSLDC's Submission

CSLDC submitted that Operation and Maintenance (O&M) Expenses includes Employee expenses, Administrative & General (A&G) expenses, and Repairs & Maintenance (R&M) expenses. CSLDC has considered O&M expenses for FY 2019-20, as shown in the Table below:

Table 5-1: O&M Expenses for FY 2019-20 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20
1	Gross Employee Expenses	8.29
2	Gross A&G Expenses	0.30
3	Gross R&M Expenses	1.14
4	**Total O&M Expenses**	**9.73**

Also, CSLDC submitted the details of sanctioned employee strength, current employee strength, and vacant positions for different class of employees, as on March 31, 2020. The total sanctioned strength of different class of employees of SLDC is 76 out of which 46 are currently working and balance 30 are envisaged to be filled in the coming FYs, as shown in the Table below:

Table 5-2: Employee strength at CSPTCL as on 31st March 2020

Sr. No.	Particulars	Sanctioned	Working	Vacant
CSPTCL				
1	Class I	160	132	28
2	Class II	241	195	46
3	Class III	1,543	779	764
4	Class IV	1,411	521	620
5	**Total**	**3.085**	**1,627**	**1,458**
SLDC				
1	Class I	20	15	5
2	Class II	24	14	10
3	Class III	23	15	8
4	Class IV	9	2	7
5	**Total**	**76**	**46**	**30**
CSPTCL + SLDC				
1	Class I	180	147	33
2	Class II	265	209	56
3	Class III	1,566	794	772
4	Class IV	1,150	523	627
5	**Total**	**3,161**	**1,673**	**1,488**

CSLDC requested to approve actual O&M Expenses of Rs. 9.73 Cr. for FY 2019-20.

Sharing of gain and losses on account of O&M Expenses

As per the CSERC MYT Regulations, 2015 and the subsequent amendment, the Employee expenses have been considered based on actuals and have not been subjected to sharing of gains or losses. A&G expenses and R&M expenses have been subjected to sharing of gains/losses as per Regulation 47.5 of the CSERC MYT Regulations, 2015.

Accordingly, CSLDC has computed the normative A&G expenses and R&M expenses for FY 2019-20 by applying WPI escalation factor of 1.68% on approved expenses of FY 2018-19. The normative A&G expenses and R&M expenses for FY 2019-20, as submitted by CSLDC are shown in the Table below:

Table 5-3: Normative A&G Expenses for FY 2019-20 as submitted by CSLDC (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20
1	Normative A&G Expenses	1.20
2	Normative R&M Expenses	1.76

The normative A&G expenses and R&M expenses have been considered for the purpose of sharing of gains/losses for FY 2019-20. The actual A&G expenses and R&M expenses are Rs. 0.30 Crore and Rs. 1.14 Crore (net of capitalisation), respectively, for FY 2019-20. The same have been considered for sharing of gain/(loss) as shown in the Table below:

Table 5-4: Sharing of gain/ (loss) on A&G expenses and R&M expenses for FY 2019-20 as submitted by CSLDC (Rs. Cr.)

Sr. No.	Particulars	Normative	Actual	Gain/ (Loss)
1	Net A&G expenses	1.20	0.30	0.90
2	Net R&M expenses	1.76	1.14	0.62
3	Total Gain/(Loss)	2.96	1.44	1.52
4	**CSLDC share (1/2 of Total Gain/(Loss))**			**0.76**

CSLDC submitted the sharing of gains of Rs. 0.76 Cr. on account of sharing of normative A&G expenses and R&M expenses vis-à-vis actual expenses in the true-up of ARR for FY 2019-20.

Commission's View

Regulation 47.5 of the CSERC MYT Regulations, 2015 specifies the basis for computation of normative O&M expenses and the method of sharing the efficiency gains/losses vis-à-vis actual O&M expenses, as reproduced in the earlier Chapter.

The Commission, in the MYT Order, had approved O&M Expenses for the Control Period in accordance with the said Regulations, which specify that at the time of truing up, the O&M expenses shall be considered after taking into account the actual inflation over the approved O&M expenses of base-year/previous year.

Accordingly, the Commission has computed the revised normative O&M expenses for FY 2019-20 by applying the actual inflation over base-year's approved O&M expenses. The Commission has considered the WPI and CPI as per the CSERC MYT Regulations, 2015 and, accordingly, computed escalation factor of 7.53% for employee expenses and 1.68% for R&M expenses and A&G Expenses for FY 2019-20. Accordingly, the normative O&M Expenses approved for FY 2019-20 are shown in the Table below:

Table 5-5: Approved Normative O&M Expenses for FY 2019-20 (Rs. Cr.)

Particulars	Approved in MYT Order	Petition	Revised Normative Expenses
A&G Expenses	1.41	1.20	1.20
R&M Expenses	2.05	1.76	1.76

The Commission has considered actual O&M expenses for FY 2019-20 as per audited accounts and Segmental Notes, as submitted by CSLDC. Accordingly, the Commission approves actual O&M Expenses of Rs. 9.73 Cr. for FY 2019-20.

The Commission has undertaken sharing of gains and losses of normative expenses vis-à-vis actual expenses for FY 2019-20, as per CSERC MYT Regulations, 2015. As regards the sharing of gains and losses, the following provision has been inserted in Regulation 13.1 by the First Amendment to the CSERC MYT Regulations, 2015 on June 16, 2017:

"Provided further that employee cost shall not be factored in for sharing of gains or losses on account of operations and maintenance expenses…"

Accordingly, the Commission approves the Employee Expenses at actuals as Rs. 8.29 Cr. for FY 2019-20.

As CSPTCL and CSLDC do not have separate accounts, the whole capitalization of O&M expenses has been considered in CSPTCL's Petition. The Commission has considered the Actual A&G expenses and R&M expenses net of capitalisation for sharing of gains and losses for FY 2019-20 as shown in the Table below:

Table 5-6: Sharing of gain/ (loss) on A&G expenses and R&M expenses for FY 2019-20 as approved by the Commission (Rs. Cr.)

Sr. No.	Particulars	Normative	Actual	Gain/ (Loss)
1	Net A&G expenses	1.20	0.30	0.90
2	Net R&M expenses	1.76	1.14	0.62
3	Total Gain/(Loss)			1.52
4	**CSLDC share (1/2 of Total Gain/(Loss))**			**0.76**

In this Order, the Commission approves the O&M expenses based on audited accounts for FY 2019-20. Further, the Commission approves sharing of gains of Rs. 0.76 Crore for FY 2019-20.

5.4 Contribution to Pension and Gratuity Fund

CSLDC's Submission

CSLDC submitted that the Commission, in the MYT Order, had allowed Contribution to Pension and Gratuity (P&G) fund of Rs. 1.56 Cr. for FY 2019-20, which was further revised vide tariff order issued by the Commission dated 28th February, 2019 for FY 2019-20 as Rs. 1.11 Cr. for FY 2019-20. CSLDC has considered the same amount as actual contribution and requested the Commission to approve the same.

Commission's View

The Commission has approved the Contribution to Pension and Gratuity Fund of Rs. 1.11 Cr. for FY 2019-20 in the Tariff Order dated 28th February, 2019. For the purpose of final true-up, the Commission approves the same amount of Rs. 1.11 Cr for FY 2019-20.

5.5 Gross Fixed Assets and Means of Finance

CSLDC has considered the opening GFA for FY 2019-20 same as the closing GFA approved in the final true-up for FY 2018-19. It has considered GFA addition of Rs. 0.79 Cr. as the actual capitalisation in FY 2019-20. As per Regulation 17 of the CSERC MYT Regulations, 2015, the normative debt: equity ratio of 70:30 has been considered for funding of the additional capitalisation for the year. The additional capitalisation has not been funded by any grants.

Commission's View

The Commission has approved the closing GFA for FY 2018-19 as Rs. 15.59 Cr. after True-up in the Order dated May 30, 2020. The Commission has accordingly considered the same amount as Opening GFA for FY 2019-20. As discussed in earlier Chapter of this Order, the Commission notes that CSPTCL's audited accounts for FY 2019-20 reported the actual capitalisation of Rs. 397.55 Cr. during the year. Out of this, an amount of Rs. 0.79 Cr. pertains to CSLDC for FY 2019-20. The Commission has considered the actual capitalisation of Rs. 0.79 Cr. for FY 2019-20, based on submission of CSLDC.

As regards to the funding of capitalisation as submitted by CSLDC, the Commission has not considered any grants for FY 2019-20. Further, normative Debt: Equity ratio of 70:30 has been considered as per Regulation 17 of the CSERC MYT Regulations, 2015. Accordingly, the Commission approves the GFA and its funding for FY 2019-20 as shown in the following Table:

Table 5-7: Gross Fixed Assets and its Funding for FY 2019-20 for CSLDC as approved by the Commission (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Opening GFA	22.48	15.59	15.59
2	Capitalisation during the Year	0.45	0.79	0.79
3	Closing GFA	22.93	16.38	16.38
	Means of Finance			
4	Consumer Contribution/Grants	0.50	-	-
5	Equity	0.14	0.24	0.24
6	Debt	0.32	0.55	0.55
7	**Total Capitalisation**	**0.95**	**0.79**	**0.79**

5.6 Depreciation

CSLDC's Submission

The closing GFA of Rs. 15.59 Cr. as approved in the true-up order for FY 2018-19 is considered as the opening GFA for FY 2019-20. The asset base has been identified from the accounts of CSPTCL by Asset Segregation Ccommittee and the same has been considered in its computations. As the asset class-wise segregation of the CSLDC's asset base is not available, the weighted average depreciation rate considered for CSPTCL has been considered for CSLDC. Regulation 24.5 of CSERC MYT Regulations, 2015 specifies that till CSLDC is part of CSPTCL, the depreciation shall be calculated as applicable for CSPTCL. Since, CSLDC is not operating as a separate Company, the depreciation as applicable to CSPTCL has been considered. CSLDC requested to approve depreciation of Rs. 0.84 Cr. for FY 2019-20.

Commission's View

The Commission has approved the depreciation for FY 2019-20 in accordance with the approach adopted in the past orders. The closing GFA approved in the true up for FY 2018-19, has been considered as the opening GFA for FY 2019-20. The GFA addition for FY 2019-20 has been considered as approved in earlier Section of this Chapter. The consumer contribution/Grants in GFA addition for FY 2019-20 has been considered as Nil. The weighted average depreciation rate of 5.26%, computed for CSPTCL on the basis of deprecation rates provided in the CSERC MYT Regulations, 2015, has been considered for FY 2019-20 for CSLDC. The depreciation approved by the Commission for FY 2019-20 is shown in the Table below:

Table 5-8: Depreciation for FY 2019-20 for CSLDC as approved by the Commission (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Opening GFA	22.48	15.59	15.59
2	Additional capitalization during the year	0.45	0.79	0.79
3	GFA at the end of the year	22.93	16.38	16.38
4	Average GFA for the year	22.71	15.99	15.99
5	Depreciation Rate	5.25%	5.26%	5.26%
6	**Depreciation**	**1.19**	**0.84**	**0.84**

5.7 Interest on Loan

CSLDC's Submission

CSLDC has calculated Interest and Finance Charges as per Regulation 23 of the CSERC MYT Regulations, 2015. CSLDC is not operating as a separate Company and, therefore, the actual loan as applicable to CSPTCL has been considered. CSLDC has considered the approved closing normative loan balance for FY 2018-19 as per the true-up order, as the opening normative loan balance for FY 2019-20. The debt component of 70% of the GFA addition has been considered as the normative loan addition during the year. The allowable depreciation for the year has been considered as the normative repayment for the year. The rate of interest has been computed in accordance with Regulation 23.5 of the CSERC MYT Regulations, 2015. The actual weighted average interest rate of 10.05% for FY 2019-20 has been considered by CSLDC for computation of the interest on loan. CSLDC requested to approve the Interest and Finance Charges of Rs. 0.26 Cr. for FY 2019-20.

Commission's View

The Commission has approved interest on loan capital for FY 2019-20 as per Regulation 23 of the CSERC MYT Regulations, 2015. The Commission has considered the closing net normative loan balance for FY 2018-19, as approved after True-up, as the opening net normative loan balance for FY 2019-20. The addition of normative loan has been considered based on debt component towards additional capitalisation, as considered earlier in this Chapter. The repayment has been considered equal to depreciation approved by the Commission in this Order.

Regulation 23.5 of the CSERC MYT Regulations, 2015 provides for the rate of interest based on actual loan portfolio at the beginning of the year. For computation of weighted average rate of interest, the Commission has considered the applicable rate of interest on the outstanding loan portfolio of CSPTCL at the beginning of the financial year as per the audited accounts of FY 2019-20, in absence of segregation of actual loan for CSLDC. Accordingly, the Commission has considered the weighted average rate of interest of 10.02% for FY 2019-20.

The interest on loan approved for FY 2019-20 is shown in the Table below:

Table 5-9: Interest on Loan for FY 2019-20 for CSLDC approved by Commission (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Total Opening Net Loan	6.70	2.77	2.77
2	Repayment during the period	1.19	0.84	0.84
3	Additional Capitalization of Borrowed Loan during the year	0.32	0.55	0.55
4	Total Closing Net Loan	5.83	2.48	2.48
5	Average Loan during the year	6.26	2.63	2.63
6	Weighted Average Interest Rate	12.20%	10.05%	10.02%
7	**Interest Expenses**	**0.76**	**0.26**	**0.26**

5.8 Return on Equity (RoE) and Income Tax

CSLDC's Submission

CSLDC has computed Return on Equity (RoE) as per the Regulation 22 of the CSERC MYT Regulations, 2015. The closing permissible equity balance of FY 2018-19, as approved in the true-up Order, has been considered as opening equity balance for true-up of FY 2019-20. The equity addition during FY 2019-20 has been considered as 30% of the capitalisation during the year. CSLDC has considered base rate of RoE of 15.50% (without grossing up by MAT rate). Since, CSLDC has not paid any Income Tax during FY 2019-20, no Tax has been considered for the year. CSLDC requested to approve RoE of Rs. 0.80 Cr. for FY 2019-20.

Commission's View

Regulation 22 of the CSERC MYT Regulations, 2015 provides that RoE shall be computed by grossing up the base rate with the prevailing MAT rate of the base year for projection purposes. The Commission notes that CSLDC has not paid any Income Tax separately, hence, rate of return of RoE has not been grossed up with the prevailing MAT rate. Accordingly, the Commission has approved RoE at rate of 15.50% as per Regulation 22 of the CSERC MYT Regulations, 2015.

For computation of RoE, the Commission has considered the closing equity as approved for FY 2018-19 after True-up, as opening equity for FY 2019-20. The equity addition for FY 2019-20 has been considered based on the actual capitalisation as approved earlier in this Order. The Commission approves the RoE for FY 2019-20 as shown in the Table below:

Table 5-10: Return on Equity for FY 2019-20 for CSLDC as approved by Commission (Rs. Cr.)

Sr. No.	Particulars	MYT Order	Petition	Approved
1	Permissible Equity in Opening GFA	7.14	5.04	5.04
2	Addition of Permissible Equity during the year	0.14	0.24	0.24
3	Permissible Equity in Closing GFA	7.28	5.28	5.28
4	Average Gross Permissible Equity during the year	7.21	5.16	5.16
5	Rate of Return on Equity	15.50%	15.50%	15.50%
6	**Return on Equity**	**1.12**	**0.80**	**0.80**

5.9 Interest on Working Capital (IoWC)

CSLDC's Submission

CSLDC has considered IoWC as per Regulation 25 of the CSERC MYT Regulations, 2015. CSPTCL submitted that it has considered one month of O&M expenses, maintenance spares at 40% of R&M expenses, and receivables equivalent to one month of revenue billed for computing the working capital requirement for FY 2019-20. CSLDC has considered the interest rate of 12.55% (9.05% - SBI Base Rate on 1st April 2019 plus 350 basis points) for FY 2019-20 for computing the IoWC for FY 2019-20. CSLDC requested to approve IoWC of Rs. 0.32 Cr. for FY 2019-20.

Commission's View

The Commission has computed IoWC in accordance with Regulation 25 of the CSERC MYT Regulations, 2015. It has been observed that CSLDC has considered actual R&M expenses for calculation of Maintenance spares instead of normative R&M expenses. For computation of working capital requirement as per the formula specified in the CSERC MYT Regulations, 2015, the Commission has considered the revised normative value of O&M expenses for FY 2019-20, as approved earlier in this Order. The receivables have been considered based on the actual revenue of CSLDC during FY 2019-20, as compared to CSLDC's approach of calculating the receivables from the revenue required for FY 2019-20. The interest rate of 12.55% has been considered for FY 2019-20, as per Regulation 25.4 of the MYT Regulations, 2015. The normative IoWC approved for FY 2019-20 is shown in the Table below:

Table 5-11: IoWC approved for FY 2019-20 for CSLDC by the Commission (Rs. Cr.)

Sr. No.	Particulars	MYT Order	CSLDC Petition	Approved
1	O&M expenses for One Month	0.99	0.94	0.94
2	Maintenance Spares @ 40% of R&M Expenses	0.82	0.46	0.70
3	Receivables @ 1 Month	1.32	1.15	1.40
4	Total Working Capital requirement	3.13	2.54	3.04
5	Rate of Interest on WC	13.20%	12.55%	12.55%
6	**Net Interest on Working Capital**	**0.41**	**0.32**	**0.38**

5.10 Non-Tariff Income

CSLDC's Submission

CSLDC submitted that it has considered Non-Tariff Income (NTI) as Rs. 0.02 Cr. for FY 2019-20 based on the Segmental Notes to the Audited Accounts and requested the Commission to approve the same.

Commission's View

The Commission has considered NTI for CSLDC as per Segmental Notes of Audited Accounts of FY 2019-20. Accordingly, the Commission considers NTI of Rs. 0.02 Cr. for FY 2019-20.

5.11 Aggregate Revenue Requirement for CSLDC

Based on the above, the ARR approved for CSLDC after final truing-up for FY 2019-20 is shown in the Table below:

Table 5-12: Aggregate Revenue Requirement (ARR) for FY 2019-20 approved by the Commission (Rs. Cr.)

Sr. No	Particulars	MYT Order	Petition	Approved after True-up
1	Employee Expense	8.02	8.29	8.29
2	A&G Expenses	1.41	0.30	0.30
3	R&M Expenses	2.05	1.14	1.14
4	Provision for Interim Wage Relief Impact	0.40	-	-
5	Sharing of Gain/(Loss) for O&M Efficiency	-	0.76	0.76
6	Contribution to P&G	1.56	1.11	1.11
7	Depreciation	1.19	0.84	0.84
8	Interest on Loan	0.76	0.26	0.26
9	Interest on Working Capital	0.41	0.32	0.38
10	Return on Equity	1.12	0.80	0.80
11	**Gross Aggregate Revenue Requirement**	**16.93**	**13.83**	**13.89**
12	Less: Non-Tariff Income	1.05	0.02	0.02
13	**Net Aggregate Revenue Requirement**	**15.88**	**13.81**	**13.87**

5.12 Revenue from CSLDC Charges

CSLDC's Submission

CSLDC submitted that the revenue from CSLDC charges of Rs. 16.79 Cr. for FY 2019-20 based on the audited accounts.

Commission's View

For the purpose of true-up, the Commission has considered the revenue from CSLDC Charges of Rs. 16.79 Cr. for FY 2019-20 based on audited accounts submitted by CSLDC.

5.13 Revenue Gap/(Surplus) for CSLDC

CSLDC's Submission

CSLDC submitted that the Revenue Gap/(Surplus) for FY 2019-20, as shown in the Table below:

Table 5-13: Revenue Gap/(Surplus) for FY 2019-20 submitted by CSLDC (Rs. Cr.)

Sr. No.	Particulars	Amount
1	Annual Revenue Requirement	13.81
2	*Less:* Revenue from SLDC Charges	16.79
3	**Standalone Revenue Gap/(Surplus)**	**(2.98)**

CSLDC requested the Commission to approve the Surplus for FY 2019-20 and adjust Rs. 3.70 Cr. (with carrying cost) in the ARR of FY 2021-22.

Commission's View

After undertaking the final true-up for FY 2019-20, the Commission has computed the Revenue Gap/(Surplus) for FY 2019-20, as shown in the following Table:

Table 5-14: Revenue Gap/(Surplus) for FY 2019-20 for CSLDC as approved by the Commission (Rs. Cr.)

Sr. No	Particulars	Petition	Approved
1	Annual Revenue Requirement	13.81	13.87
2	Less: Revenue from SLDC Charges	16.79	16.79
3	**Revenue Gap/(Surplus)**	**(2.98)**	**(2.92)**

For computing the cumulative Revenue Surplus on account of final true-up for FY 2019-20, the Commission has considered the above approved Revenue Surplus. The carrying cost on Revenue Surplus approved in final True up for FY 2019-20 has been computed for two years, i.e., from mid-point of FY 2019-20 to mid-point of FY 2021-22.

Accordingly, the Revenue Surplus including carrying cost, which is required to be factored in the ARR of FY 2021-22, works out to Rs. 3.63 Cr.

6 FINAL TRUE-UP OF FY 2018-19 AND FY 2019-20 FOR CSPDCL

6.1 Background

CSPDCL has filed the Petition for final True-up of FY 2018-19 based on the Audited Accounts and provisional True-up of FY 2019-20 based on the provisional accounts in accordance with Regulations 10.2 and 10.3 of the CSERC MYT Regulations, 2015, which provides as under:

> *"10.2 ....The Distribution Licensee shall file an application for truing up of the previous year(s) and determination of tariff for the ensuing year, within the time limit specified in these Regulations.*
>
> *... ....*
>
> *10.3. In case the audited accounts are not available, the provisional truing up shall be done on the basis of un-audited/ provisional account and shall be subject to further final truing up, as soon as the audited accounts is available."*

CSPDCL submitted that the auditing of accounts for FY 2019-20 is under process. CSPDCL requested the Commission to amend the petition to the extent of expenses, revenue and gap in respect of FY 2019-20 on receipt of audited accounts, at a later stage, during the course of this Tariff Petition. Subsequently, on July 8, 2021, CSPDCL submitted the audited accounts of FY 2019-20 and later submitted the details of the variation between the amounts claimed under provisional true-up and final true-up. In accordance with the above, the Commission has undertaken the final true-up for FY 2018-19 and FY 2019-20.

In this Chapter, the Commission has analysed all the elements of audited expenditure and revenue of CSPDCL for FY 2018-19 and FY 2019-20 and undertaken final true-up of expenses and revenue in accordance with Regulation 10 of CSERC MYT Regulations, 2015. Further, the Commission has also considered the approval accorded by this Commission during provisional true-up of FY 2018-19, while deciding on the final true-up of FY 2018-19.

The Commission has approved the sharing of gains and losses on account of controllable factors between CSPDCL and Consumers, in accordance with Regulation 13 of the CSERC MYT Regulations, 2015.

6.2 Energy Sales

CSPDCL's Submission

CSPDCL submitted that there were 56,10,512 consumers at LV level and 2,931 consumers at HV and EHV level during FY 2018-19. In FY 2019-20, the number of consumers of LV and EHV/HV categories increased to 57,55,943 and 3,059, respectively. The Commission in the MYT Order had merged HV and EHV categories into supply at HV level effective from 1st April 2016. CSPDCL submitted that the connected load recorded during FY 2018-19 was 5,885.15 MW at LV level and 3,071.45 MW at EHV and HV level. The connected load was 6,183.25 MW for LV and 3,169.24 MW for EHV and HV level during FY 2019-20.

The category-wise energy sales were recorded as 22,210.21 MU for FY 2018-19, comprising 11907.93 MU sales to LT consumers and 10302.28 MU to HV and EHV Consumers. The category-wise energy sales were recorded as 22,774.27 MU for FY 2019-20, comprising 12387.34 MU sales to LT consumers and 10386.93 MU to HV and EHV Consumers.

Commission's View

The Commission sought actual category-wise and slab-wise sales in kWh for all LV consumers and category-wise sales in kVAh for all HV consumers for FY 2018-19 and FY 2019-20. The Commission also sought voltage-wise break up for HV and EHV sales for both the years. CSPDCL submitted the R-15 data for FY 2018-19 and FY 2019-20.

It is seen from the R-15 that the incidence of assessment-based billing and defective meters, though reducing, is still on the higher side. The Commission notes that, it had directed CSPDCL to prepare an action plan and take corrective measures to bring down percentage of defective meters and assessment-based billing within the prescribed ceiling in the tariff order of FY 2019-20 and FY 2020-21. CSPDCL is once again directed to take up the same in mission mode and submit the same along with its next Tariff Petition.

Agriculture Consumption

The Commission sought details of load factor of consumption by LV Agriculture category. In response, CSPDCL submitted the details of month-wise load factor for FY 2018-19 and FY 2019-20. It is observed that, actual average annual load factor recorded was 45.05% for FY 2018-19 and 41.89% for FY 2019-20, which translates to average running of 10 to 11 hours per day throughout the year. Further examination reveals that in some months, the actual load factor has increased to the level of more than 55% (55.93% in September 2018, 60.98% in October 2018, 57.27% in March 2019).

Further, the Commission observes that the actual Average Billing Rate (ABR) realised for Agriculture category is much lower than the approved ABR. CSPDCL submitted that the variation in the actual ABR and approved ABR is because of implementation of Government of Chhattisgarh notification on flat rate tariff. Government of Chhattisgarh is providing subsidy to Agriculture consumer up to 5 HP since November 2, 2009. After this, directive was issued vide Notification dated September 19, 2013 permitting the farmers to option of billing on flat rate basis for agriculture pumpsets. CSPDCL further submitted that current billing to Agriculture consumer is done strictly as per provisions of prevailing Tariff orders and notification of Government of Chhattisgarh (GoCG).

The Commission, in the tariff order for FY 2020-21, had adopted the approach of consideration of additional revenue for Agriculture Category. In the said Order, the Commission has stated that CSPDCL is bound to levy the tariff approved by the Commission in its respective Tariff Order for all categories including Agriculture consumers. From the subsidy notification, it is observed that if the consumer opts for subsidy against flat rate tariff, then there is no consumption limit for the consumer, however, the subsidy to CSPDCL has been capped at the level equivalent to 6000 units per year and 7500 units per year for 3 HP and 5 HP pumpsets, respectively. This anomaly in capping of consumption is leading to the under-recovery of revenue against this category.

Any form of subsidy given by the State Government is a relief to that category of consumers and therefore, part of the approved tariff is to be recovered in the form of subsidy from the Government and the balance part is to be levied to consumers of that category. Overall CSPDCL is liable to recover the tariff approved by the Commission.

Accordingly, details were sought from CSPDCL, which is shown in the Table below:

Table 6-1: Sales and Energy Charge for Agriculture Category as submitted by CSPDCL

Consumer Category	Nos. of Consumer	Units Sold	Energy Charge Billed	Average Energy Charge	Approved Energy Charge
	Nos.	MU	Rs. Cr.	Rs. /kWh	Rs. /kWh
FY 2018-19					
A-Metered KJJY	2,84,936.00	2,689.21	882.26	3.28	4.70
B-Flat rate KJJY	33,658.00	209.08	78.74	3.77	4.70
General/Other	1,95,489.00	2,069.60	967.84	4.68	4.70
Total	**5,14,083.00**	**4,967.89**	**1,928.84**	**3.88**	**4.70**
Difference in Energy Charge Recovery					**0.82**
FY 2019-20					
A-Metered KJJY	2,95,364.00	2,626.40	881.61	3.36	4.40
B-Flat rate KJJY	47,538.00	181.95	73.95	4.06	4.40
General/Other	1,98,985.00	2,194.56	946.25	4.31	4.40
Total	**5,41,887.00**	**5,002.91**	**1,901.81**	**3.80**	**4.40**
Difference in Energy Charge Recovery					**0.60**

The Commission has re-computed the difference in energy charge recovery for FY 2018-19 and FY 2019-20 based on the actual sales and revenue reported in the R-15 data submitted by CSPDCL, as shown in the Table below. It may be noted that CSPDCL has considered LT agricultural sales as 4968 MU and 5003 MU for FY 2018-19 and FY 2019-20, at the tariff of Rs. 4.70/kWh. However, the Commission has considered the sales and revenue as shown under R-15, for truing up the sales as well as the revenue. Hence, the Commission has considered the short-recovery of revenue from sales to LT agricultural category, as under:

Table 6-2: Variation in Energy Charge for Agriculture Category based on computation by the Commission

Consumer Category	Nos. of Consumer	Units Sold	Energy Charge Billed	Average Energy Charge	Approved Energy Charge	Difference in Energy Charge recovery
	Nos.	MU	Rs. Cr.	Rs. /kWh	Rs. /kWh	Rs. /kWh
FY 2018-19	4,22,655	4,400.92	1,685.46	3.83	4.70	0.87
FY 2019-20	4,41,081	4,241.38	1,594.72	3.76	4.40	0.64

From the above table, it is observed that there is short recovery of energy charge i.e., of Rs. 0.87/kWh for FY 2018-19 and Rs. 0.64/kWh for FY 2019-20, which translates to under-recovery of Rs. 382.97 cr. for FY 2018-19 and Rs. 271.49 cr. for FY 2019-20.

In view of the above, the Commission has considered the amount of Rs. 382.97 Cr. for FY 2018-19 and Rs. 271.49 Cr. for FY 2019-20 as an additional revenue while approving final true-up for respective years.

As FY 2018-19 and FY 2019-20 are over and the consumers cannot be billed now for the consumption in excess of 6000 units per year and 7500 units per year, respectively, CSPDCL may take appropriate steps to address this anomaly.

Further, Regulation 11.1 of the CSERC MYT Regulations, 2015 provides the sales mix and quantum of sales as an uncontrollable factor. The Commission therefore, approves the energy sales submitted by CSPDCL in its Petitions for final True-up of FY 2018-19 and FY 2019-20.

The consumer category-wise sales for FY 2018-19 approved in the tariff order, provisional sales approved in the Provisional true-up Order, actual sales submitted by CSPDCL, and Trued-up sales approved in this order are shown in the Table below:

Table 6-3: Approved Energy Sales for FY 2018-19 (MU)

Consumer Category	Tariff Order	Provisional True-up	Petition	Final True-up
LV Categories (A)	**12,454.79**	**11907.93**	**11907.93**	**11907.93**
Domestic Including BPL Consumers	5,785.87	4997.51	4997.51	4997.51
Non-Domestic (Normal Tariff)	915.37	876.46	876.46	876.46
Non-Domestic (Demand Based)	47.36	44.76	44.76	44.76
Agriculture	3,905.34	4400.92	4400.92	4400.92
Agriculture allied	15.34	16.5	16.5	16.5
LT Industry	560.39	538.68	538.68	538.68
Public Utilities	382.72	364.26	364.26	364.26
IT Industry	-	0.01	0.01	0.01
Temporary	842.41	668.83	668.83	668.83
HV Categories (B)	**9,219.97**	**10302.28**	**10302.28**	**10302.28**
Railway Traction	952.87	983.48	983.48	983.48

Consumer Category	Tariff Order	Provisional True-up	Petition	Final True-up
Mines (Coal & Others)	828.33	629.21	629.21	629.21
Other Industry & General Purpose Non-Industrial	2,207.77	2050.45	2050.45	2050.45
Steel Industries	4,772.93	6307.98	6307.98	6307.98
Low load factor Industries		0	0	0
PWW, Irrigation & Agriculture allied activities	119.41	135.61	135.61	135.61
Residential Purpose	187.93	182.36	182.36	182.36
Start-up Power Tariff	144.49	12.36	12.36	12.36
Industries related to manufacturing of equipment for power generation from RE sources	2.49	0.39	0.39	0.39
IT Industries	-	0.44	0.44	0.44
Temporary	3.74	0	0	0
Grand Total (A+B)	**21674.76**	**22210.21**	**22210.21**	**22210.21**

The consumer category-wise sales for FY 2019-20 approved in the tariff order, actual sales submitted by CSPDCL and Trued-up sales approved in this order are shown in the Table below:

Table 6-4: Approved Energy Sales for FY 2019-20 (MU)

Consumer Category	Tariff Order	Petition	Final True-up
LV Categories (A)	**11699.43**	**12387.34**	**12387.34**
Domestic Including BPL Consumers	5072.40	5391.71	5391.71
Non-Domestic (Normal Tariff)	927.11	893.44	893.44
Non-Domestic (Demand Based)	45.14	42.67	42.67
Agriculture Metered	3775.11	4241.38	4241.38
Agriculture allied	19.03	22.83	22.83
LT Industry	538.58	556.67	556.67
Public Utilities	433.89	363.84	363.84
IT Industry	-	0.02	0.02

Consumer Category	Tariff Order	Petition	Final True-up
Temporary	888.17	874.78	874.78
HV Categories (B)	**10,213.00**	**10386.93**	**10386.93**
Railway Traction	967.20	987.52	987.52
Mines (Coal & Others)	733.67	657.89	657.89
Other Industry & General Purpose Non-Industrial	2,289.41	2011.97	2011.97
Steel Industries	5,852.98	6390.65	6390.65
Low load factor Industries	-	0	0
PWW, Irrigation & Agriculture allied activities	144.22	149.43	149.43
Residential Purpose	204.35	176.64	176.64
Start-up Power Tariff	19.94	11.58	11.58
Industries related to manufacturing of equipment for power generation from RE sources	1.24	0.47	0.47
IT Industries	-	0.78	0.78
Temporary	-	0	0
Grand Total (A+B)	**21,912.43**	**22774.27**	**22774.27**

6.3 Distribution Loss and Energy Balance

CSPDCL's Submission

CSPDCL submitted that the energy losses for 33 kV and below system has been computed based on Regulation 71.1 and 71.2 of the CSERC MYT Regulations, 2015 which is reproduced below:

71.1 "The energy loss for 33 kV and below voltage level, shall be evaluated taking into consideration the clause 4.2.5 and 8.4.3 of the State Grid Code 2011. The difference between the energy injected at 33 kV voltage level and the sum of energy sold to all consumers (retail and open access), at voltage level 33 kV and below shall be the energy loss for the 33 kV and below system. The same shall be considered for gain/loss at the time of true up.

71.2. Energy sold shall be the sum of the metered sales and assessed unmetered sales, if any, based on prudence check by the Commission."

In view of the above said provisions, CSPDCL submitted the Distribution Loss and Energy Balance for FY 2018-19 and FY 2019-20, which is shown in the Table below:

Table 6-5: Energy Balance for FY 2018-19 and FY 2019-20 as submitted by CSPDCL (MU)

Sr. No	Particulars	FY 2018-19		FY 2019-20	
		Provisional True-up	Petition	Tariff Order	Petition
1	LV Sales	11,907.93	11907.93	11699.43	12772.14
2	HV Sales	7,066.81	7058.39	7449.28	7359.94
3	Total Sales below EHV Level	18,974.74	18966.32	19148.71	19747.28
4	**Distribution Loss below 33 kV (in %)**	**19.27%**	**18.95%**	**16.5%**	**18.98%**
5	Distribution Loss below 33 kV (in MU)	4528.79	4434.71	3783.88	4715.84
6	Gross Energy requirement at 33 kV Level	23503.53	23401.02	22932.59	24463.12
7	*Less:* Direct Input to distribution at 33 kV Level	149.76	149.76	217.80	253.02
8	Net Energy Input required at Distribution Periphery at 33 kV Level	23353.77	23251.26	22174.79	24210.04
9	Sales to EHV consumers	3235.48	3243.83	2763.72	3045.80
10	Net energy requirement at Distribution periphery	26589.25	26495.09	25478.51	27255.84
11	**Distribution loss including EHV Sales**	**16.94%**	**16.64%**	**14.73%**	**16.91%**

CSPDCL submitted that there were practical difficulties to have meter reading during the period of lockdown (March 2020) and therefore, the LV consumption appearing in R-15 requires appropriation on the basis of sales recorded in subsequent months. Accordingly, sales to the tune of 384.75 MU towards the month of March 2020 is included in LV sales for the purpose of Energy Balance for FY 2019-20 over the consumption indicated in R-15 for the month of March 2020.

Commission's View

As regards EHV sales, the Commission sought details of number of consumers and EHV sales and Open Access sales for FY 2018-19 and FY 2019-20. CSPDCL submitted the requisite details for prudence check. After the details submitted, the Open Access sales in FY 2018-19 and FY 2019-20 is Nil.

Further, as regards the certification of energy input, the Commission is of the view that CSLDC should certify the energy input/output and undertake energy audit/accounting, as per the responsibilities present in the Act and Regulations. CSPDCL is directed to submit the certification of energy input for the year for which True-up is being sought along with the next Tariff Petition. However, at this stage, the Commission has accepted the energy input as submitted by CSPDCL, after applying due prudence check on the data submitted by CSPTCL.

The Commission has considered the Energy Balance based on the actual Inter-State as well as Intra-State Transmission losses, energy sales approved in this order and actual quantum of power procured during FY 2018-19 and FY 2019-20.

The Commission has approved the Energy Balance as per the provisions of CSERC MYT Regulations, 2015 and methodology adopted in previous Tariff orders. The approved Distribution Losses and Energy Balance after final true-up for FY 2018-19 and FY 2019-20, in the format adopted in the previous Tariff Order, is shown in the Table below:

Table 6-6: Approved Energy Balance and Distribution Loss for FY 2018-19 & FY 2019-20

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		Petition	Final True-up	Petition	Final True-up
A	Input: Total Energy available (MU)	26,644.85	26,644.93	27,508.86	27,490.11
	i. Available at 33 kV outgoing feeder	23,251.26	23,259.69	24,210.04	24,217.74
	ii. Injected by CPP/IPP at 33/11kV S/s,	149.76	149.76	253.02	253.08
	iii. Available a EHV Level	3243.83	3,235.48	3045.80	3,019.29
B	Output: Total Energy Sales (MU)	22,210.15	22,210.22	22,793.13	22,774.27
	i. LV Sales	11,907.93	11,907.93	12,387.39	12,387.34
	ii. HV Sales	7,058.39	7,066.81	7,359.94	7,367.64
	iii. EHV Sales	3243.83	3,235.48	3045.80	3,019.29
C	Energy Loss below 33 kV (MU) *{(Ai + Aii) – (Bi +Bii)}*	4,434.70	4,434.71	4,715.73	4,715.84
D	**Energy Loss below 33 kV (%)** *{C/(Ai+Aii)*100}*	**18.95%**	**18.94%**	**19.28%**	**19.27%**

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		Petition	Final True-up	Petition	Final True-up
E	Distribution Loss Including EHV Sales (MU) *(A – B)*	4,434.70	4,434.71	4,715.73	4,715.84
F	**Distribution loss including EHV Sales** *(E/A*100)*	**16.64%**	**16.64%**	**17.14%**	**17.15%**

The Commission has not considered CSPDCL's submission to include sales to the tune of 384.75 MU in LV sales for the purpose of Energy Balance for FY 2019-20, as such treatment cannot be done in isolation only for Energy Balance purposes. If such sales are to be considered, then the corresponding revenue would also have to be considered in the true-up for FY 2019-20.

6.4 Incentive/Disallowance for over/under-achievement of distribution loss

CSPDCL's Submission

CSPDCL submitted that as per the loss trajectory specified in Regulation 71.3 of the CSERC MYT Regulations, 2015, the target Distribution Losses in FY 2018-19 was 20%. However, as per the MoU signed under Ujwal DISCOM Assurance Yojana (UDAY) Scheme, the Distribution Loss target for FY 2018-19 for CSPDCL was 15%. These targets were however flexible in nature and the relevant clause of the MoU states that,

"However, if the target in particular year is not met, then the CSPDCL shall strive to achieve the targets in subsequent years so as to achieve the desired target"

CSPDCL submitted that it is committed to make all efforts under UDAY Scheme. CSPDCL is expected to achieve the targets lower than the targets specified in CSERC MYT Regulations, 2015. CSPDCL is also committed to pass on the benefits of UDAY Scheme to its consumers. CSPDCL submitted that it is not claiming any incentive for over-achievement of losses with respect to the targets specified in the CSERC MYT Regulations, 2015. CSPDCL requested the Commission not to levy any penalty for under-achievement of losses in subsequent years with respect to the targets specified in the CSERC MYT Regulations, 2015.

Commission's View

As regards the target Distribution Losses, the CSERC MYT Regulations, 2015 provides as under:

"71.3. Energy Loss trajectory for 33 KV and below system for State utility for each year of the control period shall be as under

FY 2016-17 - 22.0%

FY 2017-18 - 21.0%

FY 2018-19 - 20.0%

FY 2019-20 - 19.0%

FY 2020-21 - 18.0%

For other distribution licensees, the trajectory shall be given in the respective tariff order."

However, in the first Amendment to the CSERC MYT Regulations, 2015 notified on 16th June 2017, the following proviso was added in Regulation 71.3:

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

CSPDCL has already signed a "Tripartite Memorandum of Understanding" with Ministry of Power (Government of India) and Government of Chhattisgarh under UDAY on 25th January 2016 to achieve financial turnaround. The targets specified under UDAY are as follows:

"1.3 (c) The CSPDCL shall endeavour to reduce AT&C Losses from 22.50% in the FY 2014-15 to 15% by FY 2018-19 as per the following trajectory:

Year	*FY 2015-16*	*FY 2017-18*	*FY 2017-18*	*FY 2018-19*
AT&C losses	*21.00*	*18.93*	*18.00*	***15.00***

However, if the target in particular year is not met, then the CSPDCL shall strive to achieve the targets in subsequent years so as to achieve ***the desired target of 15% AT&C losses by the FY 2018-19****."***(emphasis added)**

In the tariff order for FY 2019-20, the Commission has already decided the issue regarding target of Distribution Losses as per UDAY Scheme. The relevant extract of the Order is reproduced below:

"CSPDCL has submitted that the tripartite MoU signed between GoI, GoCG and CSPDCL should not be considered as an agreement and hence cannot supersede the Distribution Loss trajectory specified in MYT Regulations, 2015. In this regard, the Commission notes that the prevailing Loss trajectory specified in the MYT Regulations, 2015 (Regulation 71.3) was amended on June 16, 2017, providing for adoption of any subsequent trajectory agreed upon between CSPDCL on one hand and State and/or Central Government on the other. The Amendment is reproduced below:

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

UDAY scheme is intended to turn-around the financial health of the Distribution companies, reeling under huge debt burden, which was ultimately passed to the consumers through tariff. The loss reduction trajectory, as envisaged in the Scheme was in fact agreed to by the parties after negotiations, and is an essential component towards achieving the objective of MoU. Further, it needs to be stressed here that there is no practice of executing agreements amongst governments and government agencies; instead, MoU is the general practice and in pursuance of the same, GoCG has fulfilled its commitment towards conversion of 50 % of CSPDCL's total debt (Rs. 870.12 cr.) into grants. One has to appreciate that the Regulations were amended to facilitate implementation of such schemes and reforms. Therefore, Commission is of the view that one has to go by the intent and spirit behind the tripartite Understanding and the amended Regulations and not get bogged down with the mere wordings. Accordingly, CSPDCL has to honour its commitment towards reduction in distribution loss to the agreed level. Thus, the Commission approves the Distribution Loss Target for FY 2016-17 and FY 2017-18, as per UDAY MoU."

In its Petition, CSPDCL has also submitted that it is committed to make all efforts under UDAY Scheme and pass on the benefits of UDAY Scheme to its consumers.

The Distribution Loss target below 33 kV for FY 2018-19 and FY 2019-20, approved by the Commission in the tariff order for the respective year based on the UDAY scheme, is 16.50% for both years. The actual Distribution Loss below 33 kV achieved by CSPDCL during FY 2018-19 as computed by the Commission, based on actual energy sales and power purchase, works out to 18.94% as against 18.95% computed based on CSPDCL's Petition. Similarly, the actual Distribution Loss at 33 kV achieved by CSPDCL during FY 2019-20 as computed by the Commission, based on actual energy sales and power purchase, works out to 19.27% as against 18.98% computed based on CSPDCL's Petition. It is evident that CSPDCL has reported higher Distribution Loss for FY 2018-19 and FY 2019-20, as compared to the targeted Distribution Loss.

The CSERC MYT Regulations, 2015 provide for gain/loss to be allowed at the time of True-up based on the difference between the actual and target energy losses. In the previous tariff orders, the Commission did not allow the incentive, wherever computed, as the energy sales reported by CSPDCL were partly assessed on account of high percentage of burnt/defective meters. As stated earlier, there has been no significant improvement in the percentage of assessed consumption and also in the percentage of burnt/defective meters. Also, even after considering the assessed consumption as stated by CSPDCL, there is still significant under-achievement vis-à-vis the Distribution Loss target. The Commission is of the view that while incentive should not be allowed based on assessed consumption, disincentive has to be computed based on the assessed consumption, as it is likely that if the assessed consumption is replaced by actual metered consumption, the Distribution Losses may become higher than the present.

The CSERC MYT Regulations, 2015 specifies as under, as regards sharing of efficiency losses on account of under-achievement of Distribution Losses:

"13.2. The mechanism for sharing of aggregate net loss on account of under achievement in reference to the target set in tariff order for efficiency linked controllable items shall be passed on to the beneficiary / consumer(s) and retained by the generating company or the licensee, as the case may be, in the ratio of 50:50 or as may be specified in the Order of the Commission passed under these Regulations."

Accordingly, the Commission has assessed the impact of under-achievement of Distribution Loss vis-à-vis the targeted Distribution Loss, and shared 50% of the efficiency losses on account of under-achievement of Distribution Losses, as shown in the Table below:

Table 6-7: Sharing of Loss on account of underachievement of Distribution loss for FY 2018-19 and FY 2019-20 (Rs. Cr)

Sr. No	Particulars	FY 2018-19		FY 2019-20	
		Petition	Approved	Petition	Approved
1	Energy recorded at 33 kV Outgoing feeder of all EHV S/s (MU)	23,251.27	23,259.69	24,594.84	24,217.74
2	Add: Net Energy injected generators connected at 33/11 kV S/s (MU)	149.76	149.76	253.08	253.08
3	Energy Input at Distribution Periphery below EHV level (MU)	23,401.03	23,409.45	24,847.92	24,470.82
4	Add: EHV Sales (MU)	3,243.83	3,235.48	3,045.80	3,019.29
5	**Energy Input considered for Distribution Business (MU)**	**26,644.86**	**26,644.93**	**27,893.72**	**27,490.11**
6	**Distribution Losses (%) below 33 kV Level**	**18.95%**	**18.94%**	**18.98%**	**19.27%**
7	Targeted Distribution Losses (%)		16.50%		16.50%
8	Over/(Under) achievement (%)		(2.44%)		(2.77%)
9	Average Power Purchase Cost at Distribution Periphery (Incl. EHV)-(Rs/kWh)		3.88		4.01
10	Under-achievement amount		(252.47)		(305.60)
11	**Under-achievement to be borne by CSPDCL**		**(126.23)**		**(152.80)**

The above impact of under-achievement to be borne by CSPDCL has been adjusted against the ARR of CSPDCL for the respective years.

6.5 Power Purchase Cost

CSPDCL's Submission

CSPDCL has purchased power from difference sources such as Central Generating Stations (CGS), CSPGCL generating stations, Renewable Energy (RE) sources such as Bio-mass, Solar, Wind and other RE sources, Concessional power from Independent Power Producers (IPPs) through Chhattisgarh State Power Trading Company Limited (CSPTrDCL) and other sources such as Power Exchanges, etc., to meet the energy requirement of the State during FY 2018-19 and FY 2019-20.

During FY 2018-19, CSPDCL has purchased 34,993.02 MU at an average rate of Rs. 3.86/kWh, amounting to Rs. 13,508.71 Cr. It has also netted off sale of surplus power of 7,031.43 MU at average rate of Rs. 3.59/kWh, amounting to revenue from sale of power of Rs. 2,527.21 Cr. The sale of surplus power also includes sales to Telangana, based on a back-to-back agreement between CSPDCL and Telangana DISCOM.

Similarly, in FY 2019-20, CSPDCL has purchased 33,266.11 MU at the cost of Rs. 13,805.35 cr. at an average rate of Rs. 4.15/kWh, and netted off sale of surplus power, including sale of surplus power to Telangana, amounting to 2,821.40 MU at the average rate of Rs. 4.65/kWh, amounting to revenue from sale of surplus power of Rs. 1,310.60 cr. Based on audited accounts, CSPDCL sought approval for additional power purchase expense of Rs. 163.73 crore for purchase from Central Generating Stations and additional Transmission Charges of Rs. 50.72 crore. CSPDCL also submitted the actual revenue from sale of surplus power as Rs. 1,319.18 crore.

Further, CSPDCL has purchased 2,220.37 MU through banking arrangement and sold 1,182.01 MU of banked power during FY 2018-19. The banking purchase and sale in FY 2019-20 has been Nil. Under the regulatory principles, banking of power involves cashless transaction, where interchange of units has to be accomplished. This is in line with the Judgment of the Hon'ble APTEL dated July 1, 2014 in Appeal No.220 of 2013.

CSPDCL requested the Commission to approve power purchase expenses, which includes transmission charges of Rs. 10,981.50 cr. FY 2018-19 and Rs. 12,494.74 cr. for FY 2019-20. Based on audited accounts, CSPDCL sought approval for the revised amount of power purchase expenses of Rs. 12700.62 crore for FY 2019-20.

Commission's View

The Commission has scrutinized the available records placed on record including the power purchase cost reflecting in the final accounts of FY 2018-19 and FY 2019-20, and the actual source-wise power purchase cost for FY 2018-19 and FY 2019-20 as submitted by CSPDCL in its Petition and additional submission.

CSPDCL has purchased power from CSPGCL Stations, CGS Stations, RE Sources, and Short-Term sources. CSPDCL clarified that there is no purchase of power during FY 2018-19 and FY 2019-20 from unapproved sources. All long-term PPAs were already approved by the Commission and prior approval for purchase of short-term power is taken from the Commission on annual basis.

The Commission notes that CSPDCL has claimed gross power purchase cost of Rs. 13,508.71 Cr. for FY 2018-19, however, the same was reported as Rs. 12,604.18 Cr.

in provisional accounts. Hence, there was a difference of Rs. 904.53 cr. in the power purchase expenses, which was not claimed in provisional true-up of FY 2018-19. The difference is seen because of the change in the rate of power purchase from different sources.

CSPGCL Stations

The cost of power purchase from CSPGCL stations in FY 2018-19 has increased by Rs. 192.02 Cr., as compared to the cost estimated and approved in the Provisional True-up for FY 2018-19. In reply to the Commission's query in this regard, CSPDCL replied that since the accounts were provisional, the final amount was not available at that time. Only after reconciliation and audit of power purchase cost from CSPGCL stations, the amount has been finalized. The Commission has hence, approved power purchase of 19,775.40 MU at a cost of Rs. 6,892.81 cr. from CSPGCL stations for FY 2018-19 as submitted by the Petitioner, based on the reconciliation submitted by CSPDCL between the revenue booked by CSPGCL from sale of power to CSPDCL and the cost of power purchase from CSPGCL as booked by CSPDCL. Further, CSPDCL has included the Delayed Payment Charges against amount due to CSPGCL, in the power purchase expenses booked for purchase from CSPGCL. As Delayed Payment Charges are not allowable, the Commission has reduced the Delayed Payment Charges against cost of power purchase from CSPGCL, in the final true-up for FY 2018-19, as discussed separately.

In the final true-up for FY 2019-20, the Commission has approved purchase of 16,916.45 MU as submitted by CSPDCL. For allowing the cost of power purchase from CSPGCL, the Commission has considered the revenue booked by CSPGCL from sale of power to CSPDCL, excluding the Gap of previous years.

Central Generating Stations (CGS)

The Commission has considered the quantum and cost of power purchase from CGS in FY 2018-19 as submitted by CSPDCL, based on verification with the Audited Accounts. The quantum of purchase from CGS is 8,854.87 MU and corresponding cost is Rs. 3,180.57 cr., which is higher than the quantum approved by the Commission in the provisional true-up of FY 2018-19. In response to the Commission's query, CSPDCL clarified that the audited power purchase expenses claimed CSPDCL for FY 2019-20 included an amount of Rs. 393.35 crore against DPC. In effect, the audited power purchase expenses are lower by Rs. 229.62 crore

(Rs. 393.35 crore – Rs. 163.73 crore) as against the provisional power purchase expenses, as CSPDCL had clarified that DPC was not included in the provisional power purchase expenses. The Commission has accordingly approved the power purchase expenses.

The Commission has also accepted the quantum and cost of power purchased from CGS for FY 2019-20 as submitted by CSPDCL, based on verification with the Audited Accounts. The Commission therefore, approves purchase of 10,005.72 MU at the cost of Rs. 3,626.59 cr. from CGS in the true-up for FY 2019-20.

Renewable Energy Sources

The Commission has scrutinised the source-wise details of RE purchase during FY 2018-19 and FY 2019-20. The quantum of energy procured from RE sources for FY 2018-19 as submitted by CSPDCL is in line with the quantum approved at the time of provisional True-up of FY 2018-19. The Commission has verified the rates of power purchase based on tariffs approved by the Commission in the past. The Commission has considered the same quantum in the final True-up of FY 2018-19 and accepted the cost for procurement of RE Power as submitted by CSPDCL in its Petition, after verification from the Audited Accounts of FY 2018-19.

For FY 2019-20, the quantum and cost of purchase from all RE sources is considered same as that submitted by CSPDCL, after verification from the Audited Accounts of FY 2019-20.

Power Purchase from CSPTrdCL (Concessional Power)

The Commission sought details of purchase from concessional sources including source-wise quantum, actual entitlement, actual availability, etc. CSPDCL submitted the requisite details for FY 2018-19 and FY 2019-20. It is observed that CSPDCL has purchased 1,530.87 MU during FY 2018-19 at average rate of Rs. 1.80/kWh. The Commission has accepted the submission of CSPDCL and considered the cost of Rs. 275.16 Cr. towards purchase of Concessional Power for FY 2018-19.

As regards purchase from concessional sources for FY 2019-20, the Commission has considered the purchase of 1,720.23 MU at average rate of Rs. 1.60/kWh, which amounts to cost of Rs. 274.57 Cr., as submitted by CSPDCL in its Petition.

Other Sources

The Commission sought details of source-wise bilateral purchase for FY 2018-19 and FY 2019-20. CSPDCL submitted that bilateral power has been purchased through Competitive Bidding, and submitted the documentary evidences for the same.

During FY 2018-19, CSPDCL has purchased 845.41 MU from short-term sources at a cost of Rs. 259.47 Cr. at an average rate of Rs. 3.07/kWh. Further, CSPDCL has procured 460.84 MU of power from Power Exchanges/Traders at an average rate of Rs. 5.69/kWh, which amounts to Rs. 262.08 Cr. The Commission, after due prudence check, has accepted the total cost of short-term purchase of Rs. 521.55 Cr. as submitted by CSPDCL.

As regards FY 2019-20, the Commission has considered the purchase of 1829.39 MU from Power Exchanges/Traders and 1437.00 MU from CPP/IPPs at an average rate of Rs. 3.37/kWh and Rs. 3.64/kWh, respectively, which amount to cost of Rs. 616.19 Cr. and Rs. 522.40 Cr respectively, as submitted by CSPDCL.

CSPDCL has also shown power purchase of 10.45 MU at an average rate of Rs. 7.55/kWh and 3.82 MU at an average rate of Rs. 16.70/kWh from Border Villages for FY 2018-19 and FY 2019-20, respectively. In response to the Commission's query in this regard, CSPDCL submitted that subsequent to energization of new 33 kV feeder of approximate 100 km length emanating from 132 kV Sub-station at Manendragarh, the supply from Madhya Pradesh to the border village was discontinued in the month of October 2020. Thus, billing based on tariff of MP has been discontinued. The excessive rate during FY 2019-20 is only because of fixed charges billing on contracted demand of 250 kVA with minimal supply. The Commission has accepted the justification provided by CSPDCL in this regard, and approved the quantum and rate of power purchase from Border Villages, as submitted by CSPDCL.

UI/DSM Charges

CSPDCL has booked unscheduled interchange (UI)/Deviation Settlement Mechanism (DSM) Charges of Rs. 102.95 crore and Rs. 124.12 crore in FY 2018-19 and FY 2019-20, respectively, against UI quantum of 20.97 MU and 7 MU, respectively. The Commission sought details of UI Charges with break-up of import-export, cost incurred and average rate of the same. In reply, CSPDCL has submitted that the UI rates mainly depends on grid frequency and conditions of availability and demand, which is not under CSPDCL's control. Based on this frequency UI carries its commercial value, which is not a bilateral sale hence, it would be difficult to justify the UI purchase. CSPDCL clarified that in the Petition it has shown the DSM charges in power purchase expenses, which includes the UI purchase as well as the DSM charges paid within the State and outside the State, hence, per unit rate may not be relevant on overall basis. CSPDCL submitted the information required regarding Under-drawal and Over-drawal which is shown in the Table below:

Table 6-8: Under/Over Drawal in FY 2018-19 and FY 2019-20, as submitted by CSPDCL

Particulars	Quantum (MU)	Rate (Rs/kWh)	Cost (Rs. Crore)
FY 2018-19			
UI Injection	152.79	1.31	20.04
UI Drawal	173.75	4.71	81.89
Net UI	**20.96**		**61.85**
FY 2019-20			
UI Injection	205.04	1.77	36.39
UI Drawal	198.04	4.02	79.63
Net UI	**-7.004**		**43.14**

The Commission has considered the UI/DSM quantum and cost, based on CSPDCL's replies, in the true-up for FY 2018-19 and FY 2019-20.

Banking Purchase and Sale

CSPDCL has submitted that it purchased 2,220.37 MU through banking arrangement and sold 1,182.01 MU of banked power during FY 2018-19. CSPDCL has considered the banking purchase and sale in FY 2019-20 as Nil. In line with the regulatory principles, banking of power involves cashless transaction, where interchange of units has to be accomplished. The Commission has considered the quantum of banking purchase and sale as submitted in CSPDCL's Petition, in the true-up for FY 2018-19 and FY 2019-20.

Delayed Payment Charges

The Commission notes that the power purchase cost booked in the audited accounts of CSPDL for FY 2018-19 and claimed by CSPDCL in its Petition, includes DPC of Rs. 192.02 Cr. against CSPGCL and Rs. 57.59 Cr. against CSPTCL, which amounts to total of Rs. 249.61 Cr. For FY 2019-20, CSPDCL submitted that it has not booked any DPC in its provisional accounts for the year. The power purchase cost claimed by

CSPDCL based on the audited accounts for FY 2019-20 includes DPC of Rs. 393.35 Cr. against CSPGCL and Rs. 60.97 Cr. against CSPTCL, which amounts to total of Rs. 454.32 Cr.

As per the approach adopted by the Commission in earlier orders, both the income and expense against DPC are not considered at the time of true-up. Hence, the Commission has excluded the DPC of Rs. 249.61 Crore and Rs. 454.32 Crore, in the final true-up for FY 2018-19 and FY 2019-20, respectively.

Transmission Charges

The Commission has scrutinized the Transmission Charges, which includes Inter-State charges (PGCIL), Intra-State charges (CSPTCL), CSLDC Charges and other Transmission Charges for FY 2018-19 and FY 2019-20. The Commission notes that CSPDCL has claimed Transmission Charges of Rs. 1,529.25 Cr. for FY 2018-19 as against Rs. 1404.76 Cr. approved in provisional true-up, with the major difference in intra-State Transmission Charges of CSPTCL. For FY 2019-20, CSPDCL has claimed Transmission Charges of Rs. 1,443.58 Cr.

In response to the Commission's query, CSPDCL submitted the reconciliation of the Transmission Charges claimed against CSPTCL, with the amount claimed as revenue by CSPTCL. However, CSPDCL has also submitted the break-up of the Transmission Charges in response to the objections filed by stakeholders, wherein the individual amounts do not tally with the amounts claimed in the Petition or the reconciliation submitted to the Commission. Further, the Transmission Charges booked by CSPDCL against CSPTCL includes Delayed Payment Charges, and the Transmission Charges booked against other entities are also likely to include Delayed Payment Charges, the details of which have not been submitted to the Commission. The Commission has hence, not relied on the break-up of the Transmission Charges in response to the objections filed by stakeholders, and has relied on the reconciliation provided by CSPDCL to the Commission and CSPDCL's Petition.

The Commission has allowed the inter-State Transmission Charges paid/payable to PGCIL as claimed by CSPDCL in its Petition.

The intra-State Transmission Charges against CSPTCL have been considered based on the revenue booked by CSPTCL for FY 2018-19, i.e., Rs. 963.48 crore. The Surplus of Rs. 29.98 crore, for past period is adjusted by CSPTCL in FY 2018-19 and has been considered separately, while considering past Surplus/Gaps adjusted in the

ARR of CSPDCL. The above amount of Rs. 963.48 crore includes the Delayed Payment Charges billed by CSPTCL. As Delayed Payment Charges are not allowable, the Commission has reduced the Delayed Payment Charges against CSPTCL, in the final true-up for FY 2018-19, as discussed separately.

The CSLDC Charges have been considered based on the revenue booked by CSLDC for FY 2018-19, as considered in the true-up for FY 2018-19, i.e., Rs. 14.10 crore. The past period Surplus of Rs. 1.26 crore adjusted by CSLDC in FY 2018-19 has been considered separately, while considering past Surplus/Gaps adjusted in the ARR of CSPDCL.

The Transmission Other Charges have been allowed as claimed by CSPDCL in its Petition.

In view of the above, after due prudence check, the Commission approves the Transmission Charges of Rs. 1,420.39 Cr. for FY 2018-19.

In the true-up for FY 2019-20, the Commission has considered the inter-State Transmission Charges paid/payable to PGCIL as claimed by CSPDCL, based on reconciliation with the audited accounts for FY 2019-20.

The intra-State Transmission Charges payable to CSPTCL for FY 2019-20 have been considered based on the revenue booked by CSPTCL for FY 2019-20, as considered in the true-up for FY 2018-19, less Late Payment Surcharge, i.e., Rs. 924.71 crore. The past period Surplus of Rs. 182.61 crore adjusted by CSPTCL in FY 2019-20 has been considered separately, while considering past Surplus/Gaps adjusted in the ARR of CSPDCL. Further, Delayed Payment Charges booked by CSPTCL in its revenue for FY 2019-20 have been excluded while considering the Transmission Charges, hence, the Delayed Payment Charges have not been deducted separately in the true-up of FY 2019-20.

The CSLDC Charges have been considered based on the revenue booked by CSLDC for FY 2019-20, as considered in the true-up for FY 2019-20, i.e., Rs. 10.36 crore. The past period Gap of Rs. 5.33 crore recovered by CSLDC in FY 2019-20 has been considered separately, while considering past Surplus/Gaps adjusted in the ARR of CSPDCL.

Accordingly, the Commission approves Transmission Charges of Rs. 1,368.00 Cr. in the final true-up for FY 2019-20 based on audited accounts for FY 2019-20.

Sale of Surplus Power

CSPDCL in its Petition has accounted for the revenue from sale of surplus power under power purchase expenses. The Commission has considered the revenue from sale of surplus power as submitted by CSPDCL, after verification from the Audited Accounts. However, the Commission has continued with the methodology adopted in previous orders by separate accounting of revenue from sale of surplus power and revenue from retail-sale of power. The revenue from sale of surplus power considered by the Commission is shown in the Table below:

Table 6-9: Revenue from Sale of Power as approved by the Commission

Particulars	FY 2018-19		FY 2019-20	
	MU	Rs. Cr.	MU	Rs. Cr.
Sale of Surplus Power to Telangana	5329.05	2339.34	2,245.12	1,166.63
Sale of Surplus Power to Power Exchange	520.37	186.43	576.28	152.55
Grand Total	**5,849.42**	**2,525.77**	**2,821.40**	**1,319.18**

Other Rebates/Receipts

CSPTCL in its Petition has submitted that it has credited the POC charges received from PGCIL in FY 2019-20 amounting to Rs. 7.47 Cr to CSPDCL. The Commission has considered this amount to reduce the power purchase expenses in the true-up for FY 2019-20.

CSPDCL has considered the rebate received as Rs. 1.44 crore for FY 2018-19 and Nil for FY 2019-20. CSPDCL has also considered the Miscellaneous Receipts of Rs. 15.37 crore and Rs. 7.94 crore for FY 2018-19 and FY 2019-20, respectively. The Commission has verified the rebate of Rs. 1.44 crore and Miscellaneous Receipts of Rs. 15.37 crore from the Audited Accounts of FY 2018-19, and hence, considered the same in the final true-up for FY 2018-19. The Commission has considered the rebate of Rs. 5.61 crore and Miscellaneous Receipts of Rs. 7.94 crore from the Audited Accounts of FY 2019-20, in the final true-up for FY 2019-20.

The source-wise power purchase quantum and cost considered by the Commission after final true-up for FY 2018-19 and FY 2019-20, is shown in the Table below:

Table 6-10: Approved Power Purchase Cost for FY 2018-19 (Rs. Cr.)

Source	Provisional True-up			Petition			Approved		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)
CGS	**8854.87**	**2,766.75**	**3.12**	**8,854.87**	**3,180.57**	**359**	**8854.87**	**3180.57**	**359**
NTPC sub-total	7,967.98	2,465.87	3.09	7,967.98	2,667.08	335	7967.98	2667.08	335
NTPC-SAIL (NSPCL)	214.81	98.4	4.58	214.81	106.24	495	214.81	106.24	495
NPCIL	343.41	108.63	3.16	343.41	116.78	340	343.41	116.78	340
Other Charges (NVVN, Hirakud, Subhansiri)	328.67	99.81	3.04	328.67	95.92	292	328.67	95.92	292
Other Charges	-	-	-	-	194.55	-	-	194.55	-
CSPGCL	**19775.45**	**6,700.79**	**3.49**	**19,775.40**	**6,892.81**	**349**	**19775.40**	**6892.81**	**349**
Total CSPGCL Thermal & Hydro	19,743.80	6,892.81	3.49	19,742.06	6,879.88	348	19742.06	6879.88	348
CSPGCL – Renewables	31.65	-	0	33.34	12.93	388	33.34	12.93	388
IEX/PXIL/Traders	**460.84**	**334.69**	**7.26**	**460.84**	**262.08**	**569**	**460.84**	**262.08**	**569**
CPPs/IPPs/Short Term	**845.31**	**259.47**	**3.07**	**845.31**	**259.47**	**307**	**845.31**	**259.47**	**307**
Concessional Power - Through CSPTrdCL	**1,530.87**	**278.48**	**1.82**	**1,530.87**	**275.16**	**180**	**1530.87**	**275.16**	**180**
Others - Renewables	**1273.93**	**774.16**	**6.08**	**1,273.93**	**1,013.91**	**796**	**1273.93**	**1013.91**	**796**
Biomass	686.28	421.04	6.14	686.28	425.80	620	686.28	425.80	620
Solar	502.62	353.12	7.03	502.62	296.94	591	502.62	296.94	591
Hydel/Other RE	85.03	-	0	85.03	40.55	477	85.03	40.55	477
Other Charges- RE	-	-	-	-	250.62	-	-	250.62	-
Transmission Charges	-	1404.76	-	**-**	**1,529.25**			**1420.39**	
Interstate Transmission Charges	-	398.67	-	-	398.67	-	-	398.67	-
Intrastate Transmission Charges	-	975.02	-	-	1,072.41	-	-	963.48	-
CSLDC Charges	-	14.03	-	-	14.03	-	-	14.10	-
Other Transmission Charges	-	74.63	-	-	44.14	-	-	44.14	-

Source	Provisional True-up			Petition			Approved		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)
Other Misc Charges	**-**	**-**	**-**		**(15.37)**			**(15.37)**	**-**
Border Villages	**12.47**	**9.83**	**7.88**	**10.45**	**7.89**		**10.45**	**7.89**	**755**
Net DSM Charges	**20.97**	**75.26**	**-**	**20.97**	**102.95**		**20.97**	**61.85**	**-**
Banking Purchase	**2,220.37**	**-**	**-**	**2,220.37**			**2220.37**		
Gross Power Purchase Cost excluding Transmission Charges				**34,993.02**	**11,979.46**	**342**	**34,993.02**	**11,938.37**	**341**
Gross Power Purchase Cost including Transmission Charges	**34,995.08**	**12,604.18**	**3.67**	**34,993.02**	**13,508.71**	**386**	**34993.02**	**13358.75**	**382**
Less: Adjustments	**-**	**-**	**-**	**7,031.43**	**2,527.21**	**359**	**1182.01**	**251.05**	**212**
Rebate if any	-	-	-	-		-	-	1.44	-
GBI Claim received during the FY	-	1.47	-	-	1.44		-	-	-
POC Charges received from PGCIL (tfd by CSPTCL)	-	-	-	-	-	-	-	-	-
Late Payment Charges	-	255.58	-	-	-	-	-	249.61	-
Sale of Surplus Power*	-		-	5,329.05	2,339.34	439			
Sale of Surplus power to Power Exchange***	-	-	-	520.37	186.43	358			
Banking Sale	1,182.01	-	-	1,182.01	-	-	1182.01	-	-
Net Power Purchase Cost	**33,813.07**	**12602.71**	**3.73**	**27,961.59**	**10,981.50**	**393**	**33811.01**	**13107.71**	**388**

*Note - *Sale of surplus power approved by the Commission is included in Revenue in subsequent Section of this Order*

Table 6-11: Approved Power Purchase Cost for FY 2019-20 (Rs. Cr.)

Source	Tariff Order			Petition			Approved		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)
CGS	**11225.80**	**3481.33**	**3.10**	**10,005.72**	**3,856.21**	**385**	**10005.72**	**3626.59**	**362**
NTPC sub-total	10446.12	3238.56	3.10	9,046.47	3,076.59	340	9046.47	2846.97	315
NTPC-SAIL (NSPCL)	297.95	99.12	3.33	196.89	118.02	599	196.89	118.02	599
NPCIL	303.97	93.39	3.07	336.55	94.76	282	336.55	94.76	282
Other Charges (NVVN, Hirakud, Subhansiri)	13.95	-	-	425.81	182.28	428	425.81	182.28	428
Other Charges	-	-	-	-	384.55	-	0.00	384.55	-
Thermal Power Bundled	163.81	50.36	3.07	-	-	-	-	-	-
CSPGCL	**19846.75**	**6256.28**	**3.15**	**16,916.45**	**6,140.60**	**363**	**16916.45**	**5782.65**	**342**
Total CSPGCL Thermal & Hydro	19733.66	6229.65	3.15	16,877.47	6,124.89	363	16877.47	5766.94	342
CSPGCL – Renewables	73.09	26.63	3.64	38.98	15.71	403	38.98	15.71	403
IEX/PXIL/Traders	**350.11**	**124.58**	**3.56**	**1,829.39**	**616.19**	**337**	**1829.39**	**616.19**	**337**
CPPs/IPPs/Short Term	**-**	**-**	**-**	**1,437.00**	**522.40**	**364**	**1437.00**	**522.40**	**364**
Concessional Power - Through CSPTrdCL	**1689.81**	**270.37**	**1.60**	**1,720.23**	**274.57**	**160**	**1720.23**	**274.57**	**160**
Others - Renewables	**1246.21**	**892.84**	**7.06**	**1,346.50**	**879.97**	**654**	**1346.50**	**879.97**	**654**
Biomass	602.62	368.83	6.12	759.66	517.58	681	759.66	517.58	681
Solar	311.89	166.62	5.34	485.66	309.65	638	485.66	309.65	638
Hydel/Other RE	177.44	78.72	4.44	101.18	52.73	521	101.18	52.73	521
Solar Bundled Power	45.33	50.42	11.12	-	-	-	-	-	-
Non-Solar RECs		158.44		-	-	-	-	-	-
SECI	126.93	69.81	5.50	-	-	-	-	-	-
Transmission Charges	-	1458.06	-	**-**	**1,392.86**	**-**	**-**	**1368.00**	**-**
Interstate Transmission Charges	-	443.18	-	-	443.18	-	-	432.93	-
Intrastate Transmission Charges	-	999.45	-	-	938.99	-	-	924.71	-

Source	Tariff Order			Petition			Approved		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./kWh)
CSLDC Charges	-	15.43	-	-	10.68	-	-	10.36	
Other Transmission Charges	-	-	-	-	-	-	-	-	
Other Misc Charges	**-**	**-**	**-**	**-**	**(7.94)**	**-**	**-**	**(7.94)**	**-**
Border Villages	**-**	**-**	**-**	**3.82**	**6.38**	**1670**	**3.82**	**6.38**	**1670**
Net DSM Charges	**-**	**-**	**-**	**7.00**	**124.12**		**-7.00**	**43.14**	**-**
Banking Purchase	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
Gross Power Purchase Cost excluding Transmission Charges				**33,266.11**	**12,412.49**	**373**	**33,252.11**	**11,973.56**	**360**
Gross Power Purchase Cost including Transmission Charges	**34376.68**	**12483.45**	**3.63**	**33,266.11**	**13,805.35**	**415**	**33,252.11**	**13,111.95**	**394**
Less: Adjustments	**-**	**-**	**-**	**2,821.40**	**1,310.60**	**465**	**-**	**13.08**	**-**
Rebate if any	-	-	-	-	-	-		5.61	-
GBI Claim received during the FY	-	-	-	-	-	-		-	-
POC Charges received from PGCIL (tfd by CSPTCL)	-	-	-	-	-	-	-	7.47	-
Delayed Payment Surcharge	-	-	-	-	-	-	-	-	-
Sale of Surplus Power***	6159.09	2589.70	4.20	2,245.12	1,166.63	520	-	-	-
Sale of Surplus power to Power Exchange*	1549.54	551.63	3.56	576.28	143.97	250	-	-	-
Banking Sale	-	-	-	-	-	-	-	-	-
Net Power Purchase Cost	**26668.06**	**9342.11**	**3.50**	**30,444.71**	**12,494.75**	**410**	**33252.11**	**13098.86**	**394**

***Note** - *Sale of surplus power approved by the Commission is included in Revenue in subsequent Section of this Order*

The Commission approves Power Purchase Cost of Rs. 13107.71 Cr. after final Truing-up of FY 2018-19 and Rs. 13098.86 Cr. after final Truing-up of FY 2019-20.

6.6 O&M Expenses

CSPDCL's Submission

CSPDCL submitted the actual O&M expenses of Rs. 1,401.02 Cr. for FY 2018-19 as per Audited Accounts and Rs. 1,425.25 Cr. for FY 2019-20 based on the provisional accounts, excluding terminal benefits (pension and gratuity). Based on audited accounts, CSPDCL submitted the O&M expenses of Rs. 1426.41 Crore for FY 2019-20. The O&M Expenses submitted by CSPDCL is shown in the Table below:

Table 6-12: Actual O&M expenses as submitted by CSPDCL (Rs. Cr.)

Sl. No.	Particulars	FY 2018-19	FY 2019-20
1	Employee Costs	894.33	918.60
2	A&G Expenses	185.43	152.51
3	R&M Expenses	321.26	355.30
4	**Total O&M Expenses**	**1,401.02**	**1,426.41**

CSPDCL requested the Commission to approve actual employee expenses of Rs 894.33 Cr. and Rs. 918.60 Crore for FY 2018-19 and FY 2019-20 based on the Audited Accounts.

CSPDCL submitted that the major services involved in distribution business, such as, engagement of contract labour for operations of 33/11 kV Substations, meter reading, bill distribution and revenue collection, secretarial assistance in offices, housekeeping and security guards are performed through outsourcing, because a substantial strength of sanctioned posts in Class III and IV cadre are vacant, and expenditure for engaging outsourcing agencies are booked under the head of A&G expenses and R&M Expenses. If the services provided by outsourcing agencies are to be performed through regular appointments, then all such expenditures would qualify under employee expenses at higher cost. Hence, it is in the interest of consumers that these parts of the distribution business are performed by CSPDCL at a marginal low cost. The details of such expenses incurred are given in the Table below:

Table 6-13: Details of contract services as submitted by CSPDCL (Rs. Cr.)

Sl. No.	Particulars	FY 2018-19		FY 2019-20	
		A&G Exp.	R&M Exp.	A&G Exp.	R&M Exp.
1	Security services	1.73	-	1.88	-
2	Meter reading and other manpower service contracts	99.22	-	83.84	-
3	33/11 kV operations & Other manpower service contracts	-	56.74	-	55.33
4	**Grand Total**	**100.95**	**56.74**	**85.72**	**55.33**

CSPDCL requested to consider the expenditure indicated in the above Table as employee expenses and not be considered under controllable expenditure. CSPDCL submitted that the methodology adopted by the Commission is causing double jeopardy to CSPDCL as genuine expenses incurred towards distribution business are being currently disallowed.

CSPDCL has calculated the normative A&G expenses and R&M expenses for FY 2018-19 by escalating the normative A&G expenses and R&M expenses of FY 2017-18 with the increase in WPI of 4.28%.

For computation of sharing of gains/(losses), CSPDCL has not considered any gain and loss on account of employee costs in line with the first amendment to the CSERC MYT Regulations, 2015.

CSPDCL submitted the sharing of efficiency loss against A&G expenses and R&M expenses as Rs. 40.81 Crore for FY 2018-19 and Rs. 45.05 Crore for FY 2019-20, after excluding the A&G expenses and R&M expenses.

Commission's View

The Commission notes that it had approved O&M expenses of Rs. 1,430.13 Cr. for FY 2018-19 at the time of provisional true-up. In the present Petition, CSPDCL has claimed O&M Expenses of Rs. 1,401.02 Cr. for FY 2018-19 based on audited accounts.

As regards FY 2019-20, the Commission had approved O&M expenses of Rs. 1,323.17 Cr. in the Tariff Order dated February 28, 2019, including impact of Interim Wage Relief. As against this, CSPDCL has claimed O&M Expenses of Rs. 1,426.41 Cr. for FY 2019-20 based on audited accounts.

Actual O&M Expenses

CSPDCL has claimed actual employee expenses of Rs 894.33 Cr. and Rs. 918.60 Cr. for FY 2018-19 and FY 2019-20, respectively, based on the Audited Accounts. The Interim Wage Revision component allowed in the Tariff Order for FY 2019-20 is meagre when compared with the actual employee expenses for FY 2019-20, and has not been claimed separately. The Commission has verified the actual employee expenses from the Audited Accounts of the respective years, and allowed the actual employee expenses as claimed by CSPDCL.

CSPDCL has claimed A&G Expenses of Rs. 185.43 Cr. in the final true-up for FY 2018-19. The Commission notes that CSPDCL's claim for A&G expenses includes penalty charges of Rs. 0.10 Cr. and compensation of Rs. 4.04 crore paid to outsiders against injury. Similarly, CSPDCL's claim of A&G Expenses of Rs. 152.51 Cr. in the final true-up for FY 2019-20 includes penalty charges of Rs. 0.17 Cr, compensation of Rs. 3.09 Cr. paid to outsiders against injury, store obsolescence of Rs. 0.07 Cr., and sundry debit written off of Rs. 10.91 Cr.

The Commission is of the view that compensation paid to outsiders for injury has been incurred due to lapses on the part of CSPDCL and cannot be recovered from the consumers. Similarly, penalty charges paid by CSPDCL cannot be recovered from consumers. The expenses booked against stores obsolescence and sundry debit written off are book expenses, and cannot be passed on to the consumers. Hence, the Commission has disallowed expenses of Rs. 4.14 Crore for FY 2018-19 and Rs. 14.23 Crore for FY 2019-20, under these heads, while approving the actual A&G expenses.

Further, CSPDCL has claimed actual R&M Expenses of Rs. 321.26 Cr. and Rs. 355.30 Cr. for FY 2018-19 and FY 2019-20, respectively. The Commission has verified these expenses from the Audited Accounts of the respective years, and allowed the actual R&M expenses as claimed by CSPDCL.

Accordingly, the actual O&M Expenses considered by the Commission for sharing of gains and losses are given in the following Table:

Table 6-14: Actual O&M expenses as considered by the Commission (Rs. Cr.)

Sl. No.	Particulars	FY 2018-19		FY 2019-20	
		Petition	Approved	Petition	Approved
1	Employee Costs	894.33	894.33	922.24	918.60
2	A&G Expenses	185.43	181.29	153.35	138.28
3	R&M Expenses	321.26	321.26	349.66	355.30
4	**Total O&M Expenses**	**1,401.02**	**1,396.88**	**1,425.25**	**1,412.18**

Normative O&M Expenses

Regulation 57.4 of the CSERC MYT Regulations, 2015 provides as under:

"

(a) Operation and Maintenance (O&M) Expenses for the distribution licensee shall include:

I. Employee Cost;
II. Administrative and general Expenses
III. Repairs and Maintenance Expenses

(b) The Commission shall stipulate a separate trajectory for each of the components of O&M expenses viz. employee cost, R&M expense and A&G expense for the control period.

(c) The employee cost, excluding pension fund contribution and impact of pay revision arrears for the base year i.e. FY 2015-16 shall be derived on the basis of the normalized average of the actual employee expenses, excluding pension fund contribution and impact of pay revision arrears, available in the accounts for the previous five years immediately preceding the base year FY 2015-16, subject to prudence check by the Commission. Any other expense of non-recurring nature shall also be excluded while determining normalized average for the previous five years.

(d) The normalization shall be done by applying last five years average increase in Consumer Price Index (CPI) on year to year basis. The average of normalized net present value for FY 2010-11 to FY 2014-15, shall then be used to project base year value for FY 2015-16. The base year value so arrived, shall be escalated by the above inflation rate to estimate the employee expenses (excluding impact of pension fund contribution and pay revision, if any) for each year of the control period.

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

Provided further that impact of pay revision (including arrears) and pension fund contribution shall be allowed on actual during true-up as per accounts,

subject to prudence check and any other factor considered appropriate by the Commission."

Further, Regulation 57.4 (e) and (f) of CSERC MYT Regulations, 2015 regarding A&G Expenses and R&M Expenses specify as under:

"(e) The administrative and general expenses and repair and maintenance expenses, for the base year i.e. FY 2015-16, shall be derived on the basis of the normalized average of the actual administrative and general expenses and repair and maintenance expenses, respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2015-16, subject to prudence check by the Commission. Any expense of non-recurring nature shall be excluded while determining normalized average for the previous five (5) years.

(f) The normalization shall be done by applying last five-year average increase in Wholesale Price Index (WPI) on year to year basis. The average of normalized net present value for FY 2010-11 to FY 2014-15, shall then be used to project base year value for FY 2015-16. The base year value so arrived, shall be escalated by the above inflation rate to estimate the administrative and general expense and repair and maintenance expenses for each year of the control period.

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

Based on the above Regulations, the Commission has considered the normative A&G expenses and R&M expenses for FY 2018-19 and FY 2019-20.

The Commission notes that CSPDCL has requested to treat expenses towards contract services, viz., operations of 33/11 kV Substations, meter reading, bill distribution and revenue collection, secretarial assistance in offices, housekeeping and security guards as uncontrollable. The Commission does not accept the contention of CSPDCL that if they had been employed on regular basis, the cost of the same will be booked under Employee cost, which would have been allowed on actual basis. Under the ambit of performance-based Regulations, O&M expenses are considered as controllable factors. However, considering the special circumstances, this Commission has allowed Employee cost to be considered as uncontrollable factor. This does not mean that the expenses to be incurred under contract services is to be transferred to Employee costs. This will not suffice the purpose of performance-based Regulations. The Commission is of view that R&M expenses and A&G Expenses are considered as controllable factor and efficiency is expected in operations as well as services. The Commission notes that the Petitioner is aware about the norms of O&M Expenses and the same shall be considered while entering operation and service contracts. In view of the above, the Commission has not considered the prayer of the CSPDCL for consideration of expenses for contract services as uncontrollable factor.

Further, CSPDCL's contention that the methodology adopted by the Commission is causing double jeopardy to CSPDCL as genuine expenses incurred towards distribution business are being disallowed, is incorrect, as expenses are not being disallowed. The efficiency gains/losses are being shared between CSPDCL and the consumers in the manner specified in the CSERC MYT Regulations, 2015.

The Commission has considered escalation factor of 4.27% for R&M expenses and A&G Expenses for FY 2018-19 based on CPI and WPI. Similarly, the Commission has considered escalation factor of 1.68% for R&M expenses and A&G Expenses for FY 2019-20.

The normative A&G expenses and R&M expenses approved for FY 2018-19 and FY 2019-20 are shown in the table below:

Table 6-15: Approved Normative R&M and A&G Expenses for FY 2018-19 and FY 2019-20 (Rs. cr.)

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		Petition	Approved	Petition	Approved
1	A&G Expenses	138.58	138.58	140.90	140.91
2	R&M Expenses	128.80	128.79	130.96	130.96

The Commission notified the CSERC MYT Regulations, 2016 (First amendment) on June 16, 2017 and made it effective from April 1, 2017, whereby employee expenses are excluded from accounting of sharing of gains/(losses). The relevant Regulation is as under:

> *"In clause 13.1 of the principal regulations, the following proviso shall be inserted, namely: -*
>
> *Provided further that the employee cost shall not be factored in for sharing of gains or losses on account of Operation and Maintenance expenses"*

In line with above amendment, the employee expenses are now considered as uncontrollable expenses and therefore the actual employee expenses approved in the final truing-up of FY 2018-19 and FY 2019-20, after due prudence check, are considered without any sharing of efficiency gains/losses.

The Commission therefore approves employee cost of Rs. 894.33 Cr. for FY 2018-19 and Rs. 922.24 Cr. for FY 2019-20. The employee cost approved for FY 2019-20 is subject to change based on audited accounts at the time of final Truing-up.

As per the provisions in the Regulation for sharing of gains/(losses) of O&M expenses, the Commission has computed the efficiency gains/losses on the basis of revised normative A&G expenses and R&M expenses, in accordance with the CSERC MYT Regulations, 2015.

The Commission has computed the sharing of efficiency gains or losses for R&M expenses and A&G Expenses for FY 2018-19 as shown in the following Table:

Table 6-16: Sharing of (Gain)/Loss for FY 2018-19 (Rs. Cr.)

Particulars	Revised Normative	Actual Expenses	Efficiency (Gain)/Loss	Entitlement of (Gain)/Loss	
				CSPDCL	Consumers
A&G Expenses	138.58	181.29	42.71	21.36	21.36
R&M Expenses	128.79	321.26	192.47	96.24	96.24
Total	**267.37**	**502.55**	**235.19**	**117.59**	**117.59**

Further, the sharing of efficiency gains and losses on account of O&M Expenses for FY 2019-20 is computed as shown in the following Table:

Table 6-17: Sharing of (Gain)/Loss for FY 2019-20 (Rs. Cr.)

Particulars	Revised Normative	Actual Expenses	Efficiency (Gain)/Loss	Entitlement of (Gain)/Loss	
				CSPDCL	Consumers
A&G Expenses	140.91	138.28	(2.63)	(1.32)	(1.32)
R&M Expenses	130.96	355.30	224.34	112.17	112.17
Total	**271.87**	**493.58**	**221.71**	**110.86**	**110.86**

The Commission approves the sharing of efficiency loss of Rs. 117.59 Cr. for FY 2018-19 and Rs. 110.86 Cr. for FY 2019-20.

The Commission notes that even with the existing mechanism of sharing of the resultant efficiency loss of CSPDCL, half of the losses are still borne by the consumers. Therefore, CSPDCL is directed to manage its A&G expenses and R&M expenses within the prescribed normative ceiling.

6.7 Contribution to Pension and Gratuity

CSPDCL's submission

CSPDCL claimed the contribution to Pension and Gratuity of Rs. 355.21 Cr. for FY 2018-19 as approved in tariff order dated 26th March 2018, and Rs. 275.09 Cr. for FY 2019-20 as approved in the tariff order dated 28th February 2019.

Commission's View

The Commission has considered the contribution to Pension and Gratuity of Rs. 355.21 Cr. for FY 2018-19 as approved in tariff order dated 26th March 2018. Similarly, the Commission has considered the contribution to Pension and Gratuity of Rs. 275.09 Cr. for FY 2019-20 as approved in the tariff order dated 28th February 2019.

6.8 Capital Structure

CSPDCL's submission

CSPDCL has determined the capital structure for FY 2018-19 and FY 2019-20 based on the following principles:

(a) Opening values of various parameters for FY 2018-19 have been considered equal to the closing values of FY 2017-18;

(b) The actual loan addition has been considered as Rs. 263.24 cr. for FY 2018-19 based on Audited Accounts and Rs. 470.04 cr. for FY 2019-20 based on provisional accounts;

(c) Addition in consumer contribution/grants has been considered as Rs. 508.71 crore as per the Audited Accounts for FY 2018-19 and Rs. 94.50 Cr as per the provisional accounts of FY 2019-20;

(d) Normative equity addition has been considered based on capital restructuring methodology as approved by the Commission in the tariff order dated July 12, 2013;

(e) GFA addition has been considered as Rs. 1226.07 cr. for FY 2018-19 and Rs. 1053.53 cr. for FY 2019-20.

CSPDCL submitted the Capital Structure for FY 2018-19 and FY 2019-20 as given in the table below:

Table 6-18: Capital Structure for FY 2018-19 and FY 2019-20 as submitted by CSPDCL (Rs. cr.)

Particulars	Legend	FY 2018-19	FY 2019-20
Gross Fixed Assets (GFA)			
Opening GFA	A	6638.25	7864.32
Opening CWIP	B	2761.65	3162.31
Opening CAPEX	C=A+B	9399.90	11026.63
Capitalization during the year	D	1226.07	1053.53
Closing GFA	E=D+A	7864.32	8917.85
Closing CWIP	F	3162.31	3171.27
Closing CAPEX	G=F+E	11026.63	12089.13
Grants and Consumer Contribution			
Opening Grant and Contribution	H	4812.18	5320.89
Consumer contribution/grants during the year	I	508.71	94.50
Closing Consumer Contribution	J=H+I	5320.89	5415.39
Consumer Contribution in Opening GFA	K=H*A/C	3398.38	3794.92
Consumer Contribution in Closing GFA	L=J*E/G	3794.92	3994.80
Loan Borrowed			
Opening Borrowed Loan	M	2082.86	2346.10
Loan Borrowed during the year	N	263.24	470.04
Closing Borrowed Loan	O=M+N	2346.1	2816.14
Borrowed Loan in Opening GFA	P=M*A/C	1470.92	1673.27
Borrowed Loan in Closing GFA	Q=MAX (O*E/G, P)	1673.26	2077.40
Equity			
Opening Gross Equity	R=C-H-M	2504.86	3359.64
Equity Addition During the Year	T=S-R	854.78	497.96

Particulars	Legend	FY 2018-19	FY 2019-20
Closing Gross Equity	S=G-J-O	3359.64	3857.60
Gross Equity in Opening GFA	U=A-K-P	1768.94	2396.13
Gross Equity in Closing GFA	V=C-L-Q	2396.13	2845.66
Average Gross Equity During the year	W=Avg. (U, V)	2082.54	2620.89
Funding of Capitalized Assets			
Total Capitalization		1226.07	1053.53
Contribution of Grant in Capitalized Assets		396.54	199.88
Contribution of Equity in Capitalized Assets		248.86	256.10
Contribution of Loan in Capitalized Assets		580.67	597.56

Based on the audited accounts for FY 2019-20, CSPDCL has submitted marginally higher actual capitalisation of Rs. 1054.07 Crore as against the capitalisation of Rs. 1053.53 cr. claimed in the provisional true-up. CSPDCL further the actual funding from Grants/Consumer Contribution for FY 2019-20 as Rs. 102.36 crore as against the amount of Rs. 94.50 Crore claimed in the provisional true-up for FY 2019-20.

Commission's View

The approved closing balance after final True-up of FY 2017-18 has been considered as the opening balance of FY 2018-19 for Gross Fixed Assets (GFA), Capital Work in Progress (CWIP), Capital Expenditure, Grants/Consumer Contribution, Loan and Equity. Similarly, the closing values of FY 2018-19 approved in this order have been considered as opening values of FY 2019-20.

The addition to GFA, Grant/Consumer Contribution has been considered for FY 2018-19 and FY 2019-20, respectively, based on the Audited Accounts. The consumer contribution and grants have been reduced from the GFA addition, before considering the normative debt:equity ratio, in accordance with the approach adopted in previous tariff orders.

The GFA and its funding considered by the Commission for FY 2018-19 and FY 2019-20 are shown in the Table below:

Table 6-19: Approved GFA and Funding for FY 2018-19 and FY 2019-20 (Rs. cr.)

Sr. No.	Particulars	FY 2018-19		FY 2019-20	
		Petition	Approved	Petition	Approved
	Gross Fixed Assets (GFA)				
1	Opening GFA	6638.25	6638.25	7864.32	7864.32
2	Capitalisation during the year	1226.07	1226.07	1053.53	1054.07
3	Closing GFA	7864.32	7864.32	8917.85	8918.39
	Funding of Capitalisation				
4	Grant	396.54	400.37	199.88	205.87
5	Equity	248.86	247.71	256.10	254.46
6	Debt	580.67	577.99	597.56	593.74
7	**Total Capitalisation**	**1226.07**	**1226.07**	**1053.53**	**1054.07**

The Commission approves the total capitalization of Rs. 1,226.07 Cr. for FY 2018-19 and Rs. 1,054.07 Cr. for FY 2019-20 as shown in the Table above.

6.9 Depreciation

CSPDCL's Submission

CSPDCL submitted that depreciation has been calculated as per Regulation 24 of the CSERC MYT Regulations 2015, along with the appropriate treatment of grant received under UDAY Scheme. CSPDCL, while calculating depreciation for FY 2018-19 and FY 2019-20, has followed the methodology specified in the aforesaid Regulations and the methodology adopted by the Commission in previous tariff orders.

CSPDCL has claimed depreciation of Rs. 136.87 Cr. for FY 2018-19 and Rs. 187.47 Cr. for FY 2019-20.

Commission's View

For the purpose of final true-up for FY 2018-19 and FY 2019-20, the Commission has computed the depreciation as per Regulation 24 of the CSERC MYT Regulations, 2015.

The Regulations provides for separate depreciation rates for each asset groups. Accordingly, the weighted average depreciation rates have been computed as 5.46% and 5.56% for FY 2018-19 and FY 2019-20, respectively.

The Commission sought computation of depreciation on fully depreciated assets from CSPDCL. CSPDCL submitted the depreciation on fully depreciated assets as Rs. 16.51 Cr. for both FY 2018-19 and FY 2019-20. The Commission accepted the depreciation on fully depreciated assets for FY 2018-19 and FY 2019-20 as submitted by CSPDCL. The depreciation on fully depreciated assets has been deducted in accordance with the approach adopted in the previous tariff orders.

Also, the depreciation on consumer contribution/Grants on live assets has been deducted as per Regulation 24 of the CSERC MYT Regulations, 2015. Similarly, depreciation on assets converted from loan to grant under UDAY has been deducted.

The depreciation approved after final True-up for FY 2018-19 is shown in the Table below:

Table 6-20: Approved Depreciation for FY 2018-19 (Rs. cr.)

Particulars	Prov. True-up	Petition	Approved
Opening GFA	6638.25	6638.25	6638.25
Additional Capitalisation during the Year	996.64	1226.07	1226.07
Closing GFA	7634.89	7864.32	7864.32
Average GFA for the year	7136.57	7251.28	7251.29
Depreciation Rates (%)	5.31%	5.46%	5.46%
Gross Depreciation	378.95	396.00	396.00
Less: Depreciation on consumer contribution on live assets	153.18	196.41	196.52
Less: Depreciation on Fully Depreciated Assets	16.51	16.51	16.51
Less: Depreciation on assets converted from loan to grant under UDAY	46.20	46.20	46.20
Net Depreciation	**163.06**	**136.87**	**136.77**

Similarly, depreciation approved after final true-up for FY 2019-20 is shown in the Table below:

Table 6-21: Approved Depreciation for 2019-20 (Rs. cr.)

Particulars	MYT Order	CSPDCL	Approved
Opening GFA	10464.11	7864.32	7864.32
Additional Capitalisation during the Year	671.50	1053.53	1054.07
Closing GFA	11135.61	8917.85	8918.39
Average GFA for the year	10799.86	8391.09	8391.36
Depreciation Rates (%)	4.95%	5.56%	5.56%
Gross Depreciation	534.51	466.90	466.92
Less: Depreciation on consumer contribution on live assets	303.58	216.72	217.10
Less: Depreciation on Fully Depreciated Assets	16.94	16.51	16.51
Less: Depreciation on assets converted from loan to grant under UDAY	160.26	46.20	46.20
Net Depreciation	**53.72**	**187.47**	**187.11**

The Commission approves the total depreciation of Rs. 136.77 cr. for FY 2018-19 and Rs. 187.11 cr. for FY 2019-20 as shown in the Tables above.

6.10 Interest on Loan Capital

CSPDCL's Submission

CSPDCL submitted that the Interest on loan capital has been computed in accordance with Regulation 23 of the CSERC MYT Regulations, 2015. The allowable depreciation for the year has been considered as the normative repayment for the year. The actual weighted average interest rate of (10.28%) has been considered as for both FY 2018-19 and FY 2019-20 based on actual loan portfolio during the respective years. CSPDCL claimed the interest on loan capital as Rs. 115.61 Cr. for FY 2018-19 and as Rs. 156.46 Cr. for FY 2019-20.

Based on the audited accounts for FY 2019-20, CSPDCL claimed the actual weighted average interest rate of 10.94%.

Commission's View

The closing Net normative loan approved in final True-up for FY 2017-18 has been considered as opening net normative opening loan for FY 2018-19. Similarly, the closing values of FY 2018-19 approved in this order have been considered as opening values of FY 2019-20. Loan addition during FY 2018-19 and FY 2019-20 have been considered based on the approved capitalisation and funding for FY 2018-19 and FY 2019-20, as discussed in Capital Structure earlier. The allowable depreciation for the year has been considered as normative repayment for the year.

The Commission sought the documentary evidences for the opening loan balance and applicable interest rate for each source of loan and the computation of weighted average rate of interest for FY 2018-19 and FY 2019-20. The actual weighted average interest rate has been computed as 10.06% and 10.94% for FY 2018-19 and FY 2019-20, respectively, based on the interest expenses paid against the outstanding debt.

The interest expense approved for FY 2018-19 after final true-up is shown in the Table below:

Table 6-22: Approved Interest Expenses for FY 2018-19 (Rs. cr.)

Particulars	Prov. True-up	Petition	Approved
Opening Net Normative Loan	845.69	845.69	845.69
Repayment during the year	163.06	136.87	136.77
Loan Addition during the year	157.79	202.34	-
Normative loan addition during the year	365.85	378.33	577.99
Closing Net Normative Loan	1206.26	1289.49	1286.92
Average Normative loan during the year	1026.0	1067.59	1066.30
Weighted Average Rate of Interest	10.28%	10.28%	10.06%
Interest Expenses	**105.43**	**109.75**	**107.23**
Add: Other Finance Charges	5.27	5.86	5.86
Total Interest on Loan	**110.7**	**115.61**	**113.09**

Similarly, the interest expense approved for FY 2019-20 after final true-up is shown in the following Table:

Table 6-23: Approved Interest Expense for FY 2019-20 (Rs. cr.)

Particulars	MYT Order	Petition	Approved
Opening Net Normative Loan	2166.41	1289.49	1286.92
Repayment during the year	213.98	187.47	187.11
Loan Addition during the year	75.23	404.13	-
Normative loan addition during the year		193.43	593.74
Closing Net Normative Loan	2027.65	1699.58	1693.55
Average Normative loan during the year	2097.03	1494.53	1490.23
Weighted Average Rate of Interest	8.24%	10.28%	10.94%
Interest Expenses	**172.76**	153.64	163.03
Add: Other Finance Charges	**-**	2.82	2.82
Total Interest on Loan	**172.76**	**156.46**	**165.85**

The Commission approves the Interest on Loan of Rs. 113.09 Cr. for FY 2018-19 and Rs. 165.85 Cr. for FY 2019-20, as shown in the Tables above.

6.11 Interest on Consumer Security Deposit

CSPDCL's Submission

CSPDCL has considered the Interest on Consumer Security Deposit (CSD) paid to the consumers in line with Regulation 6.13 of the Chhattisgarh Electricity Supply Code, 2011. Accordingly, the actual interest on CSD paid by CSPDCL is Rs. 125.76 Cr. during FY 2018-19 as per Audited Accounts and Rs. 122.21 Cr. during FY 2019-20 as per provisional accounts. Based on the Audited Accounts for FY 2019-20, CSPDCL claimed the actual interest on CSD as Rs. 122.25 crore.

Commission's View

The Commission has verified the actual interest paid on the CSD as per the Audited Accounts for FY 2018-19 and FY 2019-20. Accordingly, the Commission approves interest on CSD of Rs. 125.76 cr. for FY 2018-19 and Rs. 122.25 cr. for FY 2019-20, as shown in the Table below:

Table 6-24: Approved Interest on CSD for FY 2018-19 and FY 2019-20 (Rs. cr.)

Particulars	FY 2018-19			FY 2019-20		
	Prov. True-up	Petition	Approved	Tariff Order	Petition	Approved
Interest on CSD	125.76	125.76	125.76	120.04	122.21	122.25

6.12 Interest on Working Capital

CSPDCL's Submission

CSPDCL submitted that Interest on Working Capital (IoWC) has been computed as per Regulation 25 of the CSERC MYT Regulations, 2015. For computation of working capital requirement, CSPDCL has considered one month of the approved O&M expenses, maintenance spares @ 40% of R&M expenses, and one month of receivables equal to one month of expected revenue from sale of power. CSPDCL has considered the interest rate of 12.20% for FY 2018-19 and 12.55% for computing the IoWC for FY 2019-20.

CSPDCL submitted the normative IoWC as Rs. (89.86) cr. for FY 2018-19 and Rs. (117.96) cr. for FY 2019-20.

Commission's View

The normative IoWC has been computed in accordance with the CSERC MYT Regulations, 2015. The Commission has considered the revised normative O&M expenses for computing the working capital requirement. The receivables have been considered equivalent to one month's actual revenue received. The average CSD has been considered as Rs. 2,070.99 cr. and Rs. 2,297.61 cr. for FY 2018-19 and FY 2019-20, respectively, as per the Audited Accounts submitted by CSPDCL. The interest rate for computing IoWC has been considered as 12.20% for FY 2018-19 and 12.55% for FY 2019-20, in accordance with the CSERC MYT Regulations, 2015. The normative IoWC for FY 2018-19 and FY 2019-20 works out to be negative, as shown in the Table below:

Table 6-25: Approved IoWC for FY 2018-19 and FY 2019-20 (Rs. cr.)

Particulars	FY 2017-18			FY 2018-19		
	Prov. True-up	Petition	Approved	Tariff Order	Petition	Approved
Operation and Maintenance Expenses for one month	86.10	96.81	96.81	110.26	99.51	99.21
Maintenance spares @ 40% of Repair and Maintenance expenses	51.52	51.52	51.51	53.86	52.38	52.38
Receivable equal to 1 month of expected revenue from sale of power	847.67	1,074.02	1,090.40	920.63	1,092.50	1,153.92
Total Working Capital	**985.28**	**1,222.35**	**1,238.72**	**1,084.76**	**1,244.39**	**1,305.51**
Less: Security Deposit	2004.18	1,958.90	2,070.99	1800.58	2,184.30	2,297.61
Net Working Capital Requirement	(1018.9)	(736.55)	(832.27)	(715.82)	(939.90)	(992.10)
Rate of Interest (%)	12.20%	12.20%	12.20%	12.45%	12.55%	12.55%
Interest on Working Capital requirement	**(124.31)**	**(89.86)**	**(101.54)**	**(89.12)**	**(117.96)**	**(124.51)**

The Commission approves the Interest on Working Capital of Rs. (101.54) cr. for FY 2018-19 and Rs. (124.51) cr. for FY 2019-20, as shown in the Table above.

6.13 Return on Equity

CSPDCL's Submission

CSPDCL has computed RoE as per the capital structure proposed by CSPDCL and as per Regulation 17.1 of the CSERC MYT Regulations, 2015. CSPDCL has excluded consumer contribution, deposit work and grant from the asset addition during the year for computation of normative debt: equity. CSPDCL has considered rate of Return on Equity as 16% for FY 2018-19 and FY 2019-20. CSPDCL has claimed Return on Equity of Rs. 248.03 Cr. for FY 2018-19 and Rs. 288.43 cr. for FY 2019-20.

Commission's View

The RoE has been computed in accordance with Regulation 17 of the CSERC MYT Regulations, 2015.

The Commission has considered the closing permissible equity approved for FY 2017-18, as the opening permissible equity for FY 2018-19 and closing permissible equity of FY 2018-19 as the opening permissible equity of FY 2019-20. The equity portion of the additional net capitalisation for FY 2018-19 and FY 2019-20 has been considered as the equity addition for the year. The Commission has considered rate of return as 16% on average equity for the year. The RoE approved after final true-up for FY 2018-19 and FY 2019-20 is shown in the Table below:

Table 6-26: Approved RoE for FY 2018-19 and FY 2019-20 (Rs. cr.)

Particulars	FY 2018-19			FY 2019-20		
	Prov. True-up	Petition	Approved	MYT Order	Petition	Approved
Permissible Equity in Opening GFA	1425.78	1,425.78	1,425.78	1496.72	1,674.64	1,673.49
Permissible Equity in Closing GFA	1650.20	1,674.64	1,673.49	1598.00	1,930.74	1,927.95
Average Gross Permissible Equity during the year	1537.99	1,550.21	1,549.64	1547.36	1,802.69	1,800.72
Rate of Return (%)	16%	16%	16%	16.00%	16%	16%
Return on Equity	**246.08**	**248.03**	**247.94**	**247.58**	**288.43**	**288.12**

The Commission approves Return on Equity of Rs. 247.94 Cr. for FY 2018-19 and Rs. 288.12 Cr. for FY 2019-20, as shown in the Table above.

6.14 Non-Tariff Income

CSPDCL's Submission

CSPDCL submitted Non-Tariff Income of Rs. 224.85 Cr. for FY 2018-19 based on the Audited Accounts, comprising Rs. 166.09 cr. towards Non-Tariff income and Rs. 58.77 Cr. towards revenue from Wheeling Charges, Open Access and Cross-Subsidy Charges. CSPDCL submitted that the amount of Rs.151.20 Cr. considered under the head Other Income in the Audited Accounts of FY 2018-19 pertains to the amortization of Capital grants received and hence, is not of the nature of income. This entry in the Audited Accounts is to meet the requirement of Ind AS.

Further, CSPDCL submitted that since the Audited Accounts of FY 2019-20 are not available as of now, CSPDCL has considered the Non-Tariff Income of Rs. 429.69 Cr. for FY 2019-20, as approved by the Commission in the tariff order dated 28 February, 2019, which includes Rs. 335.43 cr. towards Non-Tariff income and Rs. 94.26 Cr. towards revenue from Wheeling Charges, Open Access and Cross-Subsidy Charges. Based on the Audited Accounts for FY 2019-20, CSPDCL claimed actual Non-Tariff Income of Rs. 221.22 Cr. for FY 2019-20.

Commission's View

The Commission notes that CSPDCL has claimed Non-Tariff Income of Rs. 224.85 Cr. for FY 2018-19 and Rs. 221.22 Cr. for FY 2019-20.

The Commission notes that CSPDCL has not considered interest on other loans and advances amounting to Rs. 186.16 Cr. while considering Non-Tariff Income for FY 2019-20. In response to the Commission's query in this regard, CSPDCL submitted that the said amount of Rs.186.16 Cr. pertains to the amount received from GoCG. CSPDCL submitted that as per the arrangement between GoCG and CSPDCL, CSPDCL has taken loan from Financial Institutions against the receivables from GoCG and the repayment of these loans are being paid by GoCG. Since this is only a back-to-back arrangement and the amount received from GoCG is directly paid to the Financial Institutions, it has been shown in accounts for compliance to Accounting Standards only. CSPDCL requested the Commission not to consider this as Non-Tariff Income. The Commission accepts CSPDCL's justification in this regard, and does not consider this interest income of Rs. 186.16 Cr. under Non-Tariff Income.

The Commission observes that total miscellaneous income as per Audited Accounts is Rs. 44.61 Cr, the Commission accordingly has adjusted income from miscellaneous charges by deducting other income from miscellaneous income. Accordingly, the Commission has approved Rs. 164.65 Cr as Non-Tariff Income for FY 2018-19 and Rs. 58.77 Cr as income from Wheeling Charges, Open Access and Cross Subsidy Charges.

The Commission has considered the actual Non-Tariff income for FY 2019-20 based on the audited accounts.

The Non-Tariff Income approved after final true-up for FY 2018-19 and FY 2019-20, is shown in the Table below:

Table 6-27: Approved Non-Tariff Income for FY 2018-19 and FY 2019-20 (Rs. Cr.)

Particulars	FY 2018-19			FY 2019-20		
	Prov. True-up	Petition	Approved	Tariff Order	Petition	Approved
Non-Tariff Income	303.27	166.09	164.65	335.43	335.43	
Wheeling Charges, Open Access & Cross Subsidy Charges	52.64	58.77	58.77	94.26	94.26	
Total Non-Tariff Income	**355.91**	**224.85**	**223.42**	**429.69**	**429.69**	**221.22**

The Commission approves Non-Tariff Income of Rs. 223.42 cr. for FY 2018-19 and Rs. 221.22 cr. for FY 2019-20.

6.15 Aggregate Revenue Requirement

The Commission in provisional True-up Order for FY 2018-19 had approved the component-wise ARR. The Commission had approved revised ARR for FY 2019-20 in the Tariff Order dated February 28, 2019.

The final true-up for FY 2018-19 and FY 2019-20 has been done with respect to the ARR components approved in these Tariff Orders.

Based on the above, the summary of ARR approved in the Final True-up for FY 2018-19 is shown in the Table below:

Table 6-28: Approved ARR for FY 2018-19 (Rs. cr.)

Sr. No.	Particulars	Prov. True-up	Petition	Approved after Final True-up
A	**Power Purchase Expenses**	**10,156.85**	**10,981.50**	**13,107.71**
1	Power Purchase Cost (Net of UI, Bilateral Sale, DPS, GBI, Transmission & SLDC Charges and Trading Income, Reversal)	8,752.09	9,452.25	11,687.32
2	Inter-State Transmission charge	398.67	398.67	398.67
3	Intra-State Transmission Charges	917.43	1,072.41	963.48

Sr. No.	Particulars	Prov. True-up	Petition	Approved after Final True-up
4	CSLDC Charges	14.03	14.03	14.10
5	Other Charges (OPTCL, Transmission-SWAP Charges, DSM Charges, Other Charges, Trading Charges etc.)	74.63	44.14	44.14
B	**Operation & Maintenance Expenses**	**1,785.44**	**1,756.33**	**1,752.19**
1	Net Employee Expenses	887.04	894.33	894.33
2	Net A&G Expenses	221.82	185.43	181.29
3	Net R&M charges	321.27	321.26	321.26
4	Pension & Gratuity	355.31	355.31	355.31
C	**Interest & Finance Expenses**	**112.15**	**151.51**	**137.32**
1	Interest on Loan	110.69	115.61	113.09
2	Interest on Security Deposit	125.76	125.76	125.76
3	Interest on Working Capital Requirement	(124.31)	(89.86)	(101.54)
D	**Other Expenses**	**409.09**	**384.90**	**384.71**
1	Depreciation	163.01	136.87	136.77
2	Return on Equity	246.08	248.03	247.94
E	**Gain/(Loss) on Efficiency**	**(137.86)**	**(40.81)**	**(243.83)**
1	Gain/(Loss) on Sharing O&M Efficiency	(137.86)	(40.81)	(117.59)
2	Licensee's Share in Gain/(Loss) on account of Distribution Losses	-	-	(126.23)
F	**Less: Non-Tariff Income**	**355.91**	**224.85**	**223.42**
1	Non-Tariff Income	303.27	166.09	164.65
2	Wheeling Charges, Open Access & Cross Subsidy Charges	52.64	58.77	58.77
G	**Aggregate Revenue Requirement**	**11,969.76**	**13,008.58**	**14,914.68**

The summary of ARR approved in the final True-up for FY 2019-20 is shown in the Table below:

Table 6-29: Approved ARR for FY 2019-20 (Rs. cr.)

Sr. No.	Particulars	Tariff Order	Petition	Approved after Final True-up
A	**Power Purchase Expenses**	**9,342.11**	**12,494.75**	**13,098.86**
1	Power Purchase Cost	7,884.05	11,101.89	11,730.86
2	Inter-State Transmission charges (PGCIL)	443.18	443.18	432.93
3	Intra-State Transmission Charges	999.45	938.99	924.71
4	CSLDC Charges	15.43	10.68	10.36
5	Other Charges (OPTCL, Transmission-SWAP Charges, DSM Charges, Other Charges, Trading Charges etc.)	-	-	-
B	**Operation & Maintenance Expenses**	**1,598.26**	**1,700.34**	**1,687.27**
1	Net Employee Expenses	973.58	922.24	918.60
2	Net A&G Expenses	144.89	153.35	138.28
3	Net R&M charges	134.66	349.66	355.30
4	Pension & Gratuity	275.09	275.09	275.09
5	Interim Wage Relief	70.04		
C	**Interest & Finance Expenses**	**129.01**	**160.72**	**163.59**
1	Interest on Loan	98.09	156.46	165.85
2	Interest on Security Deposit	120.04	122.21	122.25
3	Interest on Working Capital Requirement	(89.12)	(117.96)	(124.51)
D	**Other Expenses**	**407.84**	**475.90**	**475.22**
1	Depreciation	160.27	187.47	187.11
2	Return on Equity	247.58	288.43	288.12
E	**Gain/(Loss) on Efficiency**	**-**	**(45.05)**	**(263.66)**
1	Gain/(Loss) on Sharing O&M Efficiency	-	(45.05)	(110.86)
2	Licensee's Share in Gain/(Loss) on account of Distribution Losses	-	-	(152.80)
F	**Less: Non-Tariff Income**	**429.69**	**429.69**	**221.22**
1	Non-Tariff Income	335.43	335.43	
2	Wheeling Charges, Open Access & Cross Subsidy Charges	94.26	94.26	
G	**Aggregate Revenue Requirement**	**11,047.54**	**14,356.96**	**14,940.07**

6.16 Revenue from Sale of Power

CSPDCL's Submission

CSPDCL submitted the total revenue from sale of power as Rs. 15,227.21 cr. for FY 2018-19 as per Audited Accounts, as against revenue of Rs. 15,474.26 cr. approved by the Commission in the provisional True-up Order. CSPDCL has included the revenue subsidy of Rs. 300.46 Cr. provided by GoCG in the revenue considered in the Petition. Further, the revenue of Rs. 2525.76 Cr. from sale of surplus power is included in the total revenue of Rs. 15,227.21 cr. for FY 2018-19.

CSPDCL submitted that electricity supply to agriculture metered category is billed as per KJJY scheme notified by the State Government, which is equally binding on CSPDCL in terms of overriding effect of Article of Association (AoA). The billing gap considered as revenue of CSPDCL causes financial hardship as it leads to resource deficit, which is necessary for developmental works. Therefore, CSPDCL has not considered the portion of billing gap as revenue for the purpose of present Petition. CSPDCL has included the revenue subsidy received from GoCG towards supply of electricity to HV-4 Steel Industries in the above Table.

CSPDCL submitted total revenue from sale of power of Rs. 13,110.02 cr. for FY 2019-20 as per provisional accounts, as against revenue of Rs. 13,834.87 cr. approved by the Commission in the Tariff Order dated February 28, 2019. Based on the audited accounts, CSPDCL submitted the total revenue from sale of power of Rs. 13,315.23 cr. for FY 2019-20, after including the steel subsidy of Rs. 205.21 crore received from the State Government for the period from April to September 2019.

Commission's View

The Commission notes that CSPDCL has submitted the revenue from sale of power as Rs. 15,227.21 Cr. for FY 2018-19 and Rs. 13,315.23 Cr. for FY 2019-20 based on the audited accounts of the respective years.

The Commission notes that CSPDCL has included the revenue subsidy of Rs. 300.46 Cr. and Rs. 39.66 Cr. for FY 2018-19 and FY 2019-20, respectively, received from CoCG, in the revenue. The Commission is of the view that although only Rs, 39.66 Cr is booked in the accounts of FY 2019-20, it is the Licensee's responsibility to recover the subsidy from the GoCG. Hence, the Commission has considered the revenue subsidy from GoCG as Rs. 300 crore for FY 2019-20. Further, the steel subsidy of Rs. 205.21 crore received from the State Government for the period from April to September 2019 has also been considered in addition, as CSPDCL has considered the same in the revenue as per audited accounts.

As per the methodology adopted in previous tariff orders, the Commission has treated revenue on account of sale of surplus power as revenue. These amounts have been discussed in earlier Section of this Order. Also, as discussed in earlier Section of this Order, the Commission has considered the additional notional revenue for FY 2018-19 and FY 2019-20 towards Agriculture category.

The Commission has accordingly considered total Revenue for FY 2018-19 as shown in the Table below:

Table 6-30: Approved Revenue for FY 2018-19 (Rs. cr.)

Particulars	Prov. True-up	Petition	Approved
Revenue from Retail Sale of Electricity	12,348.29	12,400.99	12,400.99
Add: Subsidy from State Government	297.26	300.46	300.46
Add: Additional revenue for Agriculture Metered category	382.85	0.00	382.97
Add: Revenue from sale of Surplus Power	2,445.86	2,525.76*	2525.77
Total Revenue from Sale	**15,474.26**	**15,227.21**	**15,610.55**

Note: ** has been considered towards reduction of power purchase cost by CSPDCL*

The Commission has considered total Revenue for FY 2019-20 as shown in the Table below:

Table 6-31: Approved Revenue for FY 2019-20 (Rs. cr.)

Particulars	Tariff Order	Petition	Approved
Revenue from Retail Sale of Electricity	13,834.87	13,070.36	13,315.23
Add: Subsidy from State Government	-	39.66	300.00
Add: Additional revenue for Agriculture Metered category	-	-	271.49
Add: Revenue from sale of Surplus Power	-	*	1,319.18
Total Revenue from Sale of Power	**13,834.87**	**13,110.02**	**15,166.24**

Note: ** has been considered towards reduction of power purchase cost by CSPDCL*

The Commission approves total revenue of Rs. 15,610.55 Cr. for FY 2018-19 and Rs. 15,166.24 Cr. for FY 2019-20, after including revenue from sale of surplus power.

6.17 Revenue Gap/(Surplus)

CSPDCL's Submission

CSPDCL has submitted a standalone Revenue Gap of Rs. 306.77 Cr. for FY 2018-19 and Rs. 1246.93 Cr. for FY 2019-20. Further, after considering the adjustment of past Revenue Gaps and carrying cost, CSPDCL has submitted the cumulative Revenue Gap at the end of FY 2019-20 as Rs. 5,157.42 Cr.

Commission's View

The Commission has already allowed certain Revenue Gap/(Surplus) in the previous tariff order based on the provisional true-up for FY 2018-19, hence, the incremental Revenue Gap/(Surplus) after final truing-up of FY 2018-19, has to be allowed in this order.

Further, it is observed that CSPDCL has not considered the Past Surpluses of CSPGCL, CSPTCL and CSLDC adjusted by the Commission in the Tariff Order for FY 2018-19 (refer Table 8.1-1 of the Tariff Order for FY 2018-19), while CSPDCL has correctly considered the Past Gaps considered by the Commission for CSPGCL, CSPTCL, and CSLDC, in the Tariff Order for FY 2019-20. This has led to over-statement of the Revenue Gap of CSPDCL for FY 2018-19 by Rs. 310.76 Crore [Rs. 279.52 Crore CSPGCL) + Rs. 29.98 Crore (CSPTCL) + Rs. 1.26 Crore (CSLDC)].

The Commission has correctly considered the Past Gap/(Surplus) considered by the Commission for CSPDCL, CSPGCL, CSPTCL, and CSLDC, while approving the ARR for the respective year, for correct computation of the Revenue Gap/(Surplus) after final true-up.

The summary of Revenue Gap/(Surplus) approved after final truing-up of FY 2018-19 for CSPDCL is shown in the Table below:

Table 6-32: Approved Revenue Gap/(Surplus) for FY 2018-19 (Rs. Cr.)

Sl. No.	Particulars	Provisional True-up	Petition	Approved after Final True-up
1	Net ARR	11,969.76	13,008.65	14,914.68
2	Revenue from Sale of Power	13,028.40	12,701.81	15,610.55
3	**Standalone Revenue Gap/(Surplus)**	**(1,058.64)**	**306.77**	**(695.88)**
4	Opening Revenue Gap/(Surplus) of FY 2017-18	(211.98)	-	-
5	Add: Standalone Revenue Gap/(Surplus)	(1,058.64)	306.77	(695.88)
6	Add: Revenue Gap/(Surplus) for CSPDCL, CSPGCL, CSPTCL, and CSLDC for FY 2016-17 including carrying cost as given in Tariff Order for FY 2018-19	2,357.60	2,357.60	2,046.84
7	**Closing Revenue Gap/(Surplus)**	**1,510.95**	**2,664.37**	**1,350.96**
8	Gap already adjusted in provisional true up of FY 2018-19 in Tariff Order dated 30.05.2020	-	1,616.04	1,616.04
9	**Balance Revenue Gap**	**-**	**1,048.33**	**(265.08)**
10	Rate of Interest (%)	12.20%	12.20%	12.20%
11	(Carrying)/Holding cost	105.10	109.18	10.11
12	Total Closing Revenue Gap/(Surplus) at end of the year	**1,616.04**	**1,157.51**	**(254.97)**

Similarly, the summary of Revenue Gap/(Surplus) approved after final true-up of FY 2019-20 for CSPDCL is shown in the Table below:

Table 6-33: Approved Revenue Gap/(Surplus) for FY 2019-20 (Rs. cr.)

Sl. No.	Particulars	Tariff Order	Petition	Approved after Final True-up
1	Net ARR	11,047.54	14,356.95	14,940.07
2	Revenue from Sale of Power	13,834.87	13,110.92	15,166.24
3	**Standalone Revenue Gap/(Surplus)**	**(2,787.33)**	**1,246.93**	**(226.16)**
4	Opening Revenue Gap/(Surplus)	2,247.41	1,157.51	(254.97)
5	Add: Standalone Revenue Gap/(surplus)		1,246.93	(226.16)
6	Add: Revenue Gap/Surplus for CSPDCL, CSPGCL, CSPTCL, and CSLDC for FY 2017-18 including carrying cost as given in Tariff Order for FY 2019-20		2247.41	2,247.41
7	**Closing Revenue Gap/(Surplus)**	**(539.92)**	**4651.86**	**1,766.28**
8	Rate of Interest (%)		12.55%	12.55%
9	Carrying/(Holding) cost		505.56	235.86
10	Total Closing Revenue Gap/(surplus) at end of the year		**5,157.42**	**2,002.14**

The Commission approves cumulative Revenue Gap of Rs. 2,002.14 Cr. at the end of FY 2019-20 for CSPDCL. This Revenue Gap has been adjusted against the ARR of CSPDCL for FY 2021-22, along with the due Carrying Cost, as discussed in subsequent Chapter.

7 AGGREGATE REVENUE REQUIREMENT AND GENERATION TARIFF OF CSPGCL FOR FY 2021-22

7.1 Background

The Commission notified the CSERC MYT Regulations, 2015 for the third MYT Control Period from FY 2016-17 to FY 2020-21 on September 9, 2015. Subsequently, the Commission notified the First Amendment to CSERC MYT Regulations on June 16, 2017. The Commission issued the MYT Order on April 30, 2016 approving the ARR of CSPGCL for the Control Period from FY 2016-17 to FY 2020-21 and Generation tariff for FY 2016-17. Further, the AFC for all the plants for FY 2019-20 and FY 2020-21 were revised vide respective Tariff Orders.

Due to the intervening COVID-19 and subsequent lockdowns imposed, the new CSERC MYT Regulations could not be notified. Hence the Commission vide CSERC letter 03/CSERC/Tariff 2020/1228 dated November 26, 2020 has notified the extension of CSERC MYT Regulations, 2015 for next year, i.e., 2021-22. Accordingly, the Generating Company(s) and Licensee(s) were informed to file the Tariff Petition for FY 2021-22 before December 31, 2020 by adopting the principles of CSERC MYT Regulations, 2015. Accordingly, CSPGCL submitted the Petition for determination of ARR and generation tariff for FY 2021-22 in line with the CSERC MYT Regulations, 2015.

Regulation 9.1 and 9.2 of the CSERC MYT Regulations, 2015 provides as under:

"9.1. Notwithstanding anything contained in these Regulations, the commission shall at all times have the authority, either on suo-moto basis or on a Petition filed by the applicant, to determine the tariff including terms and conditions thereof, of any generating company or STU/ transmission licensee or distribution licensee or SLDC

9.2 Tariff in respect of a generating station may be determined for the whole of the generating station or a stage or unit or block of the generating station, and tariff for the transmission system may be determined for the whole of the transmission system or any part of the transmission system. The retail supply tariff, wheeling charges and miscellaneous charges for the distribution licensee shall also be decided by the Commission for whole of the distribution system"

In accordance with the above Regulation, the Commission has determined the ARR for CSPGCL and generation Tariff for FY 2021-22.

7.2 Decommissioning of KTPS

CSPGCL submitted that the balance Units of KTPS are proposed to be de-commissioned by December 31, 2020 because the Chhattisgarh Environment Control Board (CECB) has extended the consent to operate the plant till this date only. Therefore, CSPGCL had claimed the balance depreciation in true-up for FY 2019-20 in accordance with this date. The Commission has also accepted the de-commissioning date of December 31, 2020 and according allowed depreciation in FY 2019-20. Therefore, performance norms and ARR of KTPS are not discussed in this Chapter.

7.3 NORMS for OPERATION FOR CSPGCL GENERATING STATIONS

The norms for operation of the conventional generation plants of CSPGCL were provided in the CSERC MYT Regulations, 2015 issued for the MYT Control Period, and specific parameters were allowed through the previous Orders, which is now made applicable for FY 2021-22. CSPGCL in its Petition has submitted the plant-wise operational parameters against the norms for FY 2021-22. The plant-wise operational parameters as claimed and as approved by the Commission are as under:

7.3.1 HTPS

CSPGCL's Submission

CSPGCL submitted that considering the works related to ESP upgradation and other important works, the Commission had allowed the relaxation in PAF (78.69%) and Specific Oil consumption (0.90 ml/kWh) till March 31, 2021. CSPGCL is expecting the ESP Upgradation work to get completed in FY 2020-21 but due to COVID-19 pandemic, the work is likely to spill over in FY 2021-22. Accordingly, CSPGCL prayed for the same norms to be allowed for the extended Control Period. The norms for operation of HTPS for FY 2021-22 are as under:

Table 7-1: Operational Norms for HTPS as submitted by CSPGCL

Sr. No.	Particulars	UoM	FY 2021-22
1	PAF	%	78.69%
2	Auxiliary Consumption	%	9.70%
3	Specific Oil Consumption	ml/kWh	0.90
4	Station Heat Rate	kcal/kWh	2650
5	Transit Loss	%	0.20%

Commission's View

The operational norms for HTPS for the Control Period have been approved in accordance with Regulation 39 of the CSERC MYT Regulations, 2015. However, as per the proposal for outage of the plant to enable installing of ESP and other capital works, relaxation of norms of PAF and Secondary Fuel Oil Consumption on account of ESP augmentation has been accepted till FY 2020-21 in previous tariff orders. The Commission is of the opinion that owing to the current situation of COVID-19 Pandemic, the works related to ESP augmentation may further get delayed. The Commission has, therefore, accepted the submission of CSPGCL and continued with the same relaxed norms for PAF and Specific Oil Consumption for FY 2021-22. All other norms specified are as per CSERC MYT Regulations, 2015. The operational norms as approved for HTPS for FY 2021-22 are given in the Table below:

Table 7-2: Approved Operational Norms for HTPS for FY 2021-22

Sr. No.	Particulars	UoM	As claimed by CSPGCL	As approved by the Commission
1	PAF	%	78.69%	78.69%
2	Auxiliary Consumption	%	9.70%	9.70%
3	Specific Oil Consumption	ml/kWh	0.90	0.90
4	Station Heat Rate	kcal/kWh	2650	2650
5	Transit Loss	%	0.20%	0.20%

7.3.2 DSPM TPS

CSPGCL's Submission

The norms for Operation of DSPM for FY 2021-22 submitted by CSPGCL are as under:

Table 7-3: Operational Norms for DSPM as submitted by CSPGCL

Sr. No.	Particulars	UoM	FY 2021-22
1	PAF	%	85.00%
2	Auxiliary Consumption	%	9.00%
3	Specific Oil Consumption	ml/kWh	0.50
4	Station Heat Rate	kcal/kWh	2500
5	Transit Loss	%	0.20%

Commission's View

The operational norms for DSPM have been approved in accordance with Regulation 39 of the CSERC MYT Regulations, 2015. As regards the transit loss for coal, DSPM has been considered as pit head station as approved in the MYT order dated April 30, 2016-. The operational norms for DSPM approved for FY 2021-22 are shown in the Table below:

Table 7-4: Approved Operational Norms for DSPM for FY 2021-22

Sr. No.	Particulars	UoM	As claimed by CSPGCL	As approved by the Commission
1	PAF	%	85.00%	85.00%
2	Auxiliary Consumption	%	9.00%	9.00%
3	Specific Oil Consumption	ml/kWh	0.50	0.50
4	Station Heat Rate	kcal/kWh	2500	2500
5	Transit Loss	%	0.20%	0.20%

7.3.3 Korba West Extension TPP (KWTPP)

CSPGCL's Submission

CSPGCL submitted the norms of operation for KWTPP for FY 2021-22, which are shown in the Table below:

Table 7-5: Operational Norms for KWTPP as submitted by CSPGCL

Sr. No.	Particulars	UoM	FY 2021-22
1	PAF	%	85.00%
2	Auxiliary Consumption	%	5.25%
3	Specific Oil Consumption	ml/kWh	0.50
4	Station Heat Rate	kcal/kWh	2375
5	Transit Loss	%	0.20%

Commission's View

The operational norms for KWTPP have been considered in accordance with Regulation 39 of CSERC MYT Regulations, 2015, which are shown in the following Table:

Table 7-6: Approved Operational Norms for DSPM for FY 2021-22

Sr. No.	Particulars	UoM	As claimed by CSPGCL	As approved by the Commission
1	PAF	%	85.00%	85.00%
2	Auxiliary Consumption	%	5.25%	5.25%
3	Specific Oil Consumption	ml/kWh	0.50	0.50
4	Station Heat Rate	kcal/kWh	2375	2375
5	Transit Loss	%	0.20%	0.20%

7.3.4 Hasdeo Bango

CSPGCL's Submission

SPGCL has submitted the norms of operation for Hasdeo Bango as under:

Table 7-7: Operational Norms for Hasdeo Bango as submitted by CSPGCL

Sr. No.	Particulars	UoM	FY 2021-22
1	Gross Generation	MU	274.00
2	Auxiliary Consumption	%	1.00%

Commission's View

The gross generation of 274 MU is equal to the design energy of the plant and the same was approved in the MYT order dated April 30, 2016. The Commission has accepted the same for FY 2021-22. The auxiliary consumption for Hasdeo Bango has been considered in accordance with Regulation 40 of the CSERC MYT Regulations, 2015. The norms of operation for Hasdeo Bango as approved for FY 2021-22 are as under:

Table 7-8: Approved Operational Norms for Hasdeo Bango for FY 2021-22

Sr. No.	Particulars	UoM	As claimed by CSPGCL	As approved by the Commission
1	Gross Generation	MU	274.00	274.00
2	Auxiliary Consumption	%	1.00%	1.00%

7.3.5 Atal Bihari Vajpayee TPP (ABVTPP)

CSPGCL's Submission

The Commission had approved NAPAF of 76.50% for the Control Period considering the mining plan and limitation of Bridge Linkage. CSPGCL submitted that considering the pandemic hardships, the Ministry of Coal reduced the production target for GP III mine for FY 2020-21 from 1.5 MTPA to 1.125 MTPA (25% reduction). For operating their plants at 76.50% PAF, CSPGCL requires 4.67 MTPA, which requires mining target to be overachieved by 33%. CSPGCL therefore, prayed to retain the PAF for the extended Control Period. CSPGCL submitted the norms for operation of ABVTPP for FY 2021-22 as shown in the Table below:

Table 7-9: Operational Norms for ABVTPP as submitted by CSPGCL

Sr. No.	Particulars	UoM	FY 2021-22
1	PAF	%	76.50%
2	Auxiliary Consumption	%	5.25%
3	Specific Oil Consumption	ml/kWh	0.50
4	Station Heat Rate	kcal/kWh	2378.42
5	Transit Loss for Coal	%	0.80%

Commission's View

The Commission had relaxed the operational norms for ABVTPP in the Tariff Order dated July 07, 2018 after exercising its powers under Regulation 83 and 85 of CSERC MYT Regulations, 2015. The Commission had approved the normative PAF of 76.50% for ABVTPP for the period from FY 2018-19 to FY 2020-21. The Commission has taken into account the submission made by CSPGCL on issue regarding coal availability and effect of COVID-19 for FY 2021-22. The Commission has, therefore, agrees to continue with the same norm of PAF for FY 2021-22.

The other operational norms for ABVTPP have been considered in accordance with Regulation 39 of CSERC MYT Regulations, 2015, as shown in the following Table:

Table 7-10: Approved Operational Norms for ABVTPP for FY 2021-22

Sr. No.	Particulars	UoM	As claimed by CSPGCL	As approved by the Commission
1	PAF	%	76.50%	76.50%
2	Auxiliary Consumption	%	5.25%	5.25%
3	Specific Oil Consumption	ml/kWh	0.50	0.50
4	Station Heat Rate	kcal/kWh	2378.42	2378
5	Transit Loss for Coal	%	0.80%	0.80%

7.4 GENERATION FROM CSPGCL GENERATING STATIONS

CSPGCL's submission

CSPGCL has projected gross and net generation for FY 2021-22 for thermal and hydro power stations based on installed capacity, projected PAF and auxiliary consumption.

Commission's View

The generation for FY 2021-22 has been approved based on installed capacity, approved PAF and normative auxiliary consumption. Commission has agreed the submission and accordingly considered and approved the station-wise approved gross generation and net generation for FY 2021-22 is summarised in the Table below:

Table 7-11: Approved Gross Generation and Net Generation for FY 2021-22

Particulars	As submitted by CSPGCL		As approved by the Commission	
	Gross Generation (MU)	Net Generation (MU)	Gross Generation (MU)	Net Generation (MU)
HTPS	5,790.32	5,228.66	5,790.32	5,228.66
DSPM	3,723.00	3,387.93	3,723.00	3,387.93
KWTPP	3,723.00	3,527.54	3,723.00	3,527.54
ABVTPP	6,701.40	6,349.58	6,701.40	6,349.58
Hasdeo Bango HEP	274.00	271.26	274.00	271.26

7.5 ENERGY CHARGES

7.5.1 GCV and Price of Fuel

CSPGCL's Submission

CSPGCL submitted that as per Regulation 41.6 of the CSERC MYT Regulations, 2015, energy charges include Primary Fuel, i.e., Coal cost and Secondary Fuel, i.e., Oil Cost. CSPGCL submitted that the variation in the cost of coal and Energy Charge Rate (ECR) to that extent are taken care by the FCA/VCA mechanism. The Commission determined the ECR for Coal in the respective Orders of FY 2017-18, which is still in force. Hence, CSPGCL proposes to continue the same ECR for coal which was used for billing of scheduled energy in previous years.

CSPGCL submitted that the ECR for oil is not covered by the FCA mechanism and is addressed at the time of true-up. Hence, the ECR for oil may either be maintained at the level relied in the earlier Orders or may be aligned to realistic levels, so that the impact is minimal at the time of true-up, as the price of oil is uncontrollable. Due to COVID pandemic, the system demand has not been stable in the recent past, which has impacted routine oil procurement also. Hence, instead of specific three-month data, reliance is being placed on the full-year data for FY 2019-20 for the purpose of true-up.

Commission's View

For the purpose of computation of variable cost, the Price and GCV of Primary Fuel is considered same as considered for FY 2020-21. In case of ABVTPP, the Commission has considered the GCV and landed price as approved in the Tariff Order dated July 07, 2018. The GCV and landed price of primary fuel, i.e., coal, for various stations considered and approved by the Commission is summarised in the following Table:

Table 7-12: GCV and Landed Cost of Coal considered by the Commission for FY 2021-22

Particulars	As per FY 2020-21 Order		As approved by Commission	
	GCV of Coal (kcal/kg)	Landed Price of Coal (Rs. /MT)	GCV of Coal (kcal/kg)	Landed Price of Coal (Rs. /MT)
HTPS	3,406	1,690.52	3,406	1,690.52
DSPM	3,449	1,921.22	3,449	1,921.22

Particulars	As per FY 2020-21 Order		As approved by Commission	
	GCV of Coal (kcal/kg)	Landed Price of Coal (Rs. /MT)	GCV of Coal (kcal/kg)	Landed Price of Coal (Rs. /MT)
KWTPP	3,401	1,690.52	3,401	1,690.52
ABVTPP	3,631	1,990.87	3,631	1,990.87

The GCV and landed price of Secondary fuel, i.e., oil, for various stations considered and approved by the Commission is summarised in the Table below:

Table 7-13: GCV and Landed Cost of Oil considered by the Commission for FY 2021-22

Particulars	As submitted by CSPGCL		As approved by Commission	
	GCV of Oil (kcal/L)	Landed Price of Oil (Rs. /kl)	GCV of Oil (kcal/L)	Landed Price of Oil (Rs. /kl)
HTPS	10,000	49,879.59	10,000	49,879.59
DSPM	10,000	51,144.99	10,000	51,144.99
KWTPP	10,000	49,879.59	10,000	49,879.59
ABVTPP	10,000*	49,548.47*	10,000	49,548.47

**Revised submitted by CSPGCL*

7.5.2 Variable Cost and Energy Charges

CSPGCL's Submission

CSPGCL has computed the fuel cost based on norms of operation submitted in the Petition and GCV and Price of Fuel considered in the Petition.

Commission's View

As regards the computation of energy charges, CSERC MYT Regulations, 2015 provides as under:

"41.6. The energy charge shall cover the fuel cost (primary fuel as well as secondary fuel), and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month. Total Energy

charge payable to the generating company for a month shall be:

(Energy charge rate in Rs./kWh) x {Scheduled energy (ex-bus) for the month in kWh.}

Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined up to three decimal places in accordance with the following formulae for coal based stations:

ECR: [{(GHR- SFC x CVSF)x LPPF/CVPF }+ SFC x LPSFi] x 100/(100 - AUX)

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic meter, as applicable.

CVSF = Calorific value of Secondary fuel, in kCal per ml

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

GHR = Gross Station Heat Rate, in kCal per kWh.

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

SFC = Specific fuel oil consumption, in ml per kWh.

LPSFi=Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially

41.7. Though Secondary fuel cost shall be part of variable cost but shall not be part of Variable Cost Adjustment (VCA) formula. The impact on account of secondary fuel oil cost shall be taken care of at the time of true up.

41.8. Initially, the landed cost incurred by the generating company on secondary fuel oil shall be taken based on actual weighted average price of the three preceding months and in the absence of landed costs for the three preceding months, latest procurement price for the generating station, before the start of the year.

41.9. The secondary fuel oil expenses shall be subject to fuel cost adjustment at the end of the each year of tariff period, at the time of true up, *41.10. The landed cost of fuel for the month shall include price of fuel corresponding to the grade and quality of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by conveyer / rail / road or any other means, and, for the purpose of computation of energy charge, and in case of coal shall be arrived at after considering normative transit and handling losses as specified in Regulation 39.7.*

41.11. The bi-monthly increase in the primary fuel cost shall be recovered as per the Fuel Cost Adjustment mechanism as per Regulation 67 of this Regulations."

The variable cost for each generating station has been computed for FY 2021-22 by considering the operational norms, GCV of coal and Price of Fuel as discussed above.

The increase/decrease in primary fuel cost for FY 2021-22, if any, shall be recovered by CSPGCL as per Fuel Cost Adjustment (FCA) specified in Regulation 67 of the CSERC MYT Regulations, 2015.

The summary of Generating Station-wise cost of Primary Fuel, Secondary Fuel and energy charges as submitted by CSPGCL and as approved for FY 2021-22 are shown in the following Table:

Table 7-14: Variable Cost for CSPGCL Power Stations for FY 2021-22

Sl. No.	Particulars	Units	HTPS		DSPM		KWTPP		ABVTPP	
			Petition	Approved	Petition	Approved	Petition	Approved	Petition	Approved
1	Rated Capacity	MW	840	840	500	500	500	500	1000	1000
2	Target Availability (PLF)	%	78.69%	78.69%	85%	85%	85.00%	85.00%	76.50%	76.50%
3	Units of Generation at Normative PLF	MU	5,790	5,790	3,723	3,723	3,723	3,723	6,701	6,701
4	Gross Station Heat Rate (SHR)	kcal/kWh	2,650	2,650	2,500	2,500	2,375	2,375	2,378	2,378
5	Specific Fuel Oil Consumption (SFC)	ml/kWh	0.90	0.90	0.50	0.50	0.50	0.50	0.50	0.50
6	Calorific Value of Secondary Fuel (CVSF)	kcal/L	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
7	Weighted Average Landed Price of Primary Fuel (LPPF)	Rs./MT	1,690.52	1,690.52	1,921.22	1,921.22	1,690.52	1,690.52	1,990.87	1,990.87
8	Weighted Average Landed Price of Secondary Fuel	Rs./kL	49,879.59	49.879.59	51,144.99	51,144.99	49,879.59	49,879.59	49,548.47	49,548.47
9	Weighted Average Landed Price (for WC)	Rs./kL	39,029.31	39,029.31	39,868.50	39,868.50	39,029.31	39,029.31	38,056.37	38,056.37
10	Gross Calorific Value of Primary Fuel (CVPF)	kcal/kg	3,406	3,406	3,449	3,449	3,401	3,401	3,631	3,631
11	Normative Auxiliary Consumption (%)	%	9.70%	9.70%	9.00%	9.00%	5.25%	5.25%	5.25%	5.25%
12	Overall Heat	G Cal	15347198	15347198	9306495	9306495	8840301	8840301	15938744	15938744
13	Heat from Oil	G Cal	52,113	52,113	18,615	18,615	18,615	18,615	33,507	33,507
14	Heat from Coal	G Cal	15295085	15292248	9287880	9288885	8821686	8823510	15905237	15905237
15	Transit Losses	%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.80%	0.80%
16	Projected Oil Consumption	kL	5,211.29	5,211.29	1,861.50	1,861.50	1,861.50	1,861.50	3,350.70	3,350.70
17	Projected Coal Consumption	MT	4490894	4490894	2692763	2692763	2593698	2593698	4380324	4380324

Sl. No.	Particulars	Units	HTPS		DSPM		KWTPP		ABVTPP	
			Petition	Approved	Petition	Approved	Petition	Approved	Petition	Approved
18	Specific Coal Consumption	kg/kWh	0.78	0.78	0.72	0.72	0.70	0.70	0.65	0.65
19	Coal Cost	Rs. Crore	759.20	759.20	517.34	517.34	438.47	438.47	872.06	872.06
20	Oil Cost	Rs. Crore	25.99	25.99	9.52	9.52	9.29	9.29	16.60	16.60
21	Oil Cost (for WC)	Rs. Crore	20.34	20.34	7.42	7.42	7.27	7.27	12.75	12.75
22	Total Fuel Cost	Rs. Crore	785.19	785.19	526.86	526.86	447.75	447.75	888.67	888.67
23	Energy Charges	Rs. /kWh	1.502	1.502	1.555	1.555	1.269	1.269	1.400	1.400

Note*: Petition values taken same as approved for FY 2020-21*

7.6 Annual fixed charges

Regulations 34 and 35 of the CSERC MYT Regulations, 2015 provides the components of Tariff and Annual Fixed Charges for Generation Stations as under:

"34. COMPONENTS OF TARIFF

34.1 The tariff for supply of electricity 1lom a thermal generating station shall comprise two parts, namely, capacity charge (for recovery of annual fixed cost consisting of the components specified in Regulation35) and energy charge (for recovery of fuel cost).

34.2. The tariff for supply of electricity from a hydro generating station shall comprise composite capacity charge and energy charge to be derived in the manner specified in Regulation 42, (consisting of the components referred in Regulation 35).

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;

Less:

(f) Non Tariff Income

NOTE:

Non-Tariff Income as specified in the Regulation 0, shall be subtracted from the sum of above (a to e) to arrive at AFC.

The SLDC charges shall be recovered in accordance with fees and charges determined in accordance with provisions of Chapter 8 of these regulations.

Pension & Gratuity Fund Contribution shall be recoverable in equal monthly installments as maybe determined by the Commission in the

Tariff order.

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.”

The Annual Fixed Charges for CSPGCL Generation Stations have been accordingly considered as described below:

7.6.1 Capital Cost and Additional Capitalisation

CSPGCL’s submission

CSPGCL submitted that the opening GFA for FY 2021-22 for all generating stations has been computed by taking of closing GFA as considered in true-up for FY 2019-20 and the additional capitalisation for FY 2020-21, which includes balance works to be taken up in FY 2020-21 for which in principle approval has already been accorded by the Commission.

Similarly, the additional capitalisation for FY 2021-22 has been considered as submitted in the Capital Investment Plan (CIP) Petition filed separately on August 7, 2020 and January 12, 2021 in Case No. 63 of 2020 and Case No. 10 of 2021. These include the works which are either approved or proposed by CSPGCL, through this Petition.

CSPGCL submitted that due to the pandemic, multiple hardships are being faced in executing routine works. CSPGCL submitted that owing to the force majeure, many works were postponed to FY 2021-22 for execution. CSPGCL has hence, prayed to allow spill over of works and extension in cut-off date for KWTPP and ABVTPP up to March 31, 2022.

Commission's View

The Commission had approved the additional capitalisation for FY 2020-21 in Capital Investment Plan (CIP) Order dated March 16, 2016. CSPGCL has filed Petition for approval of Capital Investment Plan on 7 August 2020 as Case No. 63 of 2020 and subsequently on 12 January 2021 as Case No. 10 of 2021.

The Commission after scrutiny of all the schemes proposed in both the Petition and after consideration of restrictions imposed due to COVID-19 pandemic has approved the additional capitalisation for FY 2020-21 and FY 2021-22 vide above-referred CIP Order.

The Commission has considered and approved the opening GFA for FY 2020-21 same as closing GFA approved in true-up of FY 2019-20 and additional capitalisation during FY 2020-21 and FY 2021-22 as per above-referred CIP Order. The Commission has accordingly arrived at the closing GFA for FY 2021-22.

As regards ABVTPP, the Commission observed that there is slight increase in capital cost approved vide Tariff Order dated July 07, 2018. The Commission had approved the total capital cost of Rs. 8892.50 Crore after inclusion of additional capitalisation approved in the Tariff Order. CSPGCL has now prayed to extend the additional capitalisation till FY 2021-22. Accordingly, the closing GFA proposed for FY 2021-22 after considering the additional capitalisation for FY 2020-21 and FY 2021-22 is Rs. 8899.00 Crore.

The Commission has taken cognizance of the matter of capital works to be carried forward in FY 2021-22 due to COVID-19 pandemic. The Commission, therefore, has approved the extension of cut-off date for KWTPP and ABVTPP up to March 31, 2022. The Commission has addressed this issue in detail vide above-referred CIP order.

The additional capitalisation approved for FY 2020-21 and FY 2021-22 is shown in the following Table:

Table 7-15: Approved Additional Capitalisation (Rs. Crore)

Sr. No.	Particulars	As claimed by CSPGCL		As approved by Commission	
		FY 2020-21	FY 2021-22	FY 2020-21	FY 2021-22
1	HTPS	105.95	114.20	105.95	114.20
2	DSPM	6.73	18.80	6.73	13.86
3	KWTPP	73.47	51.27	41.87	80.54
4	ABVTPP	97.86	140.30	82.41	155.74
5	Hasdeo Bango HEP	-	3.07	-	3.07
	Total Additional Capitalisation	**284.00**	**327.63**	**236.96**	**367.40**

7.6.2 Means of Finance

CSPCGL has considered the Debt: Equity ratio of 70:30 for the additional capitalisation proposed for FY 2021-22 for HTPS, DSPM and Hasdeo Bango in accordance with Regulation 17 of the CSERC MYT Regulations, 2015. As regards, KWTPP and ABVTPP, CSPGCL has considered the Debt:Equity ratio in line with the actual debt:equity ratio of FY 2019-20 for funding of additional capitalisation for FY 2021-22. The Commission has accepted the Debt:Equity ratio for additional capitalisation as submitted by CSPGCL for FY 2021-22.

7.6.3 Depreciation

CSPGCL's submission

CSPGCL has considered the depreciation for HTPS and DSPM based on average depreciation rates of 5.32% and 5.47%, respectively, which is in line with the average depreciation rates considered in true-up of FY 2019-20.

As regards Hasdeo Bango HEP, the depreciation has been computed based on the balance useful life and the balance depreciable GFA as on FY 2021-22.

As regards KWTPP and ABVTPP, CSPGCL has computed the depreciation rates to meet the repayment obligation for FY 2021-22.

Regulation 24.4 of the CSERC MYT Regulations, 2015, specifies as under:

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

Accordingly, CSPGCL has proposed to revise the depreciation rates for KWTPP and ABVTPP as considered in True-up of FY 2019-20 in order to match with the repayment obligation. CSPGCL has considered the depreciation rate of 6.35% for KWTPP and 6.04% for ABVTPP for FY 2021-22.

Table 7-16: Depreciation for FY 2021-22 as submitted by CSPGCL (Rs. Crore)

Sr. No.	Particulars	FY 2021-22
1	HTPS	37.74
2	DSPM	130.55
3	KWTPP	235.07
4	ABVTPP	533.25
5	Hasdeo Bango HEP	2.96

Commission's View

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

"24. DEPRECIATION

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

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

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

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

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

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

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

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

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

...

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

Provided for the new generating station or unit, the depreciation shall be charged on pro-rata basis during the year the asset has been declared under commercial operation. For subsequent years, the depreciation shall be computed on the average asset base during the year."

The closing GFA for FY 2019-20 as approved in the true-up for FY 2019-20 has been considered as the opening GFA for FY 2020-21. As discussed in the previous section on additional capitalisation, GFA addition for FY 2020-21 and FY 2021-22 is considered in line with the additional capitalisation approved in the above-referred CIP Order.

The Commission has considered the average depreciation rates for HTPS and DSPM as approved in True-up of FY 2019-20.

As regards Hasdeo Bango HEP, the depreciation has been computed on the basis of balance useful life in line with the approach adopted in previous Orders.

As regards KWTPP and ABVTPP, the Commission in accordance with the provision specified in Regulation 24.4 of the CSERC MYT Regulations, 2015 has accepted the submission of CSPGCL and has considered the revised average depreciation rates of 6.35% and 6.04%, respectively, as submitted by CSPGCL for FY 2021-22.

The depreciation as approved for FY 2021-22 is given in the following Table:

Table 7-17: Approved Depreciation for CSPGCL Stations for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo HEP
1	Opening GFA	652.29	2,377.34	3,642.77	8,743.26	109.90
2	Addition of GFA	114.20	13.86	80.54	155.74	3.07
3	Closing GFA for the year	766.49	2,391.20	3,723.31	8,899.00	112.97
4	Weighted Average rate of Depreciation (%)	5.32%	5.47%	6.35%	6.04%	-
5	Accumulated depreciation	-	-	-	-	101.67
6	Balanced Depreciable value	-	-	-	-	26.63
7	Balance useful life (Years)	-	-	-	-	9.00
8	**Depreciation**	**37.73**	**130.52**	**233.99**	**532.78**	**2.96**

7.6.4 Return on Equity

CSPGCL's Submission

CSPGCL has computed the opening equity by considering the closing equity of FY 2019-20 and addition of equity for FY 2021-22 based on the additional capitalisation submitted and after considering the debt:equity ratio expected for FY 2021-22. The Return on Equity for FY 2021-22 has been computed as per Regulation 22, on pre-tax basis at base rate of 15.5% grossed up with MAT rate of 17.47% on permissible equity. Return on Equity submitted for FY 2021-22 is as under:

Table 7-18: Return on Equity for FY 2021-22 as submitted by CSPGCL (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo HEP
1	Opening Equity	451.97	707.98	630.16	1090.25	37.72
2	Addition	34.26	5.64	9.29	17.69	0.92
3	Closing Equity	486.23	713.62	639.45	1107.94	38.64
4	Pre-Tax Rate of ROE	18.78%	18.78%	18.78%	18.78%	18.78%
5	Return on Equity	88.10	133.50	119.23	206.43	7.17

Commission's View

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

"22. RETURN ON EQUITY

22.1 Generation, Transmission and SLDC: Return on equity shall be computed in rupee terms on the equity base determined in accordance with Regulation 17. Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per Regulation 22.3 of these Regulations.

... ...

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

Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee or distribution licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the Control Period shall be trued up separately for each year of the Control period. In case, no tax is payable during the financial year, the tax rate for the purpose of truing up shall be taken as nil.

Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

where, 't' is the applicable tax rate in accordance with regulation 22.3 of these regulations.

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

The closing equity for FY 2019-20 as approved in this order has been considered as the opening equity for FY 2020-21. The equity towards the additional capitalisation for FY 2020-21 and FY 2021-22 has been considered based on funding of additional capitalisation discussed in the means of finance section of this Order.

As discussed earlier, normative equity has been considered at 30% for HTPS, DSPM and Hasdeo Bango. As regards KWTPP and ABVTPP, the Commission has considered the equity funding of 18.12% and 12.61%, respectively, in line with the submission of CSPGCL for FY 2021-22 and the balance additional capitalisation is expected to be funded through loan.

Further, return of 15.5% has been considered for FY 2021-22 on the average permissible equity base, in line with the approach adopted in True-up for FY 2019-20. The Commission shall allow the Income Tax on actual basis at the time of Truing-up of FY 2021-22.

Accordingly, the return on equity has been approved for CSPGCL generating Stations for FY 2021-22, as under:

Table 7-19: Approved Return on Equity for FY 2021-22 (Rs. Crore)

Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
Opening normative equity for the year	451.97	707.98	624.44	1087.41	37.72
Addition to normative equity	34.26	4.16	14.60	19.64	0.92
Closing normative equity for the year	486.23	712.14	639.03	1107.05	38.64
Average Normative equity for the year	469.10	710.06	631.73	1097.23	38.18
Rate of Return (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	**72.71**	**110.06**	**97.92**	**170.07**	**5.92**

7.6.5 Interest and Finance Charges

CSPGCL's Submission

CSPGCL has computed the opening loan balance for FY 2020-21 considering the closing loan balances based on true-up for FY 2019-20 and addition of normative loan for FY 2020-21 and FY 2021-22 as per the proposed additional capitalisation and debt:equity ratio proposed in the Petition. The repayment is considered as per the depreciation claimed for FY 2021-22 for each of the power stations. CSPGCL has considered the weighted average interest rates as claimed in True-up of FY 2019-20 for FY 2021-22 for each of the power station. CSPGCL has computed interest and finance charges on loan capital as per Regulation 23 of the CSERC MYT Regulations, 2015 for FY 2021-22 as under:

Table 7-20: Interest and Finance Charges for FY 2021-22 as submitted by CSPGCL (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
1	Opening Loan	193.47	140.09	1679.56	5492.53	-
2	Addition	79.94	13.16	41.98	122.61	2.15
3	Repayment	37.74	130.55	235.07	533.25	2.15
4	Closing Loan	235.66	22.70	1486.47	5081.89	-
5	Interest Rate	11.22%	10.25%	9.90%	9.90%	9.92%
6	Interest on Loan	24.08	8.34	156.73	523.46	-
7	Other Finance Charges and share of saving in interest rate	0.21	0.72	15.11	48.91	-
	Total Interest	**24.29**	**9.06**	**171.84**	**572.34**	**-**

CSPGCL vide its letter dated 8th July 2021, made certain additional submissions to the Petition with regard to certain developments, and requested the Commission to allow CSPGCL to file for the same along with the next Tariff Petition and submitted that it does not have any material impact on the current Petition. CSPGCL had made the following submissions with regards to Interest Expenses:

1. After continuous rigorous pursuance, the Power Finance Corporation has agreed for resetting two of the most critical existing loans. The resetting of loans is expected to result in reduction of interest cost.
2. CSPGCL shall pass on the benefit to the beneficiaries in accordance with the Regulations.
3. CSPGCL submitted that it would file for pass through of gains through the resetting of PFC interest rate, along with the submission on additional O&M charges, as these two developments would tend to cancel each other out.

Commission's View

Regulation 23 of the CSERC MYT Regulations, 2015 prescribes the method of computation of interest and finance charges for loan capital. The closing normative loan for FY 2019-20 as approved in True-up of FY 2019-20 has been considered as opening loan for FY 2020-21. The loan addition has been considered after applying the debt:equity ratio as discussed in the above sections of this Chapter to the additional capitalisation for consideration of normative loan.

The repayment during the year has been considered equivalent to the approved depreciation for FY 2021-22.

As per Regulation 23.5 of the CSERC MYT Regulations, 2015, the rate of interest shall be weighted average rate of interest calculated based on actual loan portfolio at the beginning of the year. CSPGCL has considered the weighted average rate of depreciation as claimed in True-up of FY 2019-20. The Commission has accepted the weighted average interest rates as submitted by CSPGCL for each of the power stations.

The Commission has also considered the share of savings in interest cost on account of re-financing as proposed by CSPGCL. The amounts are reflecting in DSPM, KWTPP and ABVTPP power stations.

Accordingly, the approved Interest and finance charges on loan capital for CSPGCL generating Stations for FY 2021-22, are as under:

Table 7-21: Approved Interest and Finance Charges for FY 2021-22 (Rs. Crore)

Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
Opening normative loan for the year	193.47	140.00	1654.60	5480.73	-
Addition to normative loan	79.94	9.70	66.40	136.10	2.15
Repayment of normative loan	37.73	130.52	233.99	532.78	2.15
Closing normative loan for the year	235.67	19.18	1487.00	5084.05	-
Average Normative loan for the year	214.57	79.59	1570.80	5282.39	-
Weighted average rate of interest (%)	11.22%	10.25%	9.90%	9.90%	9.92%
Interest expenses for the period	24.08	8.16	155.52	522.98	-

Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
Share of savings due to interest rate	-	0.58	14.87	48.60	-
Finance and Other charges	0.21	0.13	0.13	0.26	-
Total Interest on Loan	**24.29**	**8.86**	**170.52**	**571.84**	**-**

As regards the additional submission made by CSPGCL vide letter dated 8th July 2021, the Commission has taken cognizance of the matter concerning the passing through of additional gains through the resetting of interest rates. CSPGCL is directed to submit the required details on resetting of interest rate on PFC loans, along with the next Tariff Petition. The Commission shall take an appropriate view on this matter at that point of time.

7.6.6 Operation & Maintenance Expenses

CSPGCL's Submission

CSPGCL has projected the O&M expenses for FY 2021-22 after considering the approved O&M expenses for FY 2020-21 vide Tariff Order dated May 30, 2020 and has applied the escalation rates of CPI and WPI as applicable for FY 2019-20. CSPGCL has also claimed the impact of wage revision over and above the normative O&M expenses computed for FY 2021-22. The following Table shows the O&M expenses claimed by CSPGCL for FY 2021-22:

Table 7-22: O&M Expenses for FY 2021-22 as submitted by CSPGCL (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
1	O&M expenses	366.77	182.14	110.34	220.69	15.89
2	Wage Revision	37.73	6.37	4.06	8.13	1.51
3	O&M Expenses including wage revision	404.51	188.51	114.41	228.82	17.40

CSPGCL vide its letter dated 8th July 2021, had made some additional submissions to this Petition with respect to certain developments, and requested the Commission to allow CSPGCL to file for the same along with the next Tariff Petition and submitted that it does not have any material impact on the current Petition. CSPGCL had made the following submissions as regards O&M expenses:

1. The MYT Petition was filed by CSPGCL for the period 01.04.2016 to 31.03.2021 in accordance with the MYT Regulations, 2015 notified on 09.09.2015.
2. Ministry of Environment and Forests (MoEF) amended the Environment (Protection) Act, 1986 vide notification dated 25th January 2016. Since the notification was after the notification of MYT Regulations, 2015, CSPGCL did not get an opportunity to consider the implications of the said amendment on the O&M expenses computed as per MYT Regulations, 2015 and the actual cost implication kept on piling up.
3. The amendment to Environment (Protection) Act, 1986 was with respect to 100% utilization of fly ash from coal or lignite thermal power stations. O&M expenses were expected to increase due to this amendment to the extent of sharing of transportation charges with fly ash users.
4. The issue was raised before Central Electricity Regulatory Commission (CERC) in several cases on whether the aforesaid amendment would qualify for 'Change in Law'. CERC in its Orders clearly stated that sharing of the transportation cost by the coal and lignite stations with the fly ash users, is covered under 'Change in Law' and has allowed this expense as additional O&M expenses.
5. Basic principle for consequence of 'Change in Law' should be determined in such a manner so as to compensate a party affected by Change in Law event, such that the party is restored to the same economic position as if such Change in Law had not occurred.
6. CSPGCL has been trying its best efforts for ash utilization even before the aforesaid amendment was brought in place. In some cases, it involved land filling, which though qualified for ash utilization but was not considered by the Commission and such expenses were borne by CSPGCL only.
7. On 22nd April 2021, MoEF published a new draft amendment, which stipulates not only steep trajectory of ash utilization but also mandates utilization of legacy ash.
8. CSPGCL hence, prayed for filing of additional O&M expenses incurred during the current Control Period at the time of filing of Petition for the next Control Period/ True-up of last financial year along with all relevant documents for prudence check and approval of the Commission.

Commission's View

Regulations 38.5.1 (c), (d), (e) and (f) of the CSERC MYT Regulations, 2015 specify as under:

> *"38.5. Operation And Maintenance Expenses*
>
> *38.5.1 Thermal Generating Station:*
>
> *... ... ...*
>
> *Employee Cost*
>
> *(c) The employee cost, excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, for the base year i.e. FY 2015-16, shall be derived on the basis of the normalized average of the actual employee expenses excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2015-16, subject to prudence check by the Commission.*
>
> *(d) The normalization shall be done by applying last five year average increase in consumer price Index (CPI) on year to year basis. The average of normalized net present value for FY 2010-11 to FY 2014-15, shall then be used to project base year value for FY 2015-16. The base year value so arrived, shall be escalated by the above inflation rate to estimate the employee expense (excluding impact of pension fund contribution and pay revision and any other expense of non-recurring nature, if any) for each year of the control period.*
>
> *At the time of true up; the employee costs shall be considered after taking into account the actual increase in CPI during the year instead of projected inflation for that period.*
>
> *Provided further that impact of pay revision (including arrears) and pension fund contribution shall be allowed on actual during the true-up as per accounts, subject to prudence check and any other factor considered appropriate by the Commission.*

A&G Expenses and R&M Expenses

(e) The administrative and general expenses (excluding water charges) and repair and maintenance expenses, for the base year i.e. FY 2015-16 shall be derived on the basis of the normalized average of the actual administrative and general expenses (excluding water charges) and repair and maintenance expenses, respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2015-16, subject to prudence check by the Commission. Any other expense of non-recurring nature shall be excluded while determining normalized average for the previous five (5) years.

(f) The normalization shall be done by applying last five year average increase in Wholesale Price Index (WPI) on year to year basis. The average of normalized net present value for FY2010-11 to FY 2014-15, shall then be used to project base year value for FY 2015-16. The base year value so arrived, shall be escalated by the above inflation rate 10 estimate the administrative and general expense and repair and maintenance expenses for each year of the control period.

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

Provided that water charges shall be pass-through in tariff on reimbursement basis."

Similarly, Regulation 38.5.2 (c), (d), (e) and (f) of the CSERC MYT Regulations, 2015 specify the principles for estimation of the O&M expenses of the existing hydro generation stations.

The O&M expenses for FY 2021-22 has been projected on the basis of methodology prescribed in the CSERC MYT Regulations, 2015.

The data published by the Office of Economic Advisor and Ministry of Statistics and Programme Implementation has been relied upon to compute average increase in CPI and WPI over past five years from FY 2015-16 to FY 2019-20. The summary of the yearly inflation and the average inflation considered for projecting the O&M expenses is shown in the Table below:

Table 7-23: Computation of Escalation Rate for Projections (%)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Average increase
CPI-IW (%)	5.65%	4.12%	3.08%	5.45%	7.53%	5.17%
WPI-AC (%)	(3.64%)	1.73%	2.92%	4.28%	1.68%	1.39%

***Note**: CPI-IW: Consumer Price Index - Industrial Workers*

WPI-AC: Wholesale Price Index - All Commodities

The Commission has considered the employee expenses approved for FY 2020-21 vide Tariff Order dated May 30, 2020, as base expenses for projecting employee expenses for FY 2021-22. The Regulation provides for employee expenses to be escalated at the average rate of CPI increase, i.e., 5.17% as derived in the above Table. The Commission accordingly has escalated the base expenses approved for FY 2020-21 by average CPI increase to arrive at normative employee expenses for FY 2021-22.

Similarly, the Commission has considered the A&G expenses and R&M expenses approved for FY 2020-21 vide Tariff Order dated May 30, 2020, as base expenses for projecting A&G expenses and R&M expenses for FY 2021-22. The Regulation provides for A&G expenses and R&M expenses to be escalated at the average rate of WPI increase, i.e., 1.39% as derived in the above Table. The Commission has accordingly escalated the base expenses approved for FY 2020-21 by average WPI increase to arrive at normative A&G expenses and R&M expenses for FY 2021-22.

The above approach for projecting O&M expenses for FY 2021-22 has been adopted for HTPS, DSPM and Hasdeo Bango.

For the Units/generating stations commissioned after April 1, 2010, Regulation 38.5.1.1 of the CSERC MYT Regulations, 2015 provides the norm for O&M Expenses, as reproduced below:

"38.5.1.1 The O&M expenses for the base year i.e. FY 2015-16, for the units / stations coming into commercial operation after 01.04.2010, shall be considered as under:-

a) The normative O&M expenses as specified in the Central Electricity Regulatory

Commission (Terms and Conditions of Tariff) Regulation 2009 for the FY 2010-11 and shall be admissible at the rate of90% of the value allowed by CERC for the respective year.

Such normative value shall be exclusive of water taxes payable to the State government which shall be pass through to the beneficiary on actual basis. However, except for pension fund liabilities, normative value, so derived, shall be considered inclusive of al) expenses incurred to meet head office or holding company expenses.

b) The adjusted value for FY 2010-11, as arrived above, shall be escalated by the actual inflation at a weighted average of 60:40 of CPI:WPI ratio, respectively on year to year basis till FY 2014- 15.

c) For projecting the normative value for FY 2015-16 and onwards, average inflation of last five years (i.e. FY 2010-11 to FY 2014-15) shall be applied.

Provided, at the time of true up, the normative O&M cost shall be readjusted to take into account the effect of actual inflation for that period.

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

As regards KWTPP and ABVTPP, in accordance with the above Regulation, there is no separate bifurcation of employee expenses, A&G expenses, and R&M expenses. The Commission has been approving normative O&M expenses in totality as provided in the above Regulation. The Commission hence, in case of KWTPP and ABVTPP has adopted the approach as submitted by CSPGCL in its Petition and considered the approved O&M expenses for FY 2020-21 vide Tariff Order dated May 30, 2020 as base expenses for projecting O&M expenses for FY 2021-22. The escalation rate considered is 3.66%, which is arrived on the basis of weighted average of CPI: WPI increase in the ratio of 60:40.

As per the CSERC MYT Regulations, 2015, the water charges will be pass through on reimbursement basis and the impact of pay revision (including arrears) will be allowed on actual during the true-up as per the audited/un-audited accounts, subject to prudence check and any other factor considered appropriate. Accordingly, the Commission has not considered the impact of wage revision as submitted by CSPGCL.

Further, the normative O&M expenses shall be adjusted to take into account the effect of actual inflation for that period.

The summary of the O&M expenses as approved for FY 2021-22 is summarised in the following Table:

Table 7-24: Approved O&M Expenses for FY 2021-22 (Rs. Crore)

Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
Employee Expenses	240.45	85.59			11.68
R&M Expenses and A&G Expenses	120.58	94.36			3.93
Total O&M Expenses	**361.03**	**179.95**	**108.74**	**217.47**	**15.62**

As regards the additional submission made by CSPGCL vide letter dated 8th July 2021, the Commission has taken cognizance of the matter concerning the allowance of additional O&M expenses under 'Change in Law' for utilization of fly ash for this Control Period. CSPGCL is directed to submit the required details and justification in this regard, along with the next Tariff Petition. The Commission shall take an appropriate view on this matter at that point of time.

7.6.7 Contribution to Pension and Gratuity

CSPGCL's Submission

Shortfall in Pension and Gratuity Trust for FY 2019-20

CSPGCL submitted that a Review Petition bearing No. 51 of 2019 has been filed against the Order dated 28.02.2019 wherein the Commission has reduced the Pension & Gratuity Contribution for FY 2019-20. The final outcome of the aforesaid Petition shall have a bearing on Pension & Gratuity expenses for FY 2019-20.

The Commission, in the MYT Order, had finalized the contribution to Pension and Gratuity Fund to be recovered from tariff at Rs. 622.44 Crore for FY 2019-20. However, the Commission has reset the contribution to Pension and Gratuity Fund to be recovered from tariff at Rs. 441.91 Crore for FY 2019-20. The Commission has adopted the principle that the total outgo from the trust shall be met out by the interest on the trust fund and the contribution by the Power Companies. The actual pay-out from the trust towards Pension and Gratuity was Rs. 920.32 Crore and the actual interest income of the trust was Rs. 336.60 Cr in FY 2019-20. Thus, the total contribution to the trust was Rs. 778.51 Crore (Rs. 441.91 Crore + Rs. 336.60 Crore). In the instant case, the additional Contribution to Pension fund by the Power Companies works out as (Rs. 920.31- Rs. 778.51= Rs 141.81 Crore) which needs to be considered by the Commission.

CSPGCL requested that the differential amount be allowed as additional recovery in FY 2021-22, without any carrying cost. The inter-Company ratio is proposed to be retained at the same level as was applicable in the original order. Accordingly, CSPGCL prayed for additional recovery of Rs. 38.65 Crore. Further, considering the other expenses incurred by the Trust (i.e., Total Expenses) the total gap stands at Rs. 240.29 Crore with CSPGCL share of Rs. 65.49 Crore.

Pension and Gratuity Fund Contribution for FY 2021-22

CSPGCL submitted that Regulation 32 of the CSERC MYT Regulations, 2015 provides that the contribution to the fund shall be decided by the Commission on the basis of actuarial analysis, expected pension outflow and availability of funds with the Pension trust at time of determination of MYT/ARR for each year of the Control Period. Accordingly, CSPGCL submitted the expected Contribution to Gratuity/Pension Fund for FY 2021-22. CSPGCL has considered the yearly escalation in Contribution by all Companies at 9.05% and has accordingly computed the share of CSPGCL and apportioned the same in line with the number of employees of the each of the power stations.

Commission's View

Regulation 32 of the CSERC MYT Regulations, 2015 specifies as under:

"32. 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 basis of actuarial analysis, expected pension outflow for the State Power Companies and availability of fund with the Pension trust at the time of determination of MYT / ARR for each year of the control period.

However, the actual outflow towards the pension payment shall not be allowed in the O&M expenses covered in these Regulations for the Control Period. The pension outflow shall be met by the Pension trust. The pension fund contribution so determined by the Commission shall be recoverable in the same manner as specified in relevant chapters.

Provided till the time SLDC is part of STU, SLDC'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 1stApril of the preceding year shall be considered." ***(emphasis added)***

In accordance with the provisions of the Regulation and on the basis of actuarial analysis, expected pension outflow for the State Power Companies and availability of fund with the Pension trust, the cumulative P&G contribution of CSPGCL, CSPTCL, CSLDC, and CSPDCL for FY 2020-21 was approved at Rs. 678.76 Crore. By considering an increase of 5.17%, i.e., average CPI rate recorded for past five years, P&G contribution for subsequent years will be Rs.713.85 Crore.

The P&G contribution of CSPGCL has been further allocated to each Generating Station in the ratio of number of employees as submitted by CSPGCL.

Further, the Commission has considered the request of the Companies to true-up the revised Contribution to Pension and Gratuity fund, to the extent of shortfall in interest income contributed to the trust fund. Hence, CSPGCL's share of the shortfall, to the extent of Rs. 38.65 Crore has been allowed along with the Contribution to Pension and Gratuity for FY 2021-22, as sought by CSPGCL. The approved Contribution to Pension and Gratuity Fund for FY 2021-22 is shown in the following Table:

Table 7.6-25: Station-wise P&G Contribution for FY 2021-22 (Rs. Crore)

Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo	Total
Contribution for FY 2021-22	87.17	32.34	19.36	52.94	2.76	194.58
Shortfall of FY 2019-20	17.32	6.43	3.85	10.52	0.55	38.65
Total P&G Contribution	**104.49**	**38.77**	**23.21**	**63.46**	**3.30**	**233.23**

7.6.8 Interest on Working Capital

CSPGCL's Submission

CSPGCL has computed the Interest on Working Capital as per Regulation 25 of the CSERC MYT Regulations, 2015. The interest rate of 10.90% has been considered equal to the Base Rate of (State Bank of India Base rate of 7.40%) as on September 30, 2020 plus 350 basis points has been by CSPGCL on Working Capital for FY 2021-22, which is as under:

Table 7-26: Interest on Working Capital for FY 2021-22 as submitted by CSPGCL (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
1	Cost of Coal	63.27	43.11	36.54	108.97	-
2	Cost of Oil	3.39	1.24	1.21	2.13	-
3	O&M Expenses	33.71	15.71	9.53	19.07	1.45
4	Maintenance Spares	41.51	32.92	17.66	35.31	0.92
5	Receivables	119.92	85.84	93.36	210.11	2.58
6	Total WC	261.80	178.82	158.30	375.62	4.95
7	Rate of Interest (%)	10.90%	10.90%	10.90%	10.90%	10.90%
8	**Interest on Working Capital**	**28.54**	**19.49**	**17.25**	**40.94***	**0.54**

Commission's View

The Interest on Working Capital for FY 2021-22 has been computed in accordance with Regulation 25 of the CSERC MYT Regulations, 2015.

The cost of coal has been considered for one month for pithead generating stations (HTPS, DSPM and KWTPP), and one and half month for non-pithead stations (ABVTPP). Cost of secondary fuel oil for two months, Operation and Maintenance expenses for one month, maintenance spares as 40% of the R&M expenses, and receivables equivalent to one month have been considered for computing the working capital requirement for thermal generating stations.

For Hasdeo Bango HEP, one-month O&M expenses, Maintenance Spares at 40% of R&M expenses and receivables equivalent to one month have been considered for computing the working capital requirement.

The interest rate of 10.90% (SBI Base Rate of 7.40% as on September 30, 2020 plus 350 basis points) has been considered, for computing the Interest on Working Capital. The Interest on Working Capital as approved for FY 2021-22 is as under:

Table 7-27: Approved Interest on Working Capital for FY 2021-22 (Rs. Crore)

Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
Cost of Coal	63.24	43.12	36.55	109.01	-
Cost of Main Secondary Fuel Oil	3.39	1.24	1.21	2.13	-
O & M Expenses	30.09	15.00	9.06	18.12	1.30
Maintenance Spares	41.39	32.82	17.40	34.80	0.92
Receivables	116.11	83.57	91.16	207.06	2.36
Total Working capital requirement	254.22	175.74	155.38	371.11	4.58
Rate of Interest (%)	10.90%	10.90%	10.90%	10.90%	10.90%
Interest on Working Capital	**27.71**	**19.16**	**16.94**	**40.45**	**0.50**

7.6.9 Non-Tariff Income

CSPGCL's Submission

CSPGCL has considered Non-Tariff Income for FY 2021-22 on the approved base values of FY 2020-21 vide tariff order dated May 30, 2020 escalated by WPI increase FY 2019-20, as shown in the Table below:

Table 7-28: Non-Tariff Income as submitted by CSPGCL (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
1	Non-Tariff Income	19.69	11.40	5.35	0.00	0.00

Commission's View

The Commission has considered the Non-Tariff Income at the same level as the actual Non-Tariff Income as considered in the true-up for FY 2019-20. The Non-Tariff Income as approved for FY 2021-22 is given in the Table below:

Table 7-29: Approved Non-Tariff Income for FY 2021-22 (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo
1	Non-Tariff Income	7.15	3.71	3.03	6.38	0.03

7.6.9.1 Statutory Charges

Commission's View

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 specifies provisions in the Regulations, Statutory charges such as duty and 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.

7.6.10 Approved ARR for FY 2021-22

Based on various components of expense and income discussed above, the station-wise summary of ARR for FY 2021-22 is given in the Table 1.30. The Contribution to Pension and Gratuity has not been considered as part of Annual Fixed Cost, however, the same shall be billed and allowed separately.

Table 7-30: Approved Annual Revenue Requirement for CSPGCL Stations for FY 2021-22 (Rs. Crore)

<table>
<tr><th rowspan="2">Sr. No.</th><th rowspan="2">Particulars</th><th colspan="2">HTPS</th><th colspan="2">DSPM</th><th colspan="2">KWTPP</th><th colspan="2">ABVTPP</th><th colspan="2">Hasdeo Bango</th></tr>
<tr><th>Petition</th><th>Approved</th><th>Petition</th><th>Approved</th><th>Petition</th><th>Approved</th><th>Petition</th><th>Approved</th><th>Petition</th><th>Approved</th></tr>
<tr><td>1</td><td>Annual Capacity (Fixed) Charges</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1.1</td><td>Depreciation</td><td>37.74</td><td>37.73</td><td>130.55</td><td>130.52</td><td>235.07</td><td>233.99</td><td>533.25</td><td>532.78</td><td>2.96</td><td>2.96</td></tr>
<tr><td>1.2</td><td>Interest on Loan and Finance charges</td><td>24.29</td><td>24.29</td><td>9.06</td><td>8.86</td><td>171.84</td><td>170.52</td><td>572.34</td><td>571.84</td><td>0.00</td><td>0.00</td></tr>
<tr><td>1.3</td><td>Return on Equity</td><td>88.10</td><td>72.71</td><td>133.50</td><td>110.06</td><td>119.23</td><td>97.92</td><td>206.43</td><td>170.07</td><td>7.17</td><td>5.92</td></tr>
<tr><td>1.4</td><td>Interest on Working Capital</td><td>28.54</td><td>27.71</td><td>19.49</td><td>19.16</td><td>17.25</td><td>16.94</td><td>40.98</td><td>40.45</td><td>0.54</td><td>0.50</td></tr>
<tr><td>1.5</td><td>O & M Expenses</td><td>366.77</td><td rowspan="2">361.03</td><td>182.14</td><td rowspan="2">179.95</td><td>110.34</td><td rowspan="2">108.74</td><td>220.69</td><td rowspan="2">217.47</td><td>15.89</td><td rowspan="2">15.62</td></tr>
<tr><td>1.6</td><td>Impact of wage revision (Interim Relief)</td><td>37.73</td><td>6.37</td><td>4.06</td><td>8.13</td><td>1.51</td></tr>
<tr><td>1.7</td><td>Less - Non-Tariff Income</td><td>19.69</td><td>7.15</td><td>11.40</td><td>3.71</td><td>5.35</td><td>3.03</td><td>0.00</td><td>6.38</td><td>0.00</td><td>0.03</td></tr>
<tr><td>1.8</td><td>Total Annual Capacity (Fixed) Charges</td><td>563.49</td><td>516.45</td><td>469.71</td><td>444.90</td><td>652.45</td><td>625.12</td><td>1581.81</td><td>1526.18</td><td>28.07</td><td>24.94</td></tr>
</table>

Sr. No.	Particulars	HTPS		DSPM		KWTPP		ABVTPP		Hasdeo Bango	
		Petition	**Approved**	**Petition**	**Approved**	**Petition**	**Approved**	**Petition**	**Approved**	**Petition**	**Approved**
2.1	Cost of Coal	759.20	759.20	517.34	517.34	438.47	438.47	872.06	872.06	0	0
2.2	Cost of Oil	25.99	25.99	9.52	9.52	9.29	9.29	16.60	16.60	0	0
2.3	Total Energy Charges	785.19	784.93	526.86	526.92	447.75	447.92	888.67	888.67	0	0
3	Contribution to P&G Fund	90.39	87.17	33.54	32.34	20.08	19.36	54.89	52.94	2.86	2.76
	Shortfall in P&G for FY 2019-20		17.32		6.43		3.85		10.52		0.55
4	**Aggregate Revenue Requirement**	**1,439.07**	**1,405.86**	**1,030.11**	**1,010.59**	**1,120.28**	**1,096.25**	**2,525.37**	**2,478.31**	**30.92**	**28.24**

In view of the above, Station-wise Annual Fixed Cost approved for each thermal generating station for FY 2021-22 is summarised in the Table below:

Table 7-31: Approved Annual Fixed Cost for FY 2021-22 for Thermal Generating Stations (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Total
1	Fixed Cost	516.45	444.90	625.12	1526.18	3112.65

The Contribution to Pension & Gratuity approved by the Commission shall be separately billed by CSPCGL. The approved Contribution to Pension and Gratuity is summarised in the Tables below:

Table 7-32: Approved Contribution to Pension and Gratuity (Rs. Crore)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP	Hasdeo	Total
1	Contribution FY 2021-22	87.17	32.34	19.36	52.94	2.76	194.58
2	Shortfall FY 2019-20	17.32	6.43	3.85	10.52	0.55	38.65
	Total Contribution	**104.49**	**38.77**	**23.21**	**63.46**	**3.30**	**233.23**

The Station-wise approved energy charge rate for thermal generating stations for FY 2021-22 is summarised in the Table below:

Table 7-33: Energy Charge Rate as approved by the Commission (Rs. /kWh)

Sr. No.	Particulars	HTPS	DSPM	KWTPP	ABVTPP
1	Coal ECR	1.452	1.527	1.243	1.373
2	Oil ECR	0.050	0.028	0.026	0.026
3	Total ECR	1.502	1.555	1.269	1.399

Regulation 42.1 of the CSERC MYT Regulations, 2015 specifies that tariff for hydro power plant shall be single-part tariff. Accordingly, the approved tariff for Hasdeo Bango for FY 2021-22, excluding P&G contribution and statutory charges such as

water charges, is summarised in the following Table below:

Table 7-34: Approved Tariff for Hasdeo Bango for FY 2021-22 (Rs/kWh)

Sr. No.	Particulars	FY 2021-22
1	Approved AFC (Rs. Crore)	24.94
2	Approved Net Generation (MU)	271.26
3	Approved Tariff for Hasdeo Bango	0.920

8 ARR AND TRANSMISSION TARIFF OF CSPTCL FOR FY 2021-22

8.1 Background

The Commission notified the CSERC MYT Regulations, 2015 for the third MYT Control Period from FY 2016-17 to FY 2020-21 on September 9, 2015. Subsequently, the Commission notified the First Amendment to CSERC MYT Regulations on June 16, 2017.

The Commission vide Public Notice CSERC letter 03/CSERC/Tariff 2020/1228 dated November 26, 2020 has notified the extension of CSERC MYT Regulations, 2015 for next year, i.e., FY 2021-22. Due to the intervening COVID-19 and subsequent lockdowns imposed, the new MYT Regulations could not be notified. Accordingly, the Generating Company(s) and Licensee(s) were informed to file the Tariff Petition for FY 2021-22 before 31 December, 2020 by adopting of principles of CSERC MYT Regulations, 2015.

CSPTCL has submitted the Petition for determination of ARR and transmission tariff for FY 2021-22. CSPTCL also submitted details of the projected expenses likely to be incurred in FY 2021-22 under various heads, viz., O&M expenses, depreciation, interest on loans, interest on working capital, etc., as per the CSERC MYT Regulations, 2015 and the Formats prescribed by the Commission.

Regulation 9.1 and 9.2 of the CSERC MYT Regulations, 2015 specifies as under:

"9.1. Notwithstanding anything contained in these Regulations, the Commission shall at all times have the authority, either on suo-moto basis or on a Petition filed by the applicant, to determine the tariff including terms and conditions thereof, of any generating company or STU/ transmission licensee or distribution licensee or SLDC

9.2 Tariff in respect of a generating station may be determined for the whole of the generating station or a stage or unit or block of the generating station, and tariff for the transmission system may be determined for the whole of the transmission system or any part of the transmission system. The retail supply tariff, wheeling charges and miscellaneous charges for the distribution licensee shall also be decided by the Commission for whole of the distribution system"

In accordance with the above Regulation, in the present Order, the Commission has determined the ARR of CSPTCL and Transmission Tariff for FY 2021-22 based on the submissions of CSPTCL.

8.2 Operations and Maintenance (O&M) Expenses

CSPTCL's Submission

Employee Expenses

CSPTCL submitted that based on actual value of Employee Expenses for FY 2019-20, employee expenses for FY 2021-22 are determined by escalating it with CPI for FY 2019-20, i.e., 7.53% as shown in the following Table:

Table 8-1: Employee Expenses projected by CSPTCL for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Employee Expenses	195.24	209.95	225.75

A&G Expenses and R&M Expenses

CSPTCL submitted that considering the actual value of A&G Expenses and R&M Expenses for FY 2019-20, A&G Expenses and R&M Expenses for FY 2021-22 are determined by escalating it with WPI for FY 2019-20, i.e., 1.68%, which is shown in the Table below:

Table 8-2: A&G expenses and R&M expenses projected by CSPTCL for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	A&G Expenses	42.12	42.83	43.54
2	R&M Expenses	43.17	43.89	44.63

Commission's View

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

*"**47.5 Operation and Maintenance expenses***

Employee Cost

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

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

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

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

A&G Expenses and R&M Expenses

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

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

The Commission has derived the O&M Expenses for FY 2021-22 in accordance with the above Regulations. The above Regulations specifies that the normalization shall be done applying last five-year average increase in CPI on year-to-year basis for employee expenses and WPI for A&G expenses and R&M expenses.

The Commission has escalated the approved employee expenses for FY 2020-21 annually with the escalation factor of 5.17%, which is equivalent to the average increase in CPI in the last five years, to derive the employee expenses for FY 2021-22. Similarly, the Commission has escalated the normative A&G expenses and R&M expenses approved for FY 2020-21 annually with the escalation factor of 1.39%, which is the average increase in WPI in the last five years. The Commission has approved the components of O&M expenses for FY 2021-22 as shown in the Table below:

Table 8-3: O&M Expenses approved for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Employee Expenses	225.75	196.37
2	A&G Expenses	43.54	46.37
3	R&M Expenses	44.63	47.52

8.3 Contribution to Pension and Gratuity Fund

CSPTCL's Submission

CSPTCL submitted that Contribution towards Pension & Gratuity Fund for FY 2021-22 has been projected by escalating the contribution towards Pension & Gratuity for FY 2020-21 by 7.53%, which is CPI for FY 2019-20.

CSPTCL further submitted that a Review Petition No. 51 of 2019 has been filed against the Order dated 28.02.2019 wherein the Commission has reduced the Pension & Gratuity Contribution. The final outcome of the aforesaid Petition has a bearing on Pension & Gratuity expenses for FY 2019-20. The Commission, in the MYT Order, had finalized the contribution to Pension and Gratuity Fund to be recovered from tariff at Rs. 622.44 Crore for FY 2019-20. However, the Commission has reset the contribution to Pension and Gratuity Fund to be recovered from tariff at Rs. 441.91 Crore for FY 2019-20. The Commission has adopted the principle that the total outgo from the trust shall be met out by the interest on the trust fund and the contribution by the Power Companies. The actual pay-out from the trust towards Pension and Gratuity was Rs. 920.32 Crore and the actual interest income of the trust was Rs. 336.60 Cr in FY 2019-20. Thus, the total contribution to the trust was Rs. 778.51 Crore (Rs. 441.91 Crore + Rs. 336.60 Crore). In the instant case, the additional Contribution to Pension fund to be allowed to the Power Companies works out to Rs. 920.31- Rs. 778.51= Rs 141.81 Crore.

CSPTCL requested that the differential amount be allowed as additional recovery in FY 2021-22, without any carrying cost. The inter-Company ratio is proposed to be retained at the same level as was applicable in the original Order. Accordingly, CSPTCL prayed for additional recovery of Rs. 14.54 Crore. Further, considering the other expenses incurred by the Trust (i.e., Total Expenses) the total gap stands at Rs. 240.29 Crore with CSPTCL share of Rs. 24.63 Crore.

Commission's View

The Commission has projected the Contribution to Pension and Gratuity fund by escalating the contribution amount approved for FY 2020-21 in the MYT Order by an escalation factor of 5.17%, which is equivalent to the average increase in CPI over the last five years. Further, the Commission has considered the request of the Companies to true-up the revised Contribution to Pension and Gratuity fund, to the extent of shortfall in interest income contributed to the trust fund. Hence, CSPTCL's share of the shortfall, to the extent of Rs. 14.54 crore has been allowed along with the Contribution to Pension and Gratuity for FY 2021-22, as sought by CSPTCL. The approved Contribution to Pension and Gratuity Fund for FY 2021-22 is shown in the following Table:

Table 8-4: Contribution to P&G Fund for FY 2021-22 approved by the Commission (Rs. Cr.)

Particulars	Petition	Approved
Contribution to Pension & Gratuity Fund	74.75	87.65

8.4 Gross Fixed Assets

CSPTCL's Submission

CSPTCL submitted that the Commission approved the Capital Investment Plan (CIP) for the MYT Control Period from FY 2016-17 to FY 2020-21 on 23rd March, 2016. Further, the Commission has approved the additional CIP for FY 2016-17 to FY 2020-21 on 30th April, 2020. CSPTCL submits that some of the proposed capital works/system improvement work to be carried out during the said Control Period are still under progress. In the additional CIP, Rs. 809.99 Crore and Rs. 984.55 Crore of capital expenditure were proposed to be incurred during FY 2020-21 and FY 2021-22, respectively. However, due to COVID-19 Pandemic, the capital expenditure proposed above could not be incurred and hence, Capex value is tentatively taken considered as Rs. 300 Crore and Rs. 400 Crore for FY 2020-21 and FY 2021-22, respectively, for the projecting ARR for FY 2021-22. During FY 2020-21, asset capitalized till date is Rs. 127.5 Crore, some additional work will be completed by the end of this financial year and has not been included in the proposed capital plan. Accordingly, asset creation during FY 2020-21 has been considered as Rs. 162.23 crore as approved by the Commission in the Tariff Order dated 30 April, 2016 for FY 2020-21. Actual values of CWIP, Loan borrowed, Asset capitalization, etc., for FY 2020-21 and FY 2021-22 shall be considered at the time of true-up. Construction activities of 6 nos. 132/33 kV substations along with the associated transmission lines at Udaipur, Siltara-II, Kharmora, Indamara, Indagaon, and Khairagarh of about Rs 202.92 crore are under progress and shall be completed before December 2021. Accordingly, asset creation during FY 2021-22 has been considered as Rs. 151.50 Crore (75% of Rs.202.92 crore). CSPTCL submitted the Capital Structure for FY 2021-22 which is shown in the following Table:

Table 8-5: Capital Structure submitted by CSPTCL for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	FY 2020-21	FY 2021-22
A	**GROSS FIXED ASSETS (GFA)**		
1	Opening GFA	5,097.24	5,259.47
2	Opening CWIP	524.41	662.18
3	Opening Capex	5,621.65	5,921.65
4	Capitalization during the year	162.23	151.50
5	Closing GFA	5,259.47	5,410.97
6	Closing CWIP	662.18	910.68
7	Closing Capex	5,921.65	6,321.65
B	**GRANTS & CONSUMER CONTRIBUTION**		
1	Opening Grant and Contribution	101.56	101.56
2	Consumer Contribution/Grants during the Year		
3	Closing Consumer Contribution	101.56	101.56
4	Consumer Contribution in Opening GFA	46.06	46.06
5	Consumer Contribution in Closing GFA	46.06	46.06
C	**LOAN BORROWED**		
1	Opening Borrowed Loan	2,753.37	2,803.37
2	Loan Borrowed during the Year	50.00	100.00
3	Closing Borrowed Loan	2,803.37	2,903.37
4	Borrowed Loan in Opening GFA	3,332.30	3,445.86
5	Borrowed Loan in Closing GFA	3,445.86	3,551.91

Sr. No.	Particulars	FY 2020-21	FY 2021-22
D	**Equity**		
1	Opening Gross Equity	2,766.72	3,016.72
2	Equity addition during the Year	250.00	300.00
3	Closing Gross Equity	3,016.72	3,316.72
4	Gross Equity in Opening GFA	1,718.88	1,767.55
5	Gross Equity in Closing GFA	1,767.55	1,813.00
6	Average Gross Equity during the year	1,743.22	1,790.28
E	**PERMISSIBLE EQUITY**		
1	Permissible Equity in Opening GFA	1,341.76	1,390.43
2	Permissible Equity in Closing GFA	1,390.43	1,435.88
3	Average Gross Permissible Equity during the year	1,366.10	1,413.16
F	**NORMATIVE LOAN**		
1	Opening Normative Loan	377.12	377.12
2	Closing Normative Loan	377.12	377.12
3	Average Normative Loan	377.12	377.12

Commission's View

The Closing GFA of FY 2019-20 as approved in this Order is considered as the opening GFA of FY 2020-21. The Commission had approved revised capitalisation of Rs. 62.35 Crore for FY 2020-21 in Tariff Order for FY 2020-21. However, CSPTCL has submitted that the actual asset capitalized in FY 2020-21 till date is Rs. 127.5 Crore, and some additional work will be completed by the end of the financial year. CSPTCL has accordingly considered asset addition during FY 2020-21 as Rs. 162.23 crore, as originally approved by the Commission for FY 2020-21 in the MYT Order dated 30 April, 2016. The Commission has considered the asset addition in FY 2020-21 as estimated by CSPTCL.

The asset addition in FY 2020-21 is added to the opening GFA to arrive at the closing GFA for FY 2020-21, which is considered as the Opening GFA of FY 2021-22. CSPTCL has provided the details of capitalization projected for FY 2021-22. CSPTCL has also separately filed the CIP for FY 2021-22 under Petition No.

06/2021, on which the Commission has issued the Order. The Commission has considered capitalisation of Rs. 151.50 Crore for FY 2021-22, for arriving at the closing GFA for FY 2021-22.

As regard to the funding of capitalisation, CSPTCL has not considered any grants for FY 2021-22, hence, the Commission has also not considered any grants or consumer contribution utilised for funding of CIP. Further, normative Debt:Equity ratio of 70:30 has been considered as per Regulation 17 of the CSERC MYT Regulations, 2015.

The Commission approves the GFA addition and its funding for FY 2021-22 which is shown in the following Table:

Table 8-6: Approved GFA Addition and Means of Finance for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Opening GFA	5,259.47	5,258.68
2	Capitalisation during the year	151.50	151.50
3	Closing GFA	5,410.97	5,410.18
4	Consumer Contribution	-	-
5	Equity	45.45	45.45
6	Debt	106.05	106.05
7	**Total Capitalisation**	**151.50**	**151.50**

8.5 Depreciation

CSPTCL's Submission

CSPTCL submitted that it has computed depreciation of Rs. 251.89 cr. for FY 2021-22, in accordance with Regulation 24 of the CSERC MYT Regulations, 2015. CSPTCL requested the Commission to approve the same.

Commission's View

The Commission has approved the depreciation in accordance with the approach adopted in the past orders. The opening and closing GFA for FY 2021-22 have been considered as approved in the Table 8-6 above. The weighted average depreciation rate of 5.26%, computed on the basis of deprecation rates provided in the CSERC MYT Regulations, 2015, has been considered for FY 2021-22.

The Commission has considered the depreciation on fully depreciated assets as per details submitted by CSPTCL. Accordingly, in this Order, the Commission has disallowed the deprecation on fully depreciated assets as Rs. 26.32 Cr. for FY 2021-22. The depreciation computed by the Commission for FY 2021-22 is shown in the following Table:

Table 8-7: Approved Depreciation for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Opening GFA excluding CSLDC	5,259.47	5,258.68
2	Add: Capitalization during the year	151.5	151.5
3	GFA at the end of the year excluding CSLDC	5,410.97	5,410.18
4	Average GFA for the year	5,335.22	5,334.43
5	Depreciation Rate	5.26%	5.26%
6	Depreciation @ applicable rates as per Regulations	280.63	280.50
7	Less: Depreciation on Consumer Contribution on live assets	2.42	2.84
8	Less: Depreciation on fully depreciated assets	26.32	26.32
9	**Net Depreciation**	**251.89**	**251.33**

8.6 Interest on Loan

CSPTCL's Submission

CSPDCL submitted that it has calculated interest and finance charges as per Regulation 23 of the CSERC MYT Regulations, 2015. CSPTCL has considered the closing loan balance for FY 2020-21, based on provisional capitalization for FY 2020-21, as the opening balance for FY 2021-22.

Commission's View

The Commission has approved interest on loan capital for FY 2021-22 as per Regulation 23 of the CSERC MYT Regulations, 2015.

The closing balance of loan capital as approved in the truing up for FY 2019-20 has been considered as the opening balance of loan for FY 2020-21. The normative debt addition in FY 2020-21 has been considered equivalent to 70% of the capitalisation approved for FY 2020-21 in the MYT Order. The closing balance of loan of FY 2020-21 has been considered as the opening loan balance for FY 2021-22. The addition of normative loan for FY 2021-22 has been considered based on debt component towards the approved capitalisation for FY 2021-22, as considered earlier in this Chapter. The repayment has been considered equal to net depreciation approved for FY 2021-22 in this Order.

The Commission has adopted the weighted average rate of interest of 10.02 % for FY 2021-22, same as computed for FY 2019-20, as per Regulation 23.5 of the CSERC MYT Regulations, 2015.

Accordingly, the interest on loan approved for FY 2021-22 is shown in the Table below:

Table 8-8: Approved Interest on Loan for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Total Opening Net Loan	1,848.11	1,842.76
2	Repayment during the period	251.89	251.33
3	Additional Capitalization of Borrowed Loan during the year	106.05	106.05
4	Total Closing Net Loan	1,702.27	1,697.47
5	Average Loan during the year	1,775.19	1,770.12
6	Weighted Average Interest Rate	10.05%	10.02%
7	**Interest Expenses**	**178.41**	**177.34**

8.7 Return on Equity (RoE) and Income Tax

CSPTCL's Submission

CSPTCL has computed RoE as per Regulation 22 of the CSERC MYT Regulations, 2015, using the base rate of Return on Equity of 15.50%. CSPTCL has considered the permissible equity in closing GFA for FY 2020-21 based on provisional capitalization figure in FY 2020-21, as the permissible equity in opening GFA for FY 2021-22.

Commission's View

The closing balance of permissible equity as approved in the truing up for FY 2019-20 has been considered as the opening balance of equity for FY 2020-21. The normative equity addition in FY 2020-21 has been considered equivalent to 30% of the capitalisation approved for FY 2020-21 in the MYT Order. The closing balance of equity for FY 2020-21 has been considered as the opening equity balance for FY 2021-22. The addition of normative equity for FY 2021-22 has been considered based on equity component towards the approved capitalisation for FY 2021-22, as considered earlier in this Chapter.

As approved earlier in this order, the Commission has taken the same approach for calculating the rate of RoE and has not grossed up the same with the MAT rate. The rate of RoE is considered as 15.50% for FY 2021-22. At the time of true-up, the actual Income Tax paid will be allowed, subject to prudence check.

The Commission approves the RoE for FY 2021-22 as shown in the following Table:

Table 8-9: Approved Return on Equity for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Permissible Equity in Opening GFA	1,390.43	1,387.30
2	Addition of Permissible Equity during the year	45.45	45.45
3	Permissible Equity in Closing GFA	1,435.88	1,433.25
4	Average Gross Permissible Equity during the year	1,413.16	1,410.53
5	Rate of Return on Equity	15.50%	15.50%
6	**Return on Equity**	**219.04**	**218.63**

8.8 Interest on Working Capital

CSPTCL's Submission

For computation of IoWC for FY 2021-22, CSPTCL has considered one month of the approved (to be read as *projected*) O&M Expenses, Maintenance spares at 40% of the R&M expenses, and receivables equivalent to one month of fixed cost, for computing the working capital requirement. CSPTCL has considered the interest rate of 10.90%

(i.e., 7.40% - SBI Base Rate on 10th September 2020 plus 350 basis points) for FY 2021-22. CSPTCL requested the Commission to approve IoWC of Rs. 14.15 Cr. for FY 2021-22.

Commission's View

The Commission has computed IoWC in accordance with Regulation 25 of the CSERC MYT Regulations, 2015. For computation of working capital requirement as per the formula provided in the CSERC MYT Regulations, 2015, the Commission has considered the normative value of O&M expenses approved in this order. Further, the receivables have been considered based on approved ARR of FY 2021-22. The interest rate has been considered as per Regulation 25.4 of the MYT Regulations, 2015, i.e., 10.90% for FY 2021-22. The normative IoWC approved by the Commission for FY 2021-22 is shown in the Table below:

Table 8-10: Approved Interest on Working Capital for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	O&M expenses for One Month	26.16	23.67
2	Maintenance Spares @ 40% of R&M Expenses	17.85	17.75
3	Receivables @ 1 Month	85.82	84.94
4	Total Working Capital requirement	129.83	126.36
5	Less: Security Deposit from Transmission Users	-	
6	Net Working Capital Requirement	129.83	126.36
7	Rate of Interest on WC	10.90%	10.90%
8	**Net Interest on Working Capital**	**14.15**	**13.77**

8.9 Non-Tariff Income

CSPTCL's Submission

CSPTCL submitted that it has considered the Non-Tariff Income for FY 2021-22 same as approved for FY 2020-21. CSPTCL requested the Commission to consider Non- Tariff Income of Rs. 22.35 Crore for FY 2021-22.

Commission's View

The Commission has considered the Non-Tariff Income for FY 2021-22, same as that was approved in truing up of FY 2019-20 at Rs. 13.50 Cr., as shown in the Table below:

Table 8-11: Approved Non-Tariff Income for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Non-Tariff Income	22.35	13.50

8.10 Aggregate Revenue Requirement (ARR)

Based on the above, the approved ARR for FY 2021-22 is shown in the Table below:

Table 8-12: ARR Approved for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Employee Expenses	225.75	196.37
2	A&G Expenses	43.54	46.37
3	R&M Expenses	44.63	47.52
4	Contribution to Pension and Gratuity	74.75	87.65
5	Depreciation	251.89	251.33
6	Interest on Loan	178.41	177.34
7	Interest on Working capital	14.15	14.03
8	Return on Equity	219.04	218.63
9	**Aggregate Revenue Requirement (ARR)**	**1,052.17**	**1,039.24**
10	Less: Non-Tariff Income	22.35	13.50
11	**Net ARR**	**1,029.82**	**1,025.74**

8.11 Adjusted ARR for FY 2021-22

CSPTCL's Submission

CSPTCL submitted that it has considered the Surplus of FY 2019-20 and adjusted the same with carrying cost in the ARR of FY 2021-22. CSPTCL requested the

Commission to approve the ARR for FY 2021-22 as Rs. 989.81 Cr., after adjustment of the Surplus.

Commission's View

The Commission in the final true up of FY 2019-20 has approved a Surplus of Rs. 37.06 Cr. This Surplus along with carrying cost, amounting to Rs. 46.06 Cr. has been adjusted in the approved ARR for FY 2021-22 as shown below:

Table 8-13: Adjusted approved ARR for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Proposed ARR for FY 2021-22	1029.82	1025.74
2	Adjustment of Surplus of FY 2019-20 after treatment of carrying cost up to FY 2021-22	40.01	46.06
3	**Adjusted ARR for FY 2021-22**	**989.81**	**979.67**

8.12 Transmission Charges for FY 2021-22

CSPTCL's Submission

CSPTCL submitted that as per Clause 33 of CSERC (Connectivity and Intra-State Open Access) Regulations, 2011 and the amendment in the CSERC (Connectivity and Intra-State Open Access) (First Amendment) Regulations, 2012, Open Access charges for using the State Grid have been defined. CSPTCL has determined the short-term Open Access charges for FY 2021-22 by considering the projected maximum demand of 4900 MW (4736 MW maximum demand has already been observed on 21.07.2019). The estimated energy input to be handled by CSPTCL's system for FY 2021-22, based on load factor of 70% on maximum demand met, computes as 30,047 MU.

Commission's View

Regulations 45.1 and 45.2 of the CSERC MYT Regulations, 2015 specify as under:

"45.1 Annual Transmission charges or each year of the control period: The Annual Transmission Charges for each financial year of the control period shall provide for the recovery of the Aggregate Revenue Requirement of the Transmission licensee/STU for the respective financial year of the Control period, reduced by the amount of Non-Tariff Income and from other business, as approved by the Commission:

45.2. The annual Transmission Charges of the Transmission licensee shall be determined by the Commission on the basis of an application for determination of Aggregate Revenue Requirement made by the transmission licensee in accordance with chapter-2 of these Regulations."

As per the CSERC MYT Regulations, 2015, the annual transmission charges (fixed cost) shall be recovered from the users of CSPTCL's system on a monthly basis as per the methodology specified in the CSERC Open Access Regulations, 2011. According to the CSERC (Connectivity and Intra-State Open Access) Regulations, 2011, the basis of sharing monthly transmission charge shall be maximum demand in MW served by CSPTCL's system in the previous financial year.

The Commission above considered Maximum Demand in the State for FY 2021-22 as 4,900 MW, as projected by CSPTCL. The estimates energy input to be handled by CSPTCL's system for FY 2021-22, based on load factor of 70% on Maximum Demand met, is computed as 30,047 MU. Accordingly, the Transmission Charges for STOA for FY 2021-22 have been determined as shown in the Table below:

Table 8-14: Approved STOA Charges for FY 2020-21

Sr. No	Particulars	Petition	Approved
1	ARR approved in this Order (Rs. Cr.)	1029.82	1025.74
2	Less: Revenue Surplus with holding cost till FY 2021-22 (Rs. Cr.)	40.01	46.06
3	**Total ARR for FY 2021-22 (Rs. Cr.)**	**989.81**	**979.67**
4	Maximum Demand Projected (MW)	4900	4900
5	Energy Input considering 70% Load Factor (MU)	30047	30047
6	**STOA Charges (Paise/kWh)**	**32.94**	**32.60**

9 ARR AND SLDC CHARGES OF CSLDC FOR FY 2021-22

9.1 Background

The Commission notified the CSERC MYT Regulations, 2015 for the third MYT Control Period from FY 2016-17 to FY 2020-21 on September 9, 2015. Subsequently, the Commission notified the First Amendment to CSERC MYT Regulations on June 16, 2017.

The Commission vide public notice CSERC letter 03/CSERC/Tariff 2020/1228 dated November 26, 2020 has notified the extension of CSERC MYT Regulations, 2015 for the next year, i.e., FY 2021-22. Due to the intervening COVID-19 and subsequent lockdowns imposed, the new MYT Regulations could not be notified. Accordingly, the Generating Company(s) and Licensee(s) were informed to file the Tariff Petition for FY 2021-22 before 31.12.2020 by adopting of principles of CSERC MYT Regulations, 2015.

Now, CSLDC submitted the present Petition for determination of ARR and SLDC Charges for FY 2021-22. CSLDC has submitted details of its projected expenses likely to be incurred in FY 2021-22 under various heads, viz., O&M expenses, depreciation, interest on loans, interest on working capital, etc., as per the CSERC MYT Regulations, 2015.

Regulation 9.1 and 9.2 of the CSERC MYT Regulations, 2015 specifies as under:

"9.1. Notwithstanding anything contained in these Regulations, the commission shall at all times have the authority, either on suo-moto basis or on a Petition filed by the applicant, to determine the tariff including terms and conditions thereof, of any generating company or STU/ transmission licensee or distribution licensee or SLDC

9.2 Tariff in respect of a generating station may be determined for the whole of the generating station or a stage or unit or block of the generating station, and tariff for the transmission system may be determined for the whole of the transmission system or any part of the transmission system. The retail supply tariff, wheeling charges and miscellaneous charges for the distribution licensee shall also be decided by the Commission for whole of the distribution system"

In accordance with the above Regulations, in the present Order, the Commission has determined the ARR and SLDC Charges for FY 2021-22 based on the submission by CSLDC.

9.2 Annual Charges for SLDC

Regulation 74.1 of the CSERC MYT Regulations, 2015 specifies the components of Annual Charges for SLDC as under:

(a) Operation and Maintenance Expenses;

(b) Contribution to Pension and Gratuity Fund;

(c) Return on Equity;

(d) Interest on loan capital;

(e) Depreciation; and

(f) Interest on Working Capital.

9.3 Operation and Maintenance (O&M) expenses

CSLDC's Submission

CSLDC submitted that employee expenses for FY 2021-22 have been projected by escalating actual value of Employee Expenses for FY 2019-20 with CPI for FY 2019-20, i.e., 7.53%, as shown in the following Table:

Table 9-1: O&M Expenses projected by CSLDC for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Employee Expenses	8.29	8.92	9.59

A&G Expenses and R&M Expenses

CSPTCL submitted that A&G Expenses and R&M Expenses for FY 2021-22 have been projected by escalating the actual value of A&G Expenses and R&M Expenses for FY 2019-20 with WPI for FY 2019-20, i.e., 1.68%, as shown in the Table below:

Table 9-2: R&M expenses and A&G expenses projected by CSLDC for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	A&G Expenses	1.20	1.22	1.24
2	R&M Expenses	1.76	1.79	1.82

Commission's View

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

*"**47.5 Operation and Maintenance expenses***

Employee Cost

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

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

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

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

A&G Expenses and R&M Expenses

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

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

The Commission has derived the O&M Expenses for FY 2021-22 in accordance with the said Regulations. The above Regulations specify that the normalization shall be done applying last five-year average increase in CPI on year-to-year basis for employee expenses and WPI for A&G expenses and R&M expenses.

The Commission has escalated the approved employee expenses for FY 20210-21 annually with the escalation factor of 5.17%, which is the average increase in CPI during the last five years to derive the employee expense for FY 2021-22. Similarly, the Commission has escalated the normative A&G expenses and R&M expenses approved for FY 2021-21 annually with the escalation factor of 1.39%, which is the average increase in WPI in the last five years. The Commission has approved the components of O&M expenses for FY 2021-22 as shown in the Table below:

Table 9-3: O&M Expenses approved for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Employee Expenses	9.59	7.80
2	A&G Expenses	1.24	1.24
3	R&M Expenses	1.82	1.81

9.4 Contribution to Pension and Gratuity Fund

CSLDC's Submission

CSPTCL submitted that Contribution towards P&G Fund for FY 2021-22 has been projected by escalating the contribution towards P&G approved in MYT Order for FY 2020-21 by the CPI for FY 2019-20, i.e., 7.53%. CSLDC has requested to approve Rs. 1.84 Cr as contribution towards P&G Fund for FY 2021-22.

Commission's View

The Commission has projected the Contribution to P&G fund by escalating the MYT approved contribution for FY 2020-21 by an escalation factor of 5.17%, which is the average increase in CPI over the last five years. The approved Contribution to P&G Fund for FY 2021-22 is shown in the Table below:

Table 9-4: Contribution to P&G Fund for FY 2021-22 approved by the Commission (Rs. Cr.)

Particulars	Petition	Approved
Contribution to Pension & Gratuity Fund	1.84	1.80

9.5 Gross Fixed Assets

CSLDC's Submission

CSLDC has submitted that it has considered the opening GFA for FY 2021-22 as Rs. 16.45 Cr, and capitalization during the year is considered at Rs. 2.01 Cr, thus, the closing balance of GFA for FY 2021-22 is considered at 18.46 Cr.

Commission's View

The Closing GFA of FY 2019-20 as approved in this order is considered as the opening GFA of FY 2020-21. Capitalisation of Rs 0.07 Crore approved for FY 2020-21 in the MYT order is added to the opening GFA to arrive at the closing GFA for FY 2020-21, which is considered as the Opening GFA of FY 2021-22. In response to the Commission's query, CSLDC has submitted the details and basis of projection for Capitalisation in its Petition as shown in the Table below:

Table 9-5: Details of Scheme-wise Capitalisation for FY 2021-22 submitted by CSLDC (Rs. Cr)

Sl No	Assets	Amount
1	Installation of weather sensors at 10 S/s in CG	0.60
2	Replacement of Test RTU	0.10
3	Procurement of web servers, firewall and storage for Backup	0.50
4	Procurement and upgradation of 37 Nos. of PCs for office use	0.31
5	Installation of Security Camera	0.50
Total		**2.01**

The Commission observes that the average capitalisation for the last five years is around Rs. 0.57 Cr. However, the Commission is of the view that CSLDC plays an important role in the Power Sector of the State and strengthening of CSLDC is of vital requirement for its efficient functioning. Accordingly, the Commission approves the projections of GFA addition for FY 2021-22 for arriving at the Closing GFA for FY 2021-22. The actual addition of GFA and effect of the same shall be considered during the Truing up of FY 2021-22.

As regards the funding of capitalisation, CSLDC has not considered any grants for FY 2021-22, hence, the Commission has also not considered any grants or consumer contribution utilised for funding of capitalisation. Further, normative Debt:Equity ratio of 70:30 has been considered as per Regulation 17 of the CSERC MYT Regulations, 2015.

The Commission approves the GFA addition and its funding for FY 2021-22 as shown in the Table below:

Table 9-6: Approved GFA Addition and Means of Finance for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Opening GFA	16.45	16.45
2	Capitalisation during the year	2.01	2.01
3	Closing GFA	18.46	18.46
4	Consumer Contribution	-	-
5	Equity	0.60	0.60
6	Debt	1.41	1.41
7	**Total Capitalisation**	**2.01**	**2.01**

9.6 Depreciation

CSLDC's Submission

CSLDC submitted that it has computed depreciation of Rs. 0.92 cr. FY 2021-22, in accordance with Regulation 24 of the CSERC MYT Regulations, 2015. CSPTCL requested the Commission to approve the same.

Commission's View

The Commission has approved the depreciation in accordance with the approach adopted in the past orders. The opening and closing GFA for FY 2021-22 have been considered as approved in this Chapter earlier. The weighted average depreciation rate of 5.26%, computed on the basis of deprecation rates provided in the CSERC MYT Regulations, 2015, has been considered for FY 2021-22.

The depreciation computed by the Commission for FY 2021-22 is shown in the following Table:

Table 9-7: Approved Depreciation for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Opening GFA	16.45	16.45
2	Add: Capitalization during the year	2.01	2.01
3	GFA at the end of the year	18.46	18.46
4	Average GFA for the year	17.45	17.45
5	Depreciation Rate	5.26%	5.26%
6	**Net Depreciation**	**0.92**	**0.92**

9.7 Interest on Loan

CSLDC's Submission

CSLDC submitted that it has calculated interest and finance charges as per Regulation 23 of the CSERC MYT Regulations, 2015. CSLDC has considered the closing balance for FY 2020-21, based on provisional capitalization figure for FY 2020-21, as the opening balance for FY 2021-22.

Commission's View

The Commission has approved interest on loan capital for FY 2021-22 as per Regulation 23 of the CSERC MYT Regulations, 2015.

The closing balance of loan capital as approved in the truing up for FY 2019-20 has been considered as the opening balance of loan for FY 2020-21. The normative debt addition in FY 2020-21 has been considered equivalent to 70% of the capitalisation approved for FY 2020-21 in the MYT order. The closing balance of loan of FY 2020-21 has been considered as the opening loan balance for FY 2021-22. The addition of normative loan for FY 2021-22 has been considered based on debt component towards the approved capitalisation for FY 2021-22, as considered earlier in this

Chapter. The repayment has been considered equal to the net depreciation approved for FY 2021-22 in this Chapter.

The Commission has adopted the weighted average rate of interest of 10.02 % for FY 2021-22, same as computed for FY 2019-20, as per Regulation 23.5 of the CSERC MYT Regulations, 2015.

Accordingly, the interest on loan approved for FY 2021-22 is shown in the Table below:

Table 9-8: Approved Interest on Loan for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Total Opening Net Loan	1.66	1.67
2	Repayment during the period	0.92	0.92
3	Additional Loan during the year	1.41	1.41
4	Total Closing Net Loan	2.15	2.16
5	Average Loan during the year	1.91	1.91
6	Weighted Average Interest Rate	10.05%	10.02%
7	**Interest Expenses**	**0.19**	**0.19**

9.8 Return on Equity (RoE) and Income Tax

CSLDC's Submission

CSLDC has computed RoE as per Regulation 22 of the CSERC MYT Regulations, 2015, using the base rate of Return on Equity of 15.50%. CSLDC has considered the permissible equity in closing GFA for FY 2020-21 based on provisional capitalization figure in FY 2020-21 as the permissible equity in opening GFA for FY 2021-22.

Commission's View

RoE has been calculated as per Regulation 22 of the CSERC MYT Regulations, 2015. The closing balance of permissible equity as approved in the truing up for FY 2019-20 has been considered as the opening balance of equity for FY 2020-21. The normative equity addition in FY 2020-21 has been considered equivalent to 30% of the capitalisation approved for FY 2020-21 in the MYT order. The closing balance of equity for FY 2020-21 has been considered as the opening equity balance for FY 2021-22. The addition of normative equity for FY 2021-22 has been considered based on equity component towards the approved capitalisation for FY 2021-22, as considered earlier in this Chapter.

As approved earlier in this order the Commission has taken the same approach for calculating the rate of RoE and has not been grossed up the same with the MAT rate. The rate of RoE is considered as 15.50% for FY 2021-22. At the time of True-up, the actual Income Tax paid will be allowed, subject to prudence check.

The Commission approves the RoE for FY 2021-22 as shown in the Table below:

Table 9-9: Approved Return on Equity for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Permissible Equity in Opening GFA	5.30	5.30
2	Addition of Permissible Equity during the year	0.60	0.60
3	Permissible Equity in Closing GFA	5.90	5.90
4	Average Gross Permissible Equity during the year	5.60	5.60
5	Rate of Return on Equity	15.50%	15.50%
6	**Return on Equity**	**0.87**	**0.87**

9.9 Interest on Working Capital

CSLDC's Submission

For computation of IoWC for FY 2021-22, CSLDC has considered one month of the approved (to be read as *projected*) O&M Expenses, Maintenance spares at 40% of the R&M expenses and receivables equivalent to one month of fixed cost for computing the working capital requirement. CSPTCL has considered the interest rate of 10.90% (i.e., 7.40% - SBI Base Rate on 10th September 2020 plus 350 basis points) for FY 2021-22. CSPTCL requested the Commission to approve IoWC of Rs. 0.34 Cr. for FY 2021-22.

Commission's View

The Commission has computed IoWC in accordance with Regulation 25 of the CSERC MYT Regulations, 2015. For computation of working capital requirement as per the formula provided in the CSERC MYT Regulations, 2015, the Commission has considered the normative value of O&M expenses approved in this Order. Further, the receivables have been considered based on approved ARR of FY 2021-22. The interest rate has been considered as per Regulation 25.4 of the MYT Regulations, 2015, i.e., 10.90% for FY 2021-22. The normative IoWC approved by the Commission for FY 2021-22 is shown in the Table below:

Table 9-10: Approved Interest on Working Capital for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	O&M expenses for One Month	1.05	0.90
2	Maintenance Spares @ 40% of R&M Expenses	0.73	0.73
3	Receivables @ 1 Month	1.31	1.24
4	Total Working Capital requirement	3.09	2.88
5	Rate of Interest on WC	10.90%	10.90%
6	**Net Interest on Working Capital**	**0.34**	**0.31**

9.10 Non-Tariff Income

CSLDC's Submission

CSLDC submitted that it has considered the Non-Tariff Income for FY 2021-22 same as approved for FY 2020-21. CSLDC requested the Commission to consider Non-Tariff Income of Rs. 1.05 Cr. for FY 2021-22.

Commission's View

The Commission has considered the Non-Tariff Income for FY 2021-22 at the same level as that approved in Truing up of FY 2019-20, i.e., Rs. 0.02 Cr., as shown in the Table below:

Table 9-11: Approved Non-Tariff Income for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Non-Tariff Income	1.05	0.02

9.11 Aggregate Revenue Requirement (ARR)

Based on the above, the ARR approved for FY 2021-22 is shown in the Table below:

Table 9-12: Approved ARR after true-up for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Employee Expenses	9.59	7.80
2	A&G Expenses	1.24	1.24

Sr. No.	Particulars	Petition	Approved
3	R&M Expenses	1.82	1.81
4	Contribution to Pension and Gratuity	1.84	1.80
5	Depreciation	0.92	0.92
6	Interest on Loan	0.19	0.19
7	Interest on Working capital	0.34	0.31
8	Return on Equity	0.87	0.87
9	**Aggregate Revenue Requirement (ARR)**	**16.80**	**14.94**
10	Less: Non-Tariff Income	1.05	0.02
11	**Net ARR**	**15.75**	**14.93**

9.12 Adjusted ARR for FY 2021-22

CSLDC's Submission

CSLDC submitted that it has considered the Surplus of FY 2019-20 and adjusted the same with carrying cost in the ARR of FY 2021-22. CSPTCL requested the Commission to approve the ARR for FY 2021-22 as Rs. 12.05 Cr. after adjustment of the Surplus.

Commission's View

The Commission in the final True up of FY 2019-20 has approved Surplus of Rs. 2.92 Cr. This Surplus along with carrying cost, amounting to Rs. 3.63 Cr. has been adjusted against the ARR approved for FY 2021-22 as shown in the Table below:

Table 9-13: Adjusted ARR and SLDC Charges approved for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	ARR for FY 2021-22	15.75	14.93
2	Adjustment of Surplus of FY 2019-20 with carrying cost up to FY 2021-22	3.70	3.63
3	**Adjusted ARR for FY 2021-22**	**12.05**	**11.30**

9.13 SLDC Charges for FY 2021-22

CSLDC's Submission

CSLDC submitted that it has projected the annual SLDC Charges bifurcated into System Operation Charges and Market Operation Charges function in accordance with Regulation 75.2 of the MYT Regulations, 2015, as reproduced below:

"75.2. Allocation and apportionment of components of annual charges to system operation function and market operation function:

(a) Annual charges towards State system operation function shall comprise 80% of the annual charges

(b) Annual charges towards intra-State market operation function shall comprise the balance 20% of annual charges.

(c) The ratio of allocation of annual charges to system operation charges and market operation charges may be reviewed and decided by the Commission from time to time."

In accordance with the above Regulation, 80% of the annual SLDC Charges determined above for FY 2021-22 have been allocated to System Operation Charges, and 20% of the annual SLDC Charges determined as above for FY 2021-22 have been allocated to intra-State Market Operation Charges. CSLDC has requested the Commission to approve System Operation Charges and intra-State Market Operation Charges as Rs. 9.64 Cr. and Rs. 2.41 Cr., respectively.

Commission's View

The Commission has determined the SLDC Charges for FY 2021-22 based on the Regulation 75.2 of the MYT Regulations, 2015 and has approved the System Operation Charges and Intra-State Market Operation Charges, as shown in the Table below:

Table 9-14: Adjusted ARR and SLDC Charges approved for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Adjusted ARR for FY 2021-22	12.05	11.30
2	System Operation Charges	9.64	9.04
3	Intra-State Market Operation Charges	2.41	2.26
4	**Total SLDC Charges**	**12.05**	**11.30**

Accordingly, the Commission approves System Operation Charges and Intra-State Market Operation Charges as Rs. 9.04 Cr. and Rs. 2.26 Cr., respectively.

10 ARR OF CSPDCL FOR FY 2021-22

10.1 Background

The Commission notified the CSERC MYT Regulations, 2015 for the third MYT Control Period from FY 2016-17 to FY 2020-21 on September 9, 2015. Subsequently, the Commission notified the First Amendment to CSERC MYT Regulations on June 16, 2017.

The Commission vide Public Notice CSERC letter 03/CSERC/Tariff 2020/1228 dated November 26, 2020 has notified the extension of CSERC MYT Regulations, 2015 for next year, i.e., FY 2021-22. Due to the intervening COVID-19 and subsequent lockdowns imposed, the new MYT Regulations could not be notified. Accordingly, the Generating Company(s) and Licensee(s) were informed to file the Tariff Petition for FY 2021-22 on or before 31 December, 2020 by adopting of principles of CSERC MYT Regulations, 2015.

CSPDCL has submitted the Petition for determination of ARR for FY 2021-22. CSPDCL has submitted details of projection of sales, power purchase and all other components of ARR as per the CSERC MYT Regulations, 2015 and in the Formats prescribed by the Commission.

Regulation 9.1 and 9.2 of the CSERC MYT Regulations, 2015 specifies as under:

"9.1. Notwithstanding anything contained in these Regulations, the Commission shall at all times have the authority, either on suo-moto basis or on a Petition filed by the applicant, to determine the tariff including terms and conditions thereof, of any generating company or STU/ transmission licensee or distribution licensee or SLDC

9.2 Tariff in respect of a generating station may be determined for the whole of the generating station or a stage or unit or block of the generating station, and tariff for the transmission system may be determined for the whole of the transmission system or any part of the transmission system. The retail supply tariff, wheeling charges and miscellaneous charges for the distribution licensee shall also be decided by the Commission for whole of the distribution system"

In accordance with the above Regulation, in the present order, the Commission has determined the ARR of CSPDCL for FY 2021-22, on the basis of the submissions by CSPDCL.

10.2 Energy Sales

CSPDCL's Submission

CSPDCL submitted that there are various factors, which can have an impact on the actual consumption of electricity and are often beyond the control of the Licensee, such as Government Policy, economic climate, weather conditions, force-majeure events like natural disasters, change in consumption mix, etc. Hence, various factors affecting electricity consumption were considered and interrelationships have been estimated among them to arrive at the forecast of energy sales within a range for the purpose of estimating future costs/revenues.

CSPDCL has considered the past growth trends in each consumer category for projecting the sales, connected load and number of consumers for FY 2021-22 as per the categorization made by the Commission in the latest tariff order. CSPDCL has considered average of Year-on-Year (YoY) growth in sales, connected load and number of consumers for each consumer category for the past three years, i.e., FY 2017-18, FY 2018-19, and FY 2019-20, which have been applied over the actual figures of FY 2019-20 to project sales, connected load and number of consumers for each category for FY 2021-22. The methodology adopted to consider first half actuals of base year (FY 2020-21) has not been applied in the present Petition to project the values for FY 2021-22, considering the impact of COVID-19 on the supply business. Further, for projection of sales, number of consumers, and connected load of sub-categories/slabs of any consumer category, CSPDCL has adopted the ratio of sales in the sub-category to total sales of the category as observed in FY 2019-20. CSPDCL has estimated the consumer category-wise sales for FY 2021-22 as shown in the Table below:

Table 10-1: Consumer Category-Wise Projection of Sales in MU as submitted by CSPDCL for FY 2021-22

Sl No	Category/ Slab	Class	Growth Considered	Basis	Estimates
A	**LV**				**13436.78**
1	Domestic including BPL Consumers	LV 1	6%	Average YoY growth for 3 Years	6058.12
2	Single-Phase Non-Domestic (up to 3 kW)	LV 2.1	2.17%	Average YoY growth for 3 Years	692.05
3	Three-Phase Non-Domestic	LV 2.2	2.17%	Average YoY growth for 3 Years	285.20

Sl No	Category/ Slab	Class	Growth Considered	Basis	Estimates
4	Agriculture	LV 3	0.64%	Average YoY growth for 3 Years	4295.50
5	Agriculture Allied Activities	LV 4	0.64%	Average YoY growth for 3 Years	23.12
i	Up to 25 HP	4.1	0.64%	Average YoY growth for 3 Years	12.04
ii	Above 25 HP up to 150 HP	4.1	0.64%	Average YoY growth for 3 Years	9.47
iii	Demand Based Tariff for Contract Demand of 15 to 75 kW	4.2	0.64%	Average YoY growth for 3 Years	1.61
6	Industry	LV 5	2.99%	Average YoY growth for 3 Years	590.49
i	Flour mills, Hullers, power looms, etc., up to 25 HP or 18.7 kW	5.1	2.99%	Average YoY growth for 3 Years	76.36
ii	Other Industries	5.2	2.99%	Average YoY growth for 3 Years	514.13
7	Public Utilities	LV 6	1.51%	Average YoY growth for 3 Years	374.94
8	IT Industries	LV 7	0.00%	No Growth	0.02
9	Temporary	LV 8	13.01%	Average YoY growth for 3 Years	1117.21
B	**HV**				**12631.09**
1	Railway Traction (132/220 kV)	HV 1	3.34%	Average YoY growth for 3 Years	1054.62
2	Mines	HV 2	3.30%	Average YoY growth for 3 Years	701.98
3	Other Industrial & General Purpose Non-Industrial	HV 3	(3.26%)	Average YoY growth for 3 Years	1883.08
4	Steel Industries	HV 4	15.86%	Average YoY growth for 3 Years	8578.29
5	Irrigation & Agriculture Allied Activities, Public Water Works	HV 5	8.73%	Average YoY growth for 3 Years	176.65

Sl No	Category/ Slab	Class	Growth Considered	Basis	Estimates
6	Residential	HV 6	(3.83) %	Average YoY growth for 3 Years	163.38
7	Start Up Power (400/220/123/33/11 kV)	HV 7	0.00%	Average YoY growth for 3 Years	72.05
8	Industries related to manufacturing of equipment for power generation from RE sources	HV 8	53.96%	Average YoY growth for 3 Years	0.26
9	IT Industry	HV 9	0.00%	Fixed	0.78
10	Temporary	HV 10	0.00%	No growth	0
C	**Total**				**26067.86**

Commission's View

The Commission is of the view that the method adopted by CSPDCL of considering the average of yearly growth rates is a shift in the approach and leads to different sales projections, as compared to the usually adopted approach of considering the appropriate Compounded Annual Growth Rate (CAGR) based on analysis of CAGR for different periods. Also, while it is true that the COVID-19 pandemic has significantly affected the category-wise sales, the Commission is of the view that the factual situation in terms of skewed sales mix and reduced sales to certain categories should not be ignored, while projecting the sales for FY 2021-22.

Hence, in order to ensure more realistic projection of the category-wise sales for FY 2021-22, the Commission has made in-depth analysis of the Pre- and Post-COVID-19 scenario. The Commission asked CSPDCL to submit the latest available actual category-wise sales. CSPDCL submitted the actual monthly sales for HT categories till January 2021 and till November 2020 for LT categories. The Commission has taken into consideration the lockdown imposed in the State that affected the consumption pattern of the consumers, and the gradual picking up of the sales from the month of July 2020 for LT categories. Hence, the Commission has considered the actual category-wise sales for LT categories for the period from July 2020 to November 2020, for estimating the sales for FY 2020-21. In case of HT categories, the sales have picked up from October 2020 onwards, hence, the Commission has considered the actual category-wise sales for HT categories for the period from October 2020 to January 2021, for estimating the sales for FY 2020-21. This estimated sales for FY 2020-21 is only for the purpose of estimating the realistic sales for FY 2021-22 and the sales for FY 2020-21 have not been revised based on these estimates.

The Commission has computed the 5-year/4-year/3-year/2-year CAGR and Year-on-Year (YoY) growth in sales for each LT and HT category. The most appropriate growth rate has been considered for projecting the category-wise sales for FY 2021-22, over the sales estimated for FY 2020-21, as discussed above. For instance, for categories where a clear and consistent trend in sales is seen, the 5-year CAGR reflecting the longer-term trend has been considered for projecting the sales for FY 2021-22. In cases where there is no clear trend visible, the shorter-term trend has been considered for making the estimates.

For projection of sales for sub-categories/consumption slabs of any consumer category, the ratio of sales in the sub-category/consumption slab to total sales of the category in FY 2019-20 has been applied to the sales projected for the category for FY 2021-22.

The sales projected by CSPDCL and the sales approved by the Commission for each consumer category is elaborated below:

LV-1: Domestic Consumers including BPL consumers

CSPDCL has considered average YoY growth rate of 6% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales of July 2020 to November 2020 to estimate the sales for FY 2020-21 and used 5-year CAGR of 6.87% to project the sales for FY 2021-22, as shown in the Table below:

Table 10-2: Sales in MU for LV 1: Domestic Category for FY 2021-22

Consumer Category	Petition	Approved
LV 1: Domestic Category	6,058.12	6,595.60

LV-2: Non-Domestic Category

CSPDCL has considered average YoY growth rate of 2.17% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales of July 2020 to November 2020 to estimate the sales for FY 2020-21 and used 5-year CAGR of 3.94% to project the sales for FY 2021-22, as shown in the Table below:

Table 10-3: Sales in MU for LV 2: Non-Domestic Category for FY 2021-22

Consumer Category	Petition	Approved
LV 2.1: Non-Domestic- Single Phase	692.05	242.19
LV 2.2: Non-Domestic- Three Phase	285.20	685.33
Total	**977.25**	**927.52**

As can be seen from the above Table, CSPDCL has projected almost inverted share of three-phase to single-phase sales, which is not borne by the past sales trends or even the actual sales in FY 2020-21. The Commission has considered the share of three-phase to single-phase sales as per the actual past trends.

LV-3: Agriculture Category

CSPDCL has considered average YoY growth rate of 0.64% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has taken into consideration the actual sales from April 2020 to November 2020 to estimate the sales for FY 2020-21, as agriculture category was not significantly impacted by the lockdown. The Commission observed that in agriculture category, there is a negative growth trend. Hence, the Commission has considered the estimated sales of FY 2020-21 to remain at the same level for FY 2021-22 also, as shown in the Table below:

Table 10-4: Sales in MU for LV 3: Agriculture Category for FY 2021-22

Consumer Category	Petition	Approved
LV 3: Agriculture Category	4,295.84	4,408.13

LV-4: Agriculture Allied Services

CSPDCL has considered average YoY growth rate of 0.64% for 3 years on FY 2019-20 sales to project the sales of FY 2021-22. Similar to LV 3 category, the Commission has considered actual sales from April 2020 to November 2020 to estimate the sales for FY 2020-21. The Commission has not considered growth rate for sales for Agriculture allied services also, as there is negative growth trend. Hence, the Commission has considered the estimated sales of FY 2020-21 to remain at the same level for FY 2021-22 also, as shown in the Table below:

Table 10-5: Sales in MU for LV-4: Agriculture Allied Services for FY 2021-22

Consumer Category	Petition	Approved
LV 4: Agriculture Allied Services	23.12	25.69

LV-5: LT Industry

CSPDCL has considered average YoY growth rate of 2.99% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales from July 2020 to November 2020 to estimate the sales for FY 2020-21, as the industries have resumed operation and the situation has improved. As the YoY trend is higher, the Commission has considered the YoY growth rate of 3.34% to project the sales for FY 2021-22, as shown in the Table below:

Table 10-6: Sales in MU for LV-5: LT Industry for FY 2021-22

Consumer Category	Petition	Approved
LV 5: LT Industry	590.49	564.89

LV-6: Public Utilities

CSPDCL has considered average YoY growth rate of 1.51% for 3 years on FY 2019-20 sales to project the sales of FY 2021-22. The Commission has considered the actual sales from July 2020 to November 2020 to estimate the sales for FY 2020-21. The Commission has considered the 5-year CAGR of 5.16% as steady growth trend is observed, to project the sales for FY 2021-22, as shown in the Table below:

Table 10-7: Sales in MU for LV-6: Public Utilities for FY 2021-22

Consumer Category	Petition	Approved
LV 6: Public Utilities	374.94	442.18

LV-7: IT Industries

CSPDCL has considered Nil growth rate on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales from July to November

2020 to estimate the sales of FY 2020-21. As this category has been introduced from FY 2017-18, there is very less historical data to determine the trend of consumption. Also, as the base is small, the YoY growth rate appears high, though the overall sales is very low. The Commission has considered the YoY growth rate of 38.52% to project the sales for FY 2021-22, as shown in the Table below:

Table 10-8: Sales in MU for LV-7: IT Industries for FY 2021-22

Consumer Category	Petition	Approved
LV 7: IT Industries	0.02	0.08

LV-8: Temporary

CSPDCL has considered average YoY growth rate of 13.01% for 3 years on FY 2019-20 sales to project the sales of FY 2021-22. The Commission has considered the actual sales from July 2020 to November 2020 to estimate the sales of FY 2020-21. The Commission has observed a steady growth trend in consumption of this category, hence, the Commission has considered the 5-year CAGR of 12.73% to project the sales for FY 2021-22, as shown in the Table below:

Table 10-9: Sales in MU for LV-8: Temporary for FY 2021-22

Consumer Category	Petition	Approved
LV 8: Temporary	1,117.21	953.74

HV-1: Railway Traction

CSPDCL has considered average YoY growth rate of 3.34% for 3 years on FY 2019-20 sales to project the sales of FY 2021-22. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales for FY 2020-21. The Commission has observed a steady growth trend in consumption of this category, hence, the Commission has considered the 5-year CAGR of 2.66% based on the past trend to project the sales for FY 2021-22, as shown in the Table below:

Table 10-10: Sales in MU for HV-1: Railway Traction for FY 2021-22

Consumer Category	Petition	Approved
HV 1: Railway Traction	1,054.62	1,085.30

HV-2: Mines

CSPDCL has considered average YoY growth rate of 3.30% for 3 years on FY 2019-20 to project the sales of FY 2021-22. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales for FY 2020-21. The Commission has observed fluctuation in the past sales trend, hence, the Commission has considered YoY growth rate of 4.56% to project the sales for FY 2021-22, as shown in the Table below:

Table 10-11: Sales in MU for HV-2: Mines for FY 2021-22

Consumer Category	Petition	Approved
HV 2: Mines	701.98	737.32

HV-3: Other Industrial & General Purpose Non-Industrial

CSPDCL has considered average YoY growth rate of -3.26% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales for FY 2020-21. The Commission observed that in HV-3 category, there is a negative growth trend. Hence, the Commission has considered the estimated sales of FY 2020-21 to remain at the same level for FY 2021-22 also, as shown in the Table below:

Table 10-12: Sales in MU for HV-3: Other Industrial & General Purpose Non-Industrial for FY 2021-22

Consumer Category	Petition	Approved
HV 3: Other Industrial & General Purpose Non-Industrial	1883.08	1,915.81

HV-4: Steel Industries

CSPDCL has considered average YoY growth rate of 15.86% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales for FY 2020-21. The Commission has observed a steady trend in growth rate over last 3 years and has hence, considered 3-year CAGR of 15.92% to project the sales for FY 2021-22, as shown in the Table below:

Table 10-13: Sales in MU for HV-4: Steel Industries for FY 2021-22

Consumer Category	Petition	Approved
HV 4: Steel Industries	8,578.29	7,173.41

HV-5: Irrigation & Agriculture Allied Activities, Public Water Works

CSPDCL has considered average YoY growth rate of 8.73% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales for FY 2020-21. The Commission has considered YoY growth rate of 10.19% to project the sales for FY 2021-22, as shown in the Table below:

Table 10-14: Sales in MU for HV-6: Irrigation & Agriculture Allied Activities, Public Water Works for FY 2021-22

Consumer Category	Petition	Approved
HV 5: Irrigation & Agriculture Allied Activities, Public Water Works	176.65	185.04

HV-6: Residential

CSPDCL has considered average YoY negative growth rate of (3.83) % for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales of FY 2020-21. The Commission observed that in HV-6 category, there is a negative growth trend. Hence, the Commission has considered the estimated sales of FY 2020-21 to remain at the same level for FY 2021-22 also, as shown in the Table below:

Table 10-15: Sales in MU for HV-7: Residential for FY 2021-22

Consumer Category	Petition	Approved
HV 6: Residential	163.38	171.68

HV-7: Start Up Power

CSPDCL has stated that it has considered average YoY growth rate of 0% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. However, CSPDCL has actually projected significantly higher sales for this category for FY 2021-22, for which no explanation has been provided. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales for FY 2020-21. The actual sales in FY 2020-21 do not justify the higher sales projected by CSPDCL for this category for FY 2021-22, and in fact, the Commission has observed a negative growth trend in HV-7 category. Hence, the Commission has considered the estimated sales of FY 2020-21 to remain at the same level for FY 2021-22 also, as shown in the Table below:

Table 10-16: Sales in MU for HV-8: Start Up Power for FY 2021-22

Consumer Category	Petition	Approved
HV 7: Start Up Power	72.05	12.39

HV-8: Industries related to manufacturing of equipment for power generation from renewable energy sources

CSPDCL has considered average YoY growth rate of 53.96% for 3 years on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales for FY 2020-21. The Commission observed that in HV-8 category, there is a negative growth trend. Hence, the Commission has considered the estimated sales of FY 2020-21 to remain at the same level for FY 2021-22 also, as shown in the Table below:

Table 10-17: Sales in MU for HV-9: Industries related to manufacturing of equipment for power generation from renewable energy sources for FY 2021-22

Consumer Category	Petition	Approved
HV 8: Industries related to manufacturing of equipment for power generation from renewable energy sources	0.26	2.39

HV-9: IT Industries

CSPDCL has considered Nil growth rate on FY 2019-20 sales to project the sales for FY 2021-22. The Commission has considered the actual sales from October 2020 to January 2021 to estimate the sales for FY 2020-21. As this category has very low sales level and there is no growth trend visible, the Commission has considered the estimated sales of FY 2020-21 to remain at the same level for FY 2021-22 also, as shown in the Table below:

Table 10-18: Sales in MU for HV-10: IT Industries for FY 2021-22

Consumer Category	Petition	Approved
HV 9: IT Industries	0.78	0.48

The summary of category-wise sales projected by CSPDCL and approved by the Commission for FY 2021-22 in this Order is shown in the Table below:

Table 10-19: Consumer category-wise sales in MU approved by the Commission for FY 2021-22

Sl. No.	Category/ Slab	Class	Petition	Approved
A	**LV Category**		**13,436.78**	**13,917.82**
1	Domestic Including BPL Consumers	LV-1	6,058.12	6,595.60
2	Single Phase Non-Domestic (up to 3 KW)	LV-2.1	692.05	242.19
3	Three Phase Non-Domestic	LV-2.2	285.20	685.33
4	Agriculture	LV-3	4,295.50	4,408.13
5	Agriculture Allied Activities	LV-4	23.12	25.69
6	Industry	LV-5	590.49	564.89
7	Public Utilities	LV-6	374.94	442.18
8	IT Industries	LV-7	0.02	0.08
9	Temporary	LV-8	1,117.21	953.74
B	**HV Category**		**12,631.09**	**11,283.83**
1	Railway Traction (132/220 kV)	HV-1	1,054.62	1,085.30
2	Mines	HV-2	701.98	737.32
3	Other Industrial & General Purpose Non-Industrial	HV-3	1,883.08	1,915.81
4	Steel Industries	HV-4	8,578.29	7,173.41
5	Irrigation & Agriculture Allied Activities, Public Water Works	HV-5	176.65	185.04
6	Residential	HV-6	163.38	171.68
7	Start Up Power (400/220/123/33/11 kV)	HV-7	72.05	12.39
8	Industries related to manufacturing of equipment for power generation from renewable energy sources	HV-8	0.26	2.39

Sl. No.	Category/ Slab	Class	Petition	Approved
9	IT Industry	HV-9	0.78	0.48
10	Temporary	HV-10	0	-
C	**Total**		**26,067.86**	**25,201.65**

As can be seen from the above Table, while the overall sales approved by the Commission is somewhat close to the overall sales projected by CSPDCL, there is significant variation in the sales mix in terms of category-wise sales approved by the Commission vis-à-vis the category-wise sales projected by CSPDCL.

10.3 Transmission Loss

CSPDCL's Submission

CSPDCL submitted that it has considered weighted average inter-State transmission loss of actual 12 months (April 2019 till March 2020) of Western Region, which is based on the practice adopted in all States. CSPDCL requested the Commission to approve the inter-State Transmission loss of 2.88% for FY 2021-22. CSPDCL further submitted that it has considered intra-State transmission loss of 3% to project availability for FY 2021-22 as approved by the Commission in the tariff order dated 30th May 2020.

Commission's View

The inter-State Transmission Losses have been considered as 2.88% for FY 2021-22 as projected by CSPDCL. The intra-State Transmission Losses have been considered as 3.00% for FY 2021-22, as proposed by CSPDCL, for the purpose of computing the energy available to CSPDCL. The actual inter-State and intra-State Transmission Losses shall be considered for the purpose of Energy Balance, at the time of true-up for FY 2021-22.

10.4 Distribution Loss and Energy Balance

CSPDCL's Submission

CSPDCL submitted that the energy losses for 33 kV and below system has been computed based on Regulation 71.1 and 71.2 of the CSERC MYT Regulations, 2015, as reproduced below:

71.1 "The energy loss for 33 kV and below voltage level, shall be evaluated taking into consideration the clause 4.2.5 and 8.4.3 of the State Grid Code 2011. The difference between the energy injected at 33 kV voltage level and the sum of energy sold to all consumers (retail and open access), at voltage level 33 kV and below shall be the energy loss for the 33 kV and below system. The same shall be considered for gain/loss at the time of true up.

71.2. Energy sold shall be the sum of the metered sales and assessed unmetered sales, if any, based on prudence check by the Commission."

In accordance with the above provisions, CSPDCL submitted the Distribution Loss and Energy Balance for FY 2021-22 as shown in the following Table:

Table 10-20: Energy Balance in MU for FY 2018-19 and FY 2019-20 as submitted by CSPDCL

Sr. No	Particulars	Legend	Petition
1	LV Sales	A	13,436.78
2	HV Sales	B	8,933.92
3	Total Below EHV Level	C=A+B	22,370.70
4	**Distribution Loss below 33 kV (in %)**	**D**	**16.00%**
5	Distribution Loss below 33 kV (in MU)	E	3,579.31
6	Gross Energy requirement at 33 kV Level	F=C+E	25,950.01
7	*Less:* Direct Input to distribution at 33 kV Level	G	150.75
8	Net Energy Input required at Distribution Periphery at 33 kV Level	H=F-G	26,100.76
9	Sales to EHV consumers	I	3,697.17
10	Net energy requirement at Distribution periphery	J=H+I	**29,797.93**
11	**Distribution loss including EHV Sales**	**K**	**12.07%**

Commission's View

The Commission has approved the energy balance as per the provisions of CSERC MYT Regulations, 2015 and methodology adopted in previous Tariff Orders.

The Commission had approved target Distribution Loss (below 33 kV system) as 16% for FY 2020-21. The Commission has retained the target level of Distribution Loss (below 33 kV system) as 16% for FY 2021-22, as also proposed by CSPDCL.

The Commission has approved the Energy Balance for FY 2021-22 based on the projected Inter-State Transmission Losses as well as Intra-State Transmission losses, category-wise Energy Sales approved in this Order, and approved Distribution Losses, as shown in the Table below:

Table 10-21: Approved Energy Balance and Distribution Loss for FY 2021-22

Sr. No	Particulars	Legend	Petition	Approved
1	LV Sales	A	13,436.78	13,917.82
2	HV Sales	B	8,933.92	8,007.10
3	Total Below EHV Level	C=A+B	22,370.70	21,924.92
4	**Distribution Loss below 33 kV (in %)**	**D**	**16.00%**	**16.00%**
5	Distribution Loss below 33 kV (in MU)	E	3,579.31	4,176.18
6	Gross Energy requirement at 33 kV Level	F=C+E	25,950.01	26,101.10
7	*Less:* Direct Input to distribution at 33 kV Level	G	150.75	150.75
8	Net Energy Input required at Distribution Periphery at 33 kV Level	H=F-G	26,100.76	25,950.35
9	Sales to EHV consumers	I	3,697.17	3,276.73
10	Net energy requirement at Distribution periphery	J=H+I	**29,797.93**	**29,227.08**
11	**Distribution loss including EHV Sales**	**K**	**12.07%**	**14.22%**

10.5 Power Purchase Cost

CSPDCL's Submission

CSPDCL submitted that it has broadly categorised the sources of energy into Allocation (firm and non-firm) from CGS sources, CSPGCL Stations, Biomass, and Solar Power Plants, CPPs, IPPs, and Short-Term/UI/Bilateral purchases, etc. CSPDCL further submitted that it has considered only one new CGS, viz., 800 MW Gadarwara Unit II, with CSPDCL share of capacity as 78 MW, scheduled to commence generation during FY 2021-22 for power purchase projections. CSPDCL has projected the purchase of power from various sources in accordance with Regulation 66.4 of CSERC MYT Regulations, 2015, as detailed below:

10.5.1 Existing Central Generating Stations

CSPDCL submitted that it has firm allocation of power from CGS 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, Solapur Super Thermal Power Station, Tarapur Atomic Power Stations and Lara Super Thermal Power Station (STPS) Unit I, etc. to meet its energy requirement.

The power purchase cost comprises of fixed charges and energy charges for two-part tariff for CGS, i.e., NTPC, NPCL and others. CSPDCL has considered the fixed charges of all the generating stations as allowed by the Commission in the Tariff Order dated 30th May, 2020 for FY 2020-21 for projecting power purchase expenses for FY 2021-22. An escalation of 5% has been considered over the energy charges approved for all these stations. CSPDCL, while estimating the costs, has considered only the Fixed Charges and Energy Charges and has estimated that any other additional cost would be passed through on actual basis.

CSPDCL has estimated the gross energy availability from the existing stations based on the allocated capacity and the average Plant Load Factor (PLF) for the past five years, and the same has been considered for calculating the gross energy availability for the State for FY 2021-22. For the stations recently commissioned, CSPDCL has considered PLF of 85% except Lara, for which PLF is projected at 60%, considering that the COD of second Unit has been attained very recently during the period of COVID-19.

The summary of the power purchase quantum and cost from CGS sources as submitted by CSPDCL is shown in the Table below:

Table 10-22: Power Purchase from CGS projected by CSPDCL for FY 2021-22

Sr. No	Source	Units Purchased (MU)	Fixed Cost (Rs crore)	Variable Cost (Rs crore)	Total Cost (Rs crore)
A	Korba STPS	1498.13	100.50	212.99	313.49
B	Korba STPS Unit VII	543.91	73.48	75.86	149.34
C	Vindhyachal	1456.91	194.13	260.18	454.31
D	Sipat STPS	3,444.39	461.15	515.53	976.68
E	Mauda STPS	602.80	141.32	208.89	350.21
F	NTPC - SAIL (NSPCL)	280.37	52.6	111.48	164.08
G	Lara STPS	3931.49	560.9	883.41	1444.31
H	Solapur STPS	335.77	209.48	121.15	330.63
I	Gadarwara STPS	541.63	220.68	371.07	591.75

Sr. No	Source	Units Purchased (MU)	Fixed Cost (Rs crore)	Variable Cost (Rs crore)	Total Cost (Rs crore)
J	Khargaon STPS	822.55	16.8	184.83	201.63
K	Kahalgaon STPS	202.56	23.12	45.31	68.43
L	Tarapur (Unit 3 & 4)	300.94	0	97.04	97.04
M	Hirakund (OHPCL)	7.85	0	1.87	1.87
N	Gadarwara STPS Unit II	541.63	280.45	70.81	351.26
Total CGS		**14,510.93**	**2334.61**	**3160.42**	**5495.03**

10.5.2 State Generating Stations

CSPDCL submitted that it mainly relies on the power from CSPGCL Stations. Currently, it has tied up 2,960 MW from CSPGCL. CSPDCL has not considered capacity of the Korba East Thermal Power Plant as CSPGCL has decided to retire this station.

CSPDCL while estimating the costs, has considered the Fixed Charges as approved by the Commission in its tariff order dated 30th May 2020 with an escalation of 5% over the approved Energy Charges, for projecting the Fixed Charges and Energy Charges for FY 2021-22 and has estimated that any other additional cost would be passed through on actual basis.

CSPDCL has considered sale of power from ABVTPP to Telangana at the State periphery for FY 2021-22 under back-to-back arrangement without any trading margin at actual prevailing rates.

The summary of the power purchase quantum and cost from CSPGCL as submitted by CSPDCL is shown in the Table below:

Table 10-23: Power Purchase from CSPGCL projected by CSPDCL for FY 2021-22

Sr. No	Source	Units Purchased (MU)	Fixed Cost (Rs crore)	Variable Cost (Rs crore)	Total Cost (Rs crore)
A	DSPM	3,387.93	467.58	543.92	1011.50
B	Hasdeo TPS	5298.05	606.83	870.60	1477.43
C	KTPS- West	3,527.54	615.29	491.51	1106.80

Sr. No	Source	Units Purchased (MU)	Fixed Cost (Rs crore)	Variable Cost (Rs crore)	Total Cost (Rs crore)
D	Marwa	6847.68	1533.12	1149.67	2682.79
E	HPS Bango	566.65	30.13	0	30.13
F	HPS Korba Mini Hydro	4.38	-	1.75	1.75
G	HPS Gangrel	25.75	-	9.95	9.95
H	HPS Sikaser	24.04	-	6.78	6.78
I	Co-Gen Kawardha	47.70	-	23.89	23.89
Total CSPGCL		**19,729.72**	**3252.95**	**3098.07**	**6351.02**

10.5.3 Power Purchase from Renewable Sources

CSPDCL has considered the RPO target for FY 2021-22 at the same level as in FY 2020-21 as notified in CSERC (Renewable Purchase Obligation and REC framework Implementation) Regulations, 2016, as the Commission has specified the RPO trajectory till FY 2020-21 only. The RPO targets specified by the Commission are 6.50% and 8.50% for Solar and Non-Solar, respectively.

CSPDCL has considered Renewable Energy (RE) purchase at same level as approved for FY 2020-21 in the tariff order dated 30th May, 2020. CSPDCL further submitted that it has envisaged that additional RE capacity of 496 MW would be commissioned during FY 2021-22. The details of RE capacity addition with expected commercial operation date (COD) is given in the table below:

Table 10-24: RE Capacity addition envisaged by CSPDCL in FY 2021-22

Sr. No.	Plant/Source	Capacity (MW)	Expected Commercial Operation Date
1	Solar Energy Corporation of India (Solar)	250	March 2021
2	Solar Energy Corporation of India (Wind)	150	June 2021
3.	Hydro Power	96	August 2021
4.	**Total**	**496**	

CSPDCL submitted that the charges for the new RE sources have been considered at the same level as that for existing RE sources. The quantum of RE required to be purchased by CSPDCL and as estimated for FY 2021-22 is shown in the Table below:

Table 10-25: RE Purchase projected by CSPDCL for FY 2021-22

Sr. No.	Source	Units Purchased (MU)	Fixed Cost (Rs crore)	Variable Cost (Rs crore)	Total Cost (Rs crore)
A	Biomass	686.28	-	442.44	442.44
B	Solar	960.33	-	496.44	496.44
C	Hydel/Other RE	464.72	-	158.64	158.64
Total RE		**2111.33**	**_**	**1097.52**	**1097.52**

10.5.4 Concessional Power Purchase

CSPDCL has considered purchase of concessional power of 1530.87 MU with 5% escalation in rate over rates approved for FY 2020-21 for the purpose of projections for FY 2021-22.

10.5.5 Short-Term Power Purchase

CSPDCL submitted that while there is estimated net surplus of power as seen from past trends, in actual there is shortage of power during certain durations of day/month/year. Accordingly, CSPDCL has considered short-term purchase of 124 MU electricity from Power Exchanges and from unscheduled sources for FY 2021-22, at the same level as approved by the Commission in the tariff order dated 30th May, 2020 for FY 2020-21.

10.5.6 Inter-State and Intra-State Transmission Charges and CSLDC Charges

CSPDCL submitted that it has to pay Transmission Charges to PGCIL for use of transmission facilities for drawing power from Western and Eastern Region. CSPDCL has considered PGCIL Charges, intra-State Transmission Charges and SLDC charges for FY 2021-22 same as approved by the Commission in the order dated 30th May, 2020 for FY 2020-21.

10.5.7 Inter-State Sale of Power

CSPDCL has consider sale of power of ABVTPP power at State periphery at actual weighted average sale rate of FY 2020-21 (Apr 20 to Sep 20), i.e., Rs 4.49/kWh and the sale of balance surplus power has been considered at Rs 2.45/kWh, which is the average of actual sale rate in FY 2020-21 (Apr 2020 to Sep 2020).

CSPDCL further submitted that the sale of electricity to other than retail consumers is not within the regulatory purview of the Commission. As electricity cannot be stored, any surplus energy gets sold as and when available at the market realised rates. The availability of such surplus energy is dependent on the consumption of the consumers and not on the Licensee. The sale of surplus energy is always ensured to be sold with the objective to maximise the revenue from such sale and to pass on the accrued benefit to the retail consumers.

Commission's View

CSPDCL's submissions and assumptions were analysed in detail and additional information was sought on the same. The power purchase expenses have been estimated based on the energy requirement approved in the Energy Balance above. CSPDCL's projections of quantum of power available from different sources and the rate of purchase from different sources have been accepted, with certain modifications which are as under:

a) For existing Central Generating Stations, the energy availability has been considered based on average PLF for last five years and allocated share of State of Chhattisgarh, as proposed by CSPDCL. For new generating stations, availability has been considered, as proposed by CSPDCL. As regards Lara TPS, the energy availability from Lara STPS has been considered as 60% PLF, as proposed by CSPDCL.

b) The 5% escalation in Energy Charges estimated by CSPDCL is not been considered, as any variation in Energy Charge rates are recommended by CSPDCL through the Variable Charge Adjustment (VCA) mechanism.

c) The quantum and cost of purchase from CSPGCL stations has been considered based on the quantum of net generation and cost of generation approved for CSPGCL for FY 2021-22 in this order. The energy availability from Hydro and Renewables has been considered as submitted by CSPDCL.

d) The availability of power from Concessional Power sources has been considered as submitted by CSPDCL, at the average rate of Rs. 1.60/kWh. In this regard, the Commission has determined tariff in respect of concessional power applicable for majority of generators. It is, therefore, clarified that for the generators whose tariff has been so determined, energy charges for FY 2020-21 shall be billed at the latest tariff determined by the Commission. For others whose tariff is yet to be determined by the Commission, the energy charges shall be billed at the rate of Rs. 1.60/kWh.

e) The RPO targets specified for FY 2020-21 have been considered at same levels for FY 2021-22 also, i.e., 6.50% and 8.50% for Solar and Non-Solar RE, respectively. The availability of power from existing as well as new RE sources has been considered as submitted by CSPDCL. However, the additional quantum of RE Solar and Wind power estimated to be available in FY 2021-22 from Solar Energy Corporation of India as well as the additional Hydro power estimated for FY 2021-22, have been considered at the average rate of Rs. 2.50/kWh, based on the prevailing trends of rates discovered through competitive bidding. The shortfall in RE procurement vis-à-vis the RPO target has been considered to be met by purchase of Renewable Energy Certificates (RECs) at the rate of Rs. 0.50/kWh. However, CSPDCL should strive to purchase actual RE power to the extent possible.

f) The Commission has made a reasonable assessment of the surplus quantum to be sold in the Power Exchanges for FY 2021-22, and has considered some short-term purchase from Power Exchanges to meet the energy requirement. The rate for short-term power purchase has been considered at the actual rate considered in the true-up of FY 2019-20.

g) During the year, there are bound to be mismatches between demand and supply, and CSPDCL should strive to maximise the revenue from such sale of surplus power.

h) While considering the energy availability from various sources, the energy requirement for sale of power to Telangana State has been considered equal to the energy purchased from ABVTPP.

It is observed that on an annual basis there is a marginal surplus in energy availability with respect to the energy requirement. In the Tariff Order for FY 2020-21, the Commission had considered the surrender of surplus power available, i.e., not scheduling of energy from contracted sources, after meeting the energy requirement, rather than considering sale of surplus power. The energy purchase was considered based on economic despatch principles. However, the surplus quantum estimated for FY 2021-22 is around 979 MU, hence, the Commission has not done the detailed computation for surrender of surplus power. However, during the year, the actual scenario would be a mix of sale of surplus power and surrender of surplus power. Hence, the Commission has considered sale of estimated quantum of surplus power at the rate of Rs. 2.75/kWh. However, CSPDCL should strive to maximise the revenue from such sale of surplus power.

The Commission has considered the ceiling rate for purchase of short-term power as Rs. 3.50/kWh, and any short-term power purchase by CSPDCL beyond this ceiling rate shall require approval of the Commission.

The Inter-State Transmission charges have been approved at the same rate as approved for FY 2020-21 in the tariff order dated 30th May, 2020. The Commission has considered the revised Annual Transmission Charges of CSPTCL and SLDC Charges for FY 2021-22 as approved in this order. The summary of power purchase cost as submitted by CSPDCL and approved by the Commission for FY 2021-22 in this order, is shown in the Table below:

Table 10-26: Approved Power Purchase Cost for FY 2021-22

Source	Petition			Approved		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./ kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./ kWh)
CGS	**14,510.93**	**5,495.03**	**379**	**14825.64**	**5347.41**	**361**
NTPC sub-total	13,921.77	5,232.04	376	14236.40	5,094.41	358
NTPC-SAIL (NSPCL)	280.37	164.08	585	280.46	158.80	566
NPCIL	300.94	97.04	322	300.94	92.42	307
Other Charges	7.85	1.87	238	7.85	1.78	227
CSPGCL	**19,729.60**	**6,351.03**	**322**	**18866.84**	**6,058.09**	**321**
Total CSPGCL Thermal & Hydro	19,627.85	6,308.65	321	18493.71	5,994.01	324
CSPGCL – Renewables	101.87	42.37	416	373.13	64.08	172

Source	Petition			Approved		
	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./ kWh)	Quantum (MU)	Cost (Rs. Cr)	Rate (Ps./ kWh)
IEX/PXIL/Traders	**124.49**	**39.74**	**319**	**124.49**	**41.93**	**337**
Concessional Power - Through CSPTrdCL	**1,530.87**	**257.19**	**168**	**1,530.87**	**244.94**	**160**
Others - Renewables	**2,111.33**	**1,045.27**	**495**	**2111.33**	**1,109.36**	**525**
Biomass	686.28	442.44	644	686.28	442.44	645
Solar	960.33	496.44	516	960.33	428.32	446
Hydel/Other RE	464.72	158.64	341	464.72	143.62	309
REC Purchase					94.98	
Gross Power Purchase Cost, excluding Transmission Charges	**38,006.71**	**13,240.56**	**348**	**37,459.17**	**12,801.73**	**342**
Transmission Charges	**-**	**1,620.06**	**-**	**-**	**1,644.59**	
Inter-State Transmission Charges	-	603.93	-	-	603.93	-
Intra-State Transmission Charges	-	1,002.42	-	-	1,025.74	-
CSLDC Charges	-	13.71	-	-	14.93	-
Power Purchase Cost including Transmission Charges	**38,006.71**	**14,860.58**	**391**	**37,459.17**	**14,446.33**	**386**
Less: Adjustments	**6,746.20**	**2,909.41**	**431**	**7328.18**	**3,120.07**	**426**
Sale of Power to Telangana	6,159.00	2,765.39	449	6349.58	2,850.96	449
Sale of Surplus power to Power Exchange	587.20	144.02	245	978.60	269.12	275
Net Power Purchase Cost	**31,260.51**	**11,951.17**	**382**	**30,131.00**	**11,326.25**	**376**

10.6 O&M Expenses

CSPDCL's Submission

CSPDCL submitted that it has estimated the components of O&M expenses based on Regulation 57.4 of the CSERC MYT Regulations, 2015. CSPDCL submitted that it has considered the period from FY 2015-16 to FY 2019-20 for calculation of average WPI and CPI escalation. CSPDCL has calculated the normative O&M expenses for FY 2021-22 by escalating the approved normative expenses for FY 2020-21 with WPI and CPI escalation rate of 1.39% and 5.17%, respectively, as shown in the Table below:

Table 10-27: O&M expenses projected by CSPDCL for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	FY 2020-21 Order dated 30.05.2020	Projections for FY 2021-22
1	Employee Costs	900.97	947.51
2	A&G Expenses	143.27	145.26
3	R&M Expenses	133.15	135.00
4	**Total O&M Expenses**	**1253.77**	**1227.78**

Commission's View

As regards O&M Expenses, Regulation 57.4 of the CSERC MYT Regulations, 2015 provides as under:

"57.4 Operation and Maintenance expenses

Employee Cost

g) *The employee cost, excluding pension fund contribution and impact of pay revision arrears for the base year i.e. FY 16, shall be derived on the basis of the normalized average of the actual employee expenses excluding pension fund contribution and impact of pay revision arrears available in the accounts for the previous five (5) years immediately preceding the base year FY 2015-16, subject to prudence check by the Commission. Any other expense of nonrecurring nature shall also be excluded while determining normalized average for the previous five (5) years.*

h) *The normalization shall be done by applying last five year average increase in Consumer Price Index (CPI) on year to year basis. The average of normalized net present value for FY 2010-11 to FY 2014-15, shall then be used to project* *base year value for FY 2015-16. The base year value so arrived, shall be escalated by the above inflation rate to estimate the employee expense (excluding impact of pension fund contribution and pay revision, if any) for each year of the Control period.*

A&G Expenses and R&M Expenses

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

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

The Commission has derived the O&M Expenses for FY 2021-22 in accordance with the above said Regulations. The above Regulations provides that the normalization shall be done applying last five-year average increase in CPI on year-to-year basis for employee expenses and WPI for A&G expenses and R&M expenses.

The Commission has escalated the employee expenses approved for FY 2020-21 with the escalation factor of 5.17%, which is the average increase in CPI in the last five years, to derive the employee expenses for FY 2021-22. Similarly, the Commission has escalated the normative A&G expenses and R&M expenses approved for FY 2020-21 with the escalation factor of 1.39%, which is the average increase in WPI in the last five years. The Commission has approved the components of O&M expenses for FY 2021-22 as shown in the Table below:

Table 10-28: O&M Expenses approved for FY 2021-22 (Rs. Cr.)

Sr. No.	Particulars	Petition	Approved
1	Employee Expenses	947.51	947.51
2	A&G Expenses	145.26	145.26
3	R&M Expenses	135.00	135.00
4	**Total O&M Expenses**	**1227.78**	**1227.78**

10.7 Contribution to Pension and Gratuity

CSPDCL's submission

CSPDCL submitted that it has considered the contribution to Pension & Gratuity (P&G) as per the demand note received from the Pension Trust. CSPDCL's share has been considered as per the methodology approved in the MYT order dated 30th April, 2016 for arriving at P&G contribution for FY 2021-22. CSPDCL requested the Commission to approve P&G contribution of Rs. 360.86 Crore for FY 2021-22.

Commission's View

The Commission accepts the submission of CSPDCL for arriving at the P&G contribution of FY 2021-22. Further, the Commission notes that the Companies have requested to true-up the revised contribution to P&G fund, to the extent of shortfall in interest income contributed to the Trust Fund. The total additional contribution to Pension Fund to be allowed to the Power Companies works out to Rs. 141.81 Crore. As per the ratio of sharing, the contribution for CSPTCL and CSPGCL is calculated at Rs. 14.54 Crore and Rs 38.65 Crore, respectively. Hence, CSPDCL's share of the shortfall, to the extent of Rs. 88.62 crore has been allowed along with the Contribution to P&G for FY 2021-22. The approved Contribution to P&G Fund for FY 2021-22 is shown in the Table below:

Table 10-29: Contribution to P&G Fund for FY 2021-22 approved by the Commission (Rs. Cr.)

Particulars	Petition	Approved
Contribution to P&G Fund for FY 2021-22	360.86	360.86
Additional Contribution due to shortfall in FY 2019-20	-	88.62
Total Contribution to P&G Fund for FY 2021-22	**360.86**	**449.48**

10.8 Capital Structure

CSPDCL's submission

CSPDCL has determined the capital structure for FY 2021-22 as under:

(a) The actual loan addition for FY 2021-22 has been considered as Rs. 100 crore;

(b) Addition in consumer contribution/grants for FY 2021-22 has been considered Rs. 100 crore;

(c) Normative equity addition has been considered based on capital restructuring methodology as approved by the Commission in the tariff order dated July 12, 2013;

(d) GFA addition of Rs 300 Crore has been projected based on the additional Capital Investment Plan (CIP) for FY 2021-22.

CSPDCL submitted the Capital Structure for FY 2021-22 shown in the table below:

Table 10-30: Capital Structure for FY 2021-22 as submitted by CSPDCL (Rs. cr.)

Particulars	Legend	FY 2021-22
Gross Fixed Assets (GFA)		
Opening GFA	A	9217.85
Opening CWIP	B	3371.27
Opening CAPEX	C=A+B	12589.13
Capitalization during the year	D	300.00
Closing GFA	E=D+A	9517.85
Closing CWIP	F	3571.27
Closing CAPEX	G=F+E	13089.13
Grants and Consumer Contribution		
Opening Grant and Contribution	H	5515.39
Consumer contribution/grants during the year	I	100.00
Closing Consumer Contribution	J=H+I	5615.39
Consumer Contribution in Opening GFA	K=H*A/C	4038.41
Consumer Contribution in Closing GFA	L=J*E/G	4083.27
Loan Borrowed		
Opening Borrowed Loan	M	2546.10
Loan Borrowed during the year	N	100.00
Closing Borrowed Loan	O=M+N	2646.10
Borrowed Loan in Opening GFA	P=M*A/C	1864.27
Borrowed Loan in Closing GFA	Q=MAX (O*E/G, P)	1924.13

Particulars	Legend	FY 2021-22
Equity		
Opening Gross Equity	R=C-H-M	4527.64
Equity Addition During the Year	T=S-R	300.00
Closing Gross Equity	S=G-J-O	4827.64
Gross Equity in Opening GFA	U=A-K-P	3315.17
Gross Equity in Closing GFA	V=C-L-Q	3510.45
Average Gross Equity During the year	W=Avg. (U, V)	3412.81
Funding of Capitalized Assets		
Total Capitalization	D	300.00
Contribution of Grant in Capitalized Assets	L-K	44.86
Contribution of Equity in Capitalized Assets	Q-P	76.54
Contribution of Loan in Capitalized Assets	V-U	178.60

Commission's View

The Closing GFA of FY 2019-20 as approved in this order is considered as the opening GFA of FY 2020-21. CSPDCL has projected capitalization for FY 2020-21 and FY 2021-22. CSPDCL has also separately filed the CIP for FY 2021-22, which is under process with the Commission. The Commission has verified the average capitalisation of past years to assess the trend for capitalisation. The capitalisation in FY 2020-21 and FY 2021-22 is likely to have impact due to COVID-19 pandemic. The Commission has provisionally considered capitalisation of Rs. 300 Crore for both FY 2020-21 and FY 2021-22, as per the submission of CSPDCL, as the same is lower than the past trend in capitalisation.

The closing GFA for FY 2020-21 thus arrived by adding the opening GFA for the year and addition of GFA during the year is considered as the Opening GFA of FY 2021-22. The Commission has arrived at the closing GFA for FY 2021-22 by considering the opening GFA for the year and the addition to GFA during the current year.

As regards the funding of capitalisation, the Commission has considered the grants/consumer contribution utilised for funding of capitalisation as Rs. 44.83 Cr. for FY 2021-22, as per the submission of CSPDCL. The consumer contribution/grants have been reduced from the GFA addition, before considering the normative debt: equity ratio of 70:30, as per Regulation 17 of the CSERC MYT Regulations, 2015.

The GFA and its funding considered by the Commission for FY 2021-22 is shown in the Table below:

Table 10-31: Approved GFA for FY 2021-22 and its Funding (Rs. cr.)

Sr. No.	Particulars	Petition	Approved
	Gross Fixed Assets (GFA)		
1	Opening GFA	9217.85	9218.39
2	Capitalization during the year	300.00	300.00
3	Closing GFA	9517.85	9518.39
	Funding of Capitalized Assets		
4	Grant	44.86	44.79
5	Equity	76.54	76.56
6	Debt	178.60	178.64
7	**Total Capitalization**	**300.00**	**300.00**

The Commission approves the total capitalization of Rs. 300 Crore for FY 2021-22 and its funding, as shown in the Table above.

10.9 Depreciation

CSPDCL's Submission

CSPDCL submitted that depreciation has been calculated as per Regulation 24 of the CSERC MYT Regulations, 2015. CSPDCL further submitted that for calculating depreciation for FY 2021-22, CSPDCL has considered the average depreciation rate for FY 2019-20. CSPDCL has claimed depreciation of Rs. 232.59 Cr. for FY 2021-22.

Commission's View

The Commission has computed the depreciation for FY 2021-22 as per Regulation 24 of the CSERC MYT Regulations, 2015.

The Commission has considered the same rate of depreciation approved in the True-up of FY 2019-20 for calculating depreciation for FY 2021-22.

The Commission has considered the depreciation on fully depreciated assets for FY 2021-22 as submitted by CSPDCL, however, the actual depreciation on fully depreciated assets will be considered during the truing up for FY 2021-22. The depreciation on fully depreciated assets has been deducted in accordance with the approach adopted in the previous orders.

Also, the depreciation on consumer contribution/grants in live assets has been deducted as per Regulation 24 of the CSERC MYT Regulations, 2015. Similarly, depreciation on assets converted from loan to grant under UDAY has been deducted.

The depreciation approved for FY 2021-22 is shown in the Table below:

Table 10-32: Approved Depreciation for FY 2021-22 (Rs. cr.)

Particulars	Petition	Approved
Opening GFA	9217.85	92178.39
Additional Capitalisation during the Year	300.00	300.00
Closing GFA	9517.85	9518.39
Average GFA for the year	9367.85	9368.39
Depreciation Rates (%)	5.56%	5.56%
Gross Depreciation	521.25	521.28
Less: Depreciation on consumer contribution on live assets	225.96	226.50
Less: Depreciation on Fully Depreciated Assets	16.51	16.51
Less: Depreciation on assets converted from loan to grant under UDAY	46.20	46.20
Net Depreciation	**232.59**	**232.08**

10.10 Interest on Loan Capital

CSPDCL's Submission

CSPDCL submitted that the Interest on loan capital has been computed in accordance with Regulation 23 of the CSERC MYT Regulations, 2015. CSPDCL has estimated the loan addition for FY 2021-22 at Rs. 100 Cr. Further, CSPDCL has considered the interest rates as per the provisional true up for FY 2019-20 for calculation of interest expenses for FY 2021-22. CSPDCL has claimed the interest on loan capital of Rs. 167.94 Crore for FY 2021-22.

Commission's View

The Commission has approved interest on loan capital for FY 2021-22 as per Regulation 23 of the CSERC MYT Regulations, 2015.

The closing balance of loan capital as approved in the truing up for FY 2019-20 has been considered as the opening balance of loan for FY 2020-21. The normative debt addition in FY 2020-21 has been considered equivalent to 70% of the capitalisation approved for FY 2020-21. The closing balance of loan of FY 2020-21 has been considered as the opening loan balance for FY 2021-22. The addition of normative loan for FY 2021-22 has been considered based on debt component towards the approved capitalisation for FY 2021-22, as considered earlier in this Chapter. The repayment has been considered equal to net depreciation approved for FY 2021-22 in this Order.

The Commission has adopted the weighted average rate of interest of 10.28 % for FY 2021-22, as submitted by CSPDCL in its Petition.

The interest expenses approved for FY 2021-22 is shown in the following Table:

Table 10-33: Approved Interest Expense for FY 2021-22 (Rs. cr.)

Particulars	Petition	Approved
Opening Net Normative Loan	1660.70	1654.72
Repayment during the year	232.59	232.08
Additional Capitalization of Borrowed Loan during the year	57.48	-
Addition/(Reduction) in Normative loan during the year	121.11	178.64
Closing Net Normative Loan	1606.71	1601.28
Average Normative loan during the year	1633.70	1628.00
Weighted Average Rate of Interest	10.28%	10.28%
Interest Expenses	**167.94**	**167.36**
Add: Other Finance Charges	-	-
Total Interest on Loan	**167.94**	**167.36**

10.11 Interest on Consumer Security Deposit

CSPDCL's Submission

CSPDCL has considered the Interest on Consumer Security Deposit (CSD) paid to the consumers in line with Regulation 6.13 of the Chhattisgarh Electricity Supply Code,

2011. CSPDCL submitted that it has projected interest on CSD by considering the addition in CSD as average of addition in FY 2018-19 and FY 2019-20. CSPDCL further submitted that the actual rate of interest at which interest has been paid to consumers in FY 2019-20 has also been considered for FY 2021-22.

Accordingly, CSPDCL requested the Commission to approve interest on CSD of Rs. 146.19 Crore for FY 2021-22.

Commission's View

The Commission has considered the closing CSD for FY 2019-20 as approved in the true-up in this order, as the opening CSD for FY 2020-21. The Commission has considered the addition to CSD in FY 2020-21 and FY 2021-22 same as the increase in CSD in FY 2019-20 over CSD of FY 2018-19.

The Commission has considered the rate of interest as submitted by CSPDCL for determining the interest on CSD for FY 2021-22 as shown in the Table below:

Table 10-34: Approved Interest on CSD for FY 2021-22 (Rs. cr.)

Particulars	Petition	Approved
Opening CSD	2,523.00	2524.22
Addition	225.39	226.62
Closing CSD	2,748.40	2750.84
Rate	5.32%	5.32%
Interest on CSD	**146.19**	**140.30**

10.12 Interest on Working Capital

CSPDCL's Submission

CSPDCL submitted that Interest on Working Capital (IoWC) has been computed as per Regulation 25 of the CSERC MYT Regulations, 2015. For computation of working capital requirement, CSPDCL has considered one month of projected O&M expenses, maintenance spares @ 40% of projected R&M expenses and one month of receivables equal to one month of expected revenue from sale of power. CSPDCL has considered the interest rate of 12.55% (SBI Base Rate as on 1st April 2019, i.e., 9.05% plus 350 basis points) for FY 2021-22. CSPDCL submitted the normative IoWC as Rs. (116.34) Crore for FY 2021-22.

Commission's View

The Commission has computed IoWC in accordance with Regulation 25 of the CSERC MYT Regulations, 2015. For computation of working capital requirement as per the formula provided in the CSERC MYT Regulations, 2015, the Commission has considered the normative value of O&M expenses approved in this Order. Further, the receivables have been considered based on approved ARR of FY 2021-22. The CSD has been considered as Rs. 2,750.84 cr. for FY 2020-21. Since, the Consumer Security Deposit is more than normative working capital requirement, the actual IoWC requirement for FY 2020-21 works out to be negative. The interest rate has been considered as per Regulation 25.4 of the CSERC MYT Regulations, 2015, i.e., 10.90% for FY 2021-22. The normative IoWC approved by the Commission for FY 2021-22 is shown in the Table below:

Table 10-35: Approved IoWC for FY 2021-22 (Rs. cr.)

Particulars	Petition	Approved
Operation and Maintenance Expenses for one month	102.31	102.31
Maintenance spares @ 40% of Repair and Maintenance expenses	54.00	54.00
Receivables equal to 1 month of expected revenue	1,552.35	1,346.86
Total Working Capital	**1,708.66**	**1,503.17**
Less: Security Deposit	2,635.70	2,750.84
Net Working Capital Requirement	(927.03)	(1,247.67)
Rate of Interest (%)	12.55%	10.90%
Interest on Working Capital requirement	**(116.34)**	**(136.00)**

10.13 Return on Equity

CSPDCL's Submission

CSPDCL has computed permissible equity as per the proposed capital structure and as per Regulation 17.1 of the CSERC MYT Regulations, 2015. CSPDCL has excluded consumer contribution, deposit work and grant obtained from the asset addition during the year for computation of normative debt: equity. CSPDCL has computed RoE of Rs. 300.71 Crore for FY 2021-22.

Commission's View

RoE has been computed as per Regulation 22 of the CSERC MYT Regulations, 2015. The closing balance of permissible equity as approved in the truing up for FY 2019-20 has been considered as the opening balance of equity for FY 2020-21. The normative equity addition in FY 2020-21 has been considered equivalent to 30% of the capitalisation considered for FY 2020-21 in this Order. The closing balance of equity for FY 2020-21 has been considered as the opening equity balance for FY 2021-22. The addition of normative equity for FY 2021-22 has been considered based on equity component towards the approved capitalisation for FY 2021-22, as considered earlier in this Chapter. The Commission has considered rate of return as 16% on average equity for the current year. The RoE approved for FY 2021-22 is shown in the Table below:

Table 10-36: Approved RoE for FY 2021-22 (Rs. cr.)

Particulars	Petition	Approved
Permissible Equity in Opening GFA	1841.15	2,004.89
Permissible Equity in Closing GFA	1917.69	2,081.45
Average Gross Permissible Equity during the year	1879.42	2,043.17
Rate of Return (%)	16%	16%
Return on Equity	**300.71**	**326.91**

10.14 Non-Tariff Income

CSPDCL's Submission

CSPDCL submitted that the Non-Tariff Income (NTI) is estimated based on the methodology adopted by the Commission in the MYT order dated 30th April, 2016, i.e., 10% escalation on YoY basis. CSPDCL further submitted that it has projected Non-Tariff Income by escalating the approved figures of FY 2020-21 by 10%. CSPDCL requested to approve Rs. 599.74 cr. as NTI for FY 2021-22. This includes Rs. 485.68 cr. towards Non-Tariff Income, and Rs. 114.06 Cr. towards revenue from Wheeling Charges.

Commission's View

The Commission has considered the actual NTI for FY 2019-20 as per the audited accounts for FY 2019-20 as the base. Further, the Point of Connection (PoC) Charges have been revised in this order, and the corresponding increase in NTI has been considered. Further, the actual NTI would be considered at the time of Truing-up for FY 2021-22 subject to prudence check. The approved NTI for FY 2021-22 is shown in the Table below:

Table 10-37: Approved Non-Tariff Income for FY 2021-22 (Rs. Cr.)

Particulars	Petition	Approved
Non-Tariff Income	485.68	241.16
Wheeling Charges, Open Access & CSS	114.06	76.87
Total Non-Tariff Income	**599.74**	**318.03**

10.15 Aggregate Revenue Requirement

Based on the above, the approved ARR for FY 2021-22 is shown in the Table below:

Table 10-38: Approved ARR for FY 2021-22 (Rs. cr.)

Sr. No.	Particulars	Petition	Approved
A	**Power Purchase Expenses**	**14,860.58***	**11,326.25**
1	Power Purchase Cost	13,240.52*	9,681.66
2	Inter-State Transmission Charges	603.93	603.93
3	Intra-State Transmission Charges	1,002.42	1025.74
4	CSLDC Charges	13.71	14.93
B	**Operation & Maintenance Expenses**	**1,588.64**	**1,677.26**
1	Net Employee Expenses	947.51	947.51
2	Net A&G Expenses	145.26	145.26
3	Net R&M Expenses	135.00	135.00
4	Pension & Gratuity	360.86	449.48
C	**Interest & Finance Expenses**	**197.80**	**171.66**
1	Interest on Loan	167.94	167.36
2	Interest on Security Deposit	146.19	140.30
3	Interest on Working Capital	(116.34)	(136.00)
D	**Other Expenses**	**533.29**	**558.98**
1	Depreciation	232.59	232.08
2	Return on Equity	300.71	326.91

Sr. No.	Particulars	Petition	Approved
E	**Less: Non-Tariff Income**	**599.74**	**318.03**
1	Non-Tariff Income	485.68	241.16
2	Wheeling Charges, Open Access & CSS	114.06	76.87
F	**Aggregate Revenue Requirement**	**16,580.57**	**13,416.12**

Note: ** - Without netting off revenue from sale of power to Telangana and Power Exchange, which has been considered as Revenue received; approved power purchase expenses have been shown after netting off revenue from sale of power to Telangana and Power Exchange, as discussed in earlier Section.*

10.16 Revenue from Sale of Power

CSPDCL's Submission

CSPDCL submitted that the Revenue from Sale of Power for FY 2021-22 has been calculated based on the tariff determined by the Commission in the tariff order for FY 2019-20 dated 28th February, 2019 (to be read as FY 2020-21 dated 30th May, 2020) as given in the Table below:

Table 10-39: Revenue from Sale of Power at Existing Tariff submitted by CSPDCL (Rs. Crore)

Sr. No.	Source	Petition
1	Revenue from Retail Sale of Power	15,718.92
2	Revenue from Sale of power to Telangana	2,765.391
3	Revenue from Sale of Surplus Power	144.02
4	**Total Non-Tariff Income**	**18,628.33**

Commission's View

The Commission has estimated the revenue from sale of electricity at existing tariff as Rs. 15,413.09 Crore, on the basis of the prevailing tariff and applicable terms and conditions as specified in the Tariff Schedule for each consumer category, and the consumer category-wise sales projected by the Commission, as discussed earlier. The revenue from sale of power to Telangana and sale of surplus power in Power Exchange has been considered for netting off the power purchase expenses, as discussed in earlier Sections, and is hence, not considered under Revenue.

The total Revenue from sale of power is shown in the Table below:

Table 10-40: Revenue from Sale of Power at Existing Tariff approved by the Commission (Rs. Crore)

Sr. No.	Source	Petition	Approved
1	Revenue from Retail Sale of Power	15,718.92	15,220.40
2	Revenue from Sale of power to Telangana	2,765.391	*
3	Revenue from Sale of Surplus Power	144.02	*
4	**Total Revenue**	**18,628.33**	**15,220.40**

Note:* * - *Revenue from sale of power to Telangana and Power Exchange have been considered for netting off power purchase expenses

10.17 Standalone Revenue Gap/(Surplus)

CSPDCL's Submission

CSPDCL has submitted that it has considered the standalone Revenue Surplus of Rs. 2047.77 Cr. for FY 2021-22.

Commission's View

The Revenue Gap/(Surplus) computed by the Commission for FY 2021-22 is given in the Table below:

Table 10-41: Approved Stand-alone Revenue Gap/(Surplus) for FY 2021-22 (Rs. cr.)

Sr. No.	Particulars	Petition	Approved
1	Annual Revenue Requirement	16,580.57	13,416.12*
2	Income from sale of Power at Existing Tariff	18,628.33	15,220.40*
3	**Standalone Revenue Gap/(Surplus)**	**(2,047.77)**	**(1,804.28)**

Note:* * - *Revenue from sale of power to Telangana and Power Exchange have been considered for netting off power purchase expenses

The Commission approves standalone Revenue Surplus of Rs. 1,804.28 Crore for FY 2021-22 for CSPDCL.

10.18 Cumulative Revenue Gap/(Surplus) for FY 2021-22

CSPDCL's Submission

CSPDCL submitted that there is net standalone Revenue Surplus of Rs. 2047.77 Crore for FY 2021-22. However, considering the net Revenue Gap of Rs 5804.68 crore carried forward from true up and adding regulatory asset of Rs.222.22 Cr (allowed in

Tariff Order dated 30.05.2020) along with carrying cost, there is overall Revenue Gap of Rs 4006.99 crore for FY 2021-22 as shown in the table below:

Table 10-42: Cumulative Revenue Gap/(Surplus) for CSPDCL for FY 2021-22 as submitted by CSPDCL (Rs. Cr.)

Sr. No.	Particulars	Petition
1	Annual Revenue Requirement (A)	16,580.57
2	Income from sale of Power at Existing Tariff (B)	18,628.33
3	**Standalone Revenue Gap/(Surplus) (C=A-B)**	**(2,047.77)**
4	Gap/(Surplus) from final true-up of FY 2018-19 and true-up for FY 2019-20	5,804.68
5	Regulatory Asset for CSPDCL	250.08
6	**Cumulative Revenue Gap/(Surplus)**	**4,006.99**

CSPDCL has requested the Commission to approve the net Revenue Gap after considering surplus/deficit position of CSPGCL/CSPTCL/CSLDC.

Commission's View

The Commission notes that while computing the cumulative Revenue Gap/(Surplus) for FY 2021-22, CSPDCL has not factored in the impact of the Revenue Gap/(Surplus) of CSPGCL, CSPTCL and CSLDC, arising after final true-up for FY 2019-20. The Commission has adjusted the Revenue Gap/(Surplus) of CSPGCL, CSPTCL and CSLDC after final true-up for FY 2019-20, and Revenue Gap/(Surplus) of CSPDCL after final true-up for FY 2018-19 and true-up for FY 2019-20 including carrying/(holding) cost, as approved in earlier Chapters of this order. Further, the Commission has also considered the CSPGCL Revenue Surplus of Rs. 5.72 crore, arising out of the final tariff determination of CSPGCLs Small-Mini Hydro Plants for FY 2017-18 to 2023-24, as approved in the order in Petition No. 16/2021, which has to be passed on to CSPDCL. Further, CSPGCL has retired the KTPS Station, and will be earning revenue from sale of scrap, which has not been considered under NTI of CSPGCL. The Commission has provisionally considered the NTI on this account as Rs. 10 crore, which shall be trued based on actuals and prudence check at the time of true-up for FY 2021-22.

The cumulative Revenue Gap/(Surplus) approved by the Commission for CSPDCL for FY 2021-22, after considering all the above Revenue Gap/(Surplus) of CSPDCL, CSPGCL, CSPTCL, and SLDC, is given in the table below:

Table 10-43: Cumulative Revenue Gap/(Surplus) for CSPDCL for FY 2021-22 as submitted by CSPDCL (Rs. Cr.)

Sr. No.	Particulars	CSPDCL Petition	Approved
1	Annual Revenue Requirement for FY 2021-22*	13,523.60	13,416.12
2	Income from sale of power at existing tariff*	15,718.92	15,220.40
3	Standalone Revenue Gap/(Surplus)	(2,195.33)	(1,804.28)
4	Gap/(Surplus) carried forward from final true-up of FY 2019-20 for CSPGCL	-	329.75
5	Gap/ (Surplus) after true-up of CSPGCL RE Station (Order in Petition No. 16/2021)	-	(5.72)
6	Additional NTI to CSPGCL from sale of scrap of KTPS	-	(10.00)
7	Gap/(Surplus) carried forward from final true-up of FY 2019-20 for CSPTCL	-	(46.06)
8	Gap/(Surplus) carried forward from final true-up of FY 2019-20 for CSLDC	-	(3.63)
9	Gap/(Surplus) carried forward from final true-up of FY 2018-19 and true-up for FY 2019-20 for CSPDCL	5,801.05	2,235.39
10	Regulatory asset for CSPDCL	250.11	246.44
11	Total Past Revenue Gap/(Surplus)	6,051.16	2,746.18
12	**Cumulative Revenue Gap/(Surplus)**	**3,855.83**	**941.89**
13	Adjusted ARR for Recovery	19,574.76	16,162.29
14	Total estimated sales		25,201.65
15	Stand alone cost of supply		5.32
16	**Adjusted Cost of supply after considering Gap**		**6.41**

Note: ** - Revenue from sale of power to Telangana and Power Exchange have been considered for netting off power purchase expenses*

11 TARIFF PRINCIPLES AND TARIFF DESIGN

Approach for Tariff for FY 2021-22

The Commission notes that the whole country including the State of Chhattisgarh was under lockdown from March 2020 onwards because of the COVID-19 pandemic. The lockdown was lifted in a phased manner from June-July 2020 onwards. Even today, there are restrictions that need to be observed all around the country. The Government of India has declared the COVID-19 situation as a force majeure event. The Commission appreciates that most industrial and commercial establishments had to be shut down due to lockdown and have since, restarted.

The primary objective of the Commission is to protect the interest of the consumer and at the same time ensuring recovery of reasonable and justified cost by the utilities. The Commission in the previous Order had taken various steps to protect public interest and provided relief to the consumers and Utilities in the State of Chhattisgarh.

The Commission, vide its Orders dated April 21, 2020, May 1, 2020 and May 6, 2020 in Petition No. 40, 46 and 47 of 2020, respectively, has already provided certain relaxation to Generating Companies, Licensees and consumers in the State of Chhattisgarh, in order to mitigate the impact of COVID-19.

The Commission had determined the cumulative Revenue Gap of Rs. 303.92 Crore in the Tariff Order of FY 2020-21 and for full recovery of that Gap, a tariff hike of 3% was required. However, the Commission was of the view that increase in Tariff in situation of COVID-19 pandemic would not be appropriate and the Commission decided to continue with the Tariff approved for FY 2019-20 vide Order dated February 28, 2019. Further, in the Tariff Order of FY 2019-20 dated February 28, 2019, the Commission had reduced the prevailing Tariff to grant relief to the consumer.

Now, as the country is slowly recovering from the COVID-19 situation and the industrial and commercial sector is returning to business-as-usual condition, the Commission is of view that the Tariff Structure needs to be revised, else the accumulated Revenue Gaps will keep increasing along with associated carrying cost, which will further burden the consumers at some later date. The updated Tariff Schedule is given in the next Chapter.

Based on the ARR and Sales approved accordingly, the Average Cost of Supply (ACoS) approved by the Commission for FY 2021-22 is shown in the Table below:

Table 11-1: Average Cost of Supply (Rs./kWh) for CSPDCL for FY 2021-22

Sr. No.	Particulars	FY 2020-21	
		CSPDCL Petition	**Approved**
1	Annual Revenue Requirement for FY 2021-22	13,523.60	13,416.12
2	Income from sale of power at existing tariff*	15,718.92	15,220.40
3	Standalone Revenue Gap/(Surplus)	(2,195.33)	(1,804.28)
4	Gap/(Surplus) carried forward from final true-up of FY 2019-20 for CSPGCL	-	329.75
5	Gap/ (Surplus) after true-up of CSPGCL RE Station (Order in Petition No. 16/2021)	-	(5.72)
6	Additional NTI to CSPGCL from sale of scrap of KTPS	-	(10.00)
7	Gap/(Surplus) carried forward from final true-up of FY 2019-20 for CSPTCL	-	(46.06)
8	Gap/(Surplus) carried forward from final true-up of FY 2019-20 for CSLDC	-	(3.63)
9	Gap/(Surplus) carried forward from final true-up of FY 2018-19 and FY 2019-20 for CSPDCL	5,801.05	2,235.39
10	Regulatory asset for CSPDCL	250.11	246.44
11	Total Past Revenue Gap/(Surplus)	6,051.16	2,746.18
12	**Cumulative Revenue Gap/(Surplus)**	**3,855.83**	**941.89**
13	Adjusted ARR for Recovery	19,574.76	16,162.29
14	Total estimated sales		25,201.65
15	Stand alone cost of supply		5.32
16	**Adjusted Cost of supply after considering Gap**		**6.41**

Note: ** - Excluding the revenue from sale of power to Telangana, which has been reduced from the power purchase expenses*

The Commission has not created any regulatory Assets for FY 2021-22.

11.1 Voltage-wise Cost of Supply for FY 2021-22

The Commission has computed the Voltage-wise Cost of Supply (VCoS) for FY 2021-22 as per the methodology adopted in the Tariff Order for FY 2018-19, after taking into account the ruling of the Hon'ble APTEL in its Judgment dated March 24, 2015 in Appeal No. 103 of 2012, on the issue of determination of tariff and cross-subsidy with reference to the VCoS.

The Commission notes that at present, the voltage-wise losses available are based on certain assumptions. The actual voltage-wise losses would be available only after the studies carried out by CSPDCL. In view of the above, the Commission determines the VCoS on the basis of available data.

Further, the framework prescribed by the Hon'ble APTEL requires that the category-wise tariffs be determined on the basis of ACoS as well as VCoS, and also the tariffs for all categories should be within ±20% of the overall ACoS for the Distribution Licensee. The Commission feels that in the absence of a realistic assessment of the voltage-wise losses, the determination of VCoS may lead to incorrect conclusions. However, the Hon'ble APTEL has directed that the tariffs and cross-subsidies have to be determined keeping in view the VCoS, while ensuring that the tariffs are within +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 category-wise tariffs on the basis of ACoS, while at the same time ensuring that the tariffs for the consumers taking supply at higher voltages is lower than that for consumers taking supply at lower voltages. The gradual movement initiated in the MYT Order in this regard has been carried forward in this Order.

The VCoS for FY 2021-22, as estimated by the Commission based on approved ARR and available data, is given in the Table below:

Table 11-2: VCoS for FY 2021-22 as calculated by Commission

Sr. No.	Particulars	EHV	33 kV	11 kV and LV	Total
1	Energy Sales (MU)	-	7,419.46	14,505.47	21,924.92
2	Distribution Loss (%)	-	4.85%	20.75%	16.00%
3	Energy input at 33 kV (MU)	-	7,797.64	18,303.46	26,101.10
4	Less: Direct Input to Distribution at 33/11 kV by CGPs and IPPs (MU)	-	45.04	105.71	150.75
5	Energy input to Discom level (MU)	-	7,752.60	18,197.74	25,950.35
6	EHV Sales (MU)	3,276.73	-	-	-
7	Energy requirement for Distribution (MU)	3,276.73	7,752.60	18,197.74	29,227.08
8	Transmission Loss (%)	3.00%	3.00%	3.00%	-
9	Energy requirement at G<>T Interface (MU)	3,378.07	7,992.38	18,760.56	30,131.01
10	Avg. Power Purchase Cost Rate (Rs. /kWh)	3.76	3.76	3.76	
11	Power Purchase Cost (Rs. Cr.)	1,269.82	3,004.34	7,052.10	11,326.25
12	Other Cost (Rs. Cr.)	234.30	554.35	1,301.22	2,089.86
13	Past Revenue Gaps (Rs. Cr.)	307.88	728.43	1,709.86	2,746.18
14	Total Cost (Rs. Cr.)	1,812.00	4,287.12	10,063.18	16,162.29
15	Energy Sales (MU)	3,276.73	7,419.46	14,505.47	25,201.65
16	**Cost of Supply (Rs. /kWh)**	**5.53**	**5.78**	**6.94**	**6.41**

11.2 Tariff Philosophy for FY 2021-22

The Commission in the Tariff Order of FY 2019-20 dated February 28, 2020 had reduced tariff for consumer categories in order to adjust the Revenue surplus of Rs. 539.92 Crore. Further, in the Tariff Order FY 2020-21 dated May 30, 2020, the Commission had decided to continue with the tariff approved for FY 2019-20. As discussed earlier, the Commission has determined the Cumulative Revenue Gap of Rs. 941.89 Crore. In order to recover the Revenue Gap, the Commission has approved increase in the category-wise Tariff for FY 2021-22. There is an under-recovery of around Rs. 304 crore projected for FY 2021-22 based on the revised tariffs, if the revised tariffs were in force for the entire year. At the same time, the sales pattern is not uniform throughout the year and the month-wise sales pattern is different for different categories. Further, as the existing tariffs have been in force for 4 months of FY 2021-22, viz., from April to July 2021, and the revised tariffs shall be applicable for only 8 months of FY 2021-22, there is likely to be a further under-recovery in the revenue from revised tariffs.

The Commission has projected the category-wise sales on a conservative basis as compared to the sales projected by CSPDCL. Further, the Commission has increased the Load Factor rebate for HV-4 Steel category as well as the TOD rebate for consumption during night hours from 75% to 65% for categories to whom TOD tariff is applicable. These measures are expected to result in increased consumption by these cross-subsidising categories. With the revised tariffs, on a stand-alone basis, the surplus for FY 2021-22 would be higher, but on account of past gaps, the tariffs have been increased.

Further, the savings on account of surrender of surplus power have not been assessed, as elaborated earlier, and revenue from sale of surplus power has been estimated on conservative basis.

Hence, keeping all these factors in mind, the amount of under-recovery in FY 2021-22 is expected to be lower, despite the implementation of revised tariffs with effect from August 1, 2021. Thus, the actual amount of under-recovery shall depend on several factors such as actual category-wise sales and power purchase costs, among other aspects. The Commission shall address the actual revenue gap/(surplus) for FY 2021-22 at the time of true-up for FY 2021-22 based on audited accounts and prudence check.

The average increase required across all consumer categories is 6.19%, which translates to 37 paise/kWh, with the adjusted ACoS of Rs. 6.41/kWh. The Commission has revised the category-wise tariffs in such a manner that the cross-subsidies are reduced and are brought within ±20% of ACoS as stipulated in the Tariff Policy, 2016, to the extent possible. Further, the Commission has reverted to the category-wise tariffs approved for FY 2018-19 (tariff in force before the tariff reduction in FY 2019-20), and then adjusted the tariffs to achieve the revenue requirement, reduce cross-subsidies, while at the same time ensuring that no category is subjected to a tariff shock.

Power Factor Incentive and Surcharge for LV category

As per the Tariff Order for FY 2020-21, the Power Factor surcharge is applicable if Power Factor is 0.85, or lower, on the entire consumption of the month at the rate of 35 paise/kWh for LV-4, LV-5, LV-6 and LV-7 categories, except for LV installations having welding transformer, which have to pay Power Factor surcharge at the rate of 75 paise/kWh. There is no Power Factor Incentive at present.

In order to improve the overall Power Factor, the Commission has revised the floor level of Power Factor to 0.9 from 0.85, below which Power Factor surcharge shall be applicable on the entire consumption of the month at the rate of 35 paise/kWh or 75 paise/kWh as per existing dispensation.

Further, all categories of LV consumers in whose case power factor surcharge is applicable; shall be eligible for Power Factor incentive for Power Factor of above 0.95. Such incentive shall be payable @ 1% of the energy charges for each 0.01 increase or part thereof in power factor above 0.95 up to unity power factor. For example, consumers with Power Factor of 0.965 shall be considered as 0.97 and be eligible for power factor incentive of 2% of energy charges. Consumers with Power Factor of 0.964 shall be considered as 0.96 and be eligible for power factor incentive of 1% of energy charges.

Method of payment of Bills

The consumers shall have the option to pay bills online or offline. However, bill amounts of more than five thousand rupees shall mandatorily be paid online.

For bill amount less than or equal to five thousand rupees, consumer may pay the bill through cash or cheque or demand draft or electronic clearing system at designated counters of a bank or through credit or debit cards or online payment through distribution licensees' web portal or any digital mode of payment and any change or further addition in the mode of payment shall be more user friendly for the consumers than the prevailing system. Further, the distribution licensee may stipulate a suitable incentive or rebate for payment through online system for consumers who opt to pay bill amount less than or equal to five thousand rupees.

The distribution licensee shall establish online portal as well as sufficient number of collection centres or drop boxes at suitable locations with necessary facilities, where consumer can deposit the bill amount with ease.

Billing on accumulated meter reading

In order to alleviate the difficulties related to billing based on accumulated meter reading and to improve the accountability of CSPDCL's officers, henceforth, if the bills are not issued consecutively for three months or more for any LT Consumer, billing on accumulated meter reading shall not be raised without approval of concerned Executive Engineer of CSPDCL.

Category-wise tariff

The approach of the Commission for determination of tariff for FY 2021-22 for various consumer categories is discussed below.

LV 1: Domestic

The load limit for single-phase connection for LV 1 category has been increased from 3 kW to 5 kW.

The applicability of this tariff category has been extended to light and fan in gauthans.

At present, tariff for this category is telescopic in nature with five consumption slabs. It is settled practice to subsidise the low-income groups through intra-category cross-subsidy mechanism. Similar approach has been taken for FY 2021-22. The Commission has retained the consumption slabs for energy charges as approved in the Tariff Order for FY 2020-21.

In the existing tariff structure for LV 1 Domestic category, the fixed charges are also linked to the consumption and are variable in nature. There is a separate clause of Monthly Minimum Charges payable by this category. However, Fixed Charges should not vary with the consumption and should be fixed in nature. Hence, the Commission has revised the Fixed Charges and linked the Fixed Charges to the Connected Load. The Commission has considered three slabs for Fixed Charges, viz., Connected Load up to 5 kW, above 5 kW up to 10 kW, and above 10 kW.

The energy charges of all consumption slabs have been increased, with higher tariff increase for higher consumption slabs and lower tariff increase for lower slabs. Both energy charges and fixed charges have been kept telescopic, which will enable the consumers in higher consumption slabs to also get the benefit of the lower energy charges in the lower consumption slabs and lower fixed charges in the lower slabs. Further, Domestic consumers shall be entitled for subsidy as per State Government Order, and their consumption shall be billed as per tariff LV-1.

Based on the above change, the monthly minimum charges are now same as the fixed charges on Rs/kW/month.

Further, if the Recorded Demand exceeds the Connected Load for any three consecutive months, then the Connected Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Connected Load, the load enhancement charges shall be applicable; however, the Security Deposit shall not be required to be increased correspondingly.

Also, if the Recorded Demand is lower than the Connected Load for any three consecutive months, then the Connected Load can be restated to the highest demand recorded in these three months at the option of the consumer.

LV 2: Non-Domestic

The load limit for single-phase connection for LV 2 category has been increased from 3 kW to 5 kW.

The Non-Domestic tariff category has two sub-categories, i.e., consumption-based and demand-based, which has been retained. The cross-subsidy provided by the Non-Domestic category is on the higher side, hence, the Commission has rationalized the Tariff in order to reduce cross subsidy.

The Commission has continued with 50% rebate in energy charges for new mobile towers, to be set up in remote left-wing extremism affected districts after April 1, 2019.

Further, the Commission has continued with flat rate single part Tariff for charging stations of electric vehicles at Rs. 5/kWh.

The discount of 10% on Energy Charges for commercial activities being run exclusively by registered women self-help groups has been retained.

In order to promote the health infrastructure in the rural areas, a discount of 7% on Energy Charges shall be applicable for private clinics, hospitals and nursing homes including X-ray plant, diagnostic centres and pathological labs, situated in rural areas as defined by Government of Chhattisgarh and all areas in Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran Notified Vide Order dated August 22, 2005.

Further, if the Recorded Demand exceeds the Connected Load for any three consecutive months, then the Connected Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Connected Load, the load enhancement charges shall be applicable; however, the Security Deposit shall not be required to be increased correspondingly.

Also, if the Recorded Demand is lower than the Connected Load for any three consecutive months, then the Connected Load can be restated to the highest demand recorded in these three months at the option of the consumer.

LV 3: Agriculture

The applicability of this category has been extended to baadi.

The Fixed Charges and Energy Charges have been increased in order to reduce the cross-subsidy. Further, in order to provide relief to the consumers having second pump, which does not receive Government Subsidy, the concession has been increased from 10% to 20%.

LV 4: Agriculture Allied Activities

The applicability of this category has been extended to mushroom cultivation and bee farming. The Fixed Charges and Energy Charges have been increased to reduce the cross-subsidies.

LV 5: LT Industries

The applicability of this category has been extended to poha and murmura mills.

The Commission has revised the Tariff Structure for LV Industries. The Demand Charges for LV 5.1 and LV 5.2.1 up to 25 HP has been retained at existing levels, while the Demand Charges for LV 5.2.2 has been increased. The Energy Charges for all three sub-categories have been revised to reduce the Cross Subsidy and to meet the revenue requirement.

In accordance with Section 62(3) of EA, 2003 which provides inter-alia for differentiation in tariff based on geographical location, the lower tariff fixed for consumers located in the areas covered under "Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran" and "Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran"(both notified vide Order dated August 22, 2005) has been retained. The Commission has continued with the rebate of 5% in energy charges for LT industries located in rural areas. In order to promote Women Empowerment, the Commission has continued with 10% rebate on energy charges.

LV 6: Public Utilities

The tariff for the Public Utilities category has been increased to meet the revenue requirement, while at the same time ensuring that the cross-subsidy for this category is within limits.

LV 7: IT Industries & Export Oriented Textiles

The Commission in order to promote the textile industry and regenerate employment in this industry in the State, has included the export oriented Textile Industries in this category. Further, the Commission has introduced a two-part tariff with lower Demand Charges and Energy Charges such that they are cross subsidized to certain extent.

LV 8: Temporary Supply

The Tariff structure for temporary supply has been retained as determined in previous Orders, i.e., Fixed Charge and Energy Charge shall be billed at one and half times the normal tariff as applicable to the corresponding consumer categories.

The Commission's approach for determination of tariff for FY 2021-22 for HV categories is discussed below:

HV 1: Railway Traction

The Demand Charges and Energy Charges have been revised. 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 is being 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 have been finalised during FY 2018-19. 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.

HV 2: Mines

The Demand Charges for HV Mines category has been retained at existing level and the energy charges have been revised upwards, to meet the revenue requirement, while at the same time, reducing the cross-subsidy.

HV 3: Other Industrial and General Purpose Non-Industrial

The Demand Charges have been increased to Rs. 375/kVA/month, to bring it at par with the Demand Charges levied to most other HV categories. The Demand Charges of the low load factor sub-category has been increased to Rs. 190/kVA/month. The Energy Charges have been revised upwards, to meet the revenue requirement, while at the same time, reducing the cross-subsidy.

Special flat rate single-part tariff is continued for Electric Vehicle charging stations.

A discount of 7% on Energy Charges shall be applicable for private clinics, hospitals and nursing homes including X-ray plant, diagnostic centres and pathological labs, situated in rural areas as defined by Government of Chhattisgarh and all areas in Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran Notified Vide Order dated August 22, 2005.

A discount of 15% on Energy Charges shall be applicable for defence establishments under Government of India.

A discount of 5% on Energy Charges shall be applicable for rice mills/Poha and murmura mills.

A discount of 10% on Energy Charges shall be applicable for exclusive oxygen plants connected up to 33 kV supply voltage.

HV 4: Steel Industries

Demand Charges have been increased to Rs. 375/kVA/month from the existing level of Rs. 365/kVA/month for supply at 220 kV, 132 kV, 33 kV and 11 kV levels. Further, for consumers availing supply at 33 kV and 11 kV and having load factor below 15% Demand Charges have been increased to Rs. 190/kVA/month from the existing level of Rs. 180/kVA/month. Energy Charges have been revised upwards, to meet the revenue requirement, while at the same time, reducing the cross-subsidy.

The Steel Industries occupy a special place in the industrial and economical scene of the State. The COVID-19 pandemic has adversely affected the economy of the State as well as the State power Utilities. As the steel industry is the core industry in the State and contributes significantly to the sales and revenue of CSPDCL, and generates employment as well as provides tax revenues to the State, the Load Factor rebate has been extended to HV-4 category to enable the industry to compete in the market.

In the Tariff Order for FY 2020-21, the Commission had provided Load Factor rebate for Load Factor equal to or higher than 63%. The Commission had capped the Load Factor rebate at 8%, which is to be achieved at 70 % Load Factor. Based on the need to improve the Load Factor of utilisation of power supply of this important category from CSPDCL, the Commission has provided Load Factor rebate for Load Factor equal to or higher than 50% and increased the cap for Load Factor to 25%, which is to be achieved at 74 % Load Factor. Since, the objective of the rebate is to increase the utilisation of power supply from CSPDCL, this facility of Load Factor rebate shall not be applicable to those consumers in HV-4 category having captive generating facility with installed capacity above 1 MW.

This will encourage higher consumption by this subsidising category, which would improve the revenue of CSPDCL.

Further, the power-off (non-supply) hours have been increased from 30 hours to 36 hours per month, i.e., 1.5 days, for calculation of Load Factor.

Further, the Licensee and consumers shall ensure compliance with all safety requirements specified under the applicable laws and amendments thereof from time to time.

HV 5: Irrigation, Agriculture Allied Activities & Public Water Works

Mushroom cultivation has been shifted from HV-3 category to HV-5 category, as it is an allied activity to agricultural industry.

The Demand Charges have been retained at the same level and the Energy Charges have been revised upwards, to meet the revenue requirement, while at the same time, reducing the cross-subsidy.

HV 6: Residential

The Demand Charges have been retained at the same level and the Energy Charges have been revised slightly upwards, to meet the revenue requirement, while at the same time, reducing the cross-subsidy.

HV 7: Start up Power

The Demand Charges have been retained at the same level and the Energy Charges have been revised slightly upwards, to meet the revenue requirement, while at the same time, reducing the cross-subsidy.

HV 9: IT Industry & Export Oriented Textile Industries

The Commission in order to promote the textile industry and regenerate employment in this industry in the State, has included the export oriented Textile Industries in this category. Further, the Commission has introduced a two-part tariff with lower Demand Charges and Energy Charges such that they are cross subsidized to certain extent.

HV 10: Temporary Supply

The Tariff structure for temporary supply has been retained as determined in previous Orders, i.e., Fixed Charge and Energy Charge shall be billed at one and half times the normal tariff as applicable to the corresponding consumer categories.

11.3 Time of Day Charges

In order to encourage higher consumption during night off-peak hours and utilise the surplus power available with CSPDCL during this period, the ToD rate applicable for consumption during night off-peak period (11:00 pm to 05:00 am of next day) has been revised downwards from 75% of normal rate of Energy Charge to 65% of normal rate of Energy Charge.

11.4 Wheeling Charges

The Commission notes that CSPDCL in its Petition has not submitted the details of Wheeling Charges for FY 2021-22. The Wheeling Charges have been computed by considering 35% of the Wires ARR, in line with the approach adopted in previous Tariff Orders. The total energy requirement at 33 kV has been considered as 25,950.35 MU based on the approved Energy Balance for FY 2021-22.

For long-term, medium-term and short-term Open Access customers, Wheeling Charges shall be Rs. 202.80/MWh (or 20.28 paise per kWh) for the energy computed at 100% load factor for wheeling. The same Charges shall be applicable for both collective and bilateral transaction at the point of injection.

Energy 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.

11.5 Revenue at Approved Tariff

The revised tariff will be applicable with effect from August 1, 2021, for the consumers of the State, for FY 2021-22. The category-wise revenue at revised tariffs approved in this Order are shown in the Table below:

Table 11-3: Revenue in FY 2021-22 at Tariffs approved by the Commission

Sr. No.	Consumer Category	Revenue at approved Tariff
A	**LV Categories**	**7,926.10**
1	Domestic including BPL	3,299.79
2	Non-Domestic (Normal Tariff & Demand Based Tariff)	780.18
3	Agriculture (including merged Agriculture allied industry)	2,377.63
4	LT Industry	421.42
5	Public Utilities	299.26
6	Temporary	747.82

Sr. No.	Consumer Category	Revenue at approved Tariff
B	**HV Categories**	**7,931.60**
1	HV 1: Railway Traction	656.86
2	HV 2: Mines (Coals & others)	636.99
3	HV 3: Other Industry &General-purpose Industry	1,679.29
4	HV 4: Steel Industries	4,666.63
5	Others	291.83
C	**Total Revenue from LV and HV categories**	**15,857.71**

Note: The revenue at approved tariff considers the revised tariff to be applicable for the entire FY 2021-22; however, the revised tariffs shall be applicable from August 1, 2021

11.6 Cross-subsidy

An element of cross-subsidy is inherent in the present and revised tariff structure. The tariffs of different consumer categories in relation to the approved adjusted ACoS of Rs. 6.41 per kWh is such that the tariffs for some categories of consumers are higher than the ACoS while the tariffs for other categories are lower than the ACoS. The Commission has rationalised the cross-subsidy in this Order as shown in the Table below:

Table 11-4: Cross-subsidy with Existing tariff and Approved tariff

Consumer Category		Approved in Tariff Order FY 2020-21		Approved in Tariff Order for FY 2021-22	
		ABR (Rs. /kWh)	ABR/ ACOS (%)	ABR (Rs. /kWh)	ABR/ ACOS (%)
LV	Domestic	3.92	66%	5.00	78%
	Non-Domestic	8.55	144%	8.47	132%
	Agriculture	4.83	81%	5.35	83%
	Industry	6.59	111%	7.46	116%
	Public Utilities	6.38	108%	6.77	106%
HV	Railway Traction	4.46	75%	6.05	94%
	Mines	8.50	143%	8.64	135%
	Other Industrial & General Purpose Non-Industrial	8.42	142%	8.77	137%
	Steel Industries	6.84	115%	6.51	101%

11.7 Cross-Subsidy Surcharge

The Commission has determined the Cross-Subsidy Surcharge (CSS) to be paid by the Open Access consumers, in accordance with CSERC (Connectivity and Intra-State Open Access) Regulations, 2011:

The approved Cross-Subsidy Surcharge is as under:

(a) Rs. 0.88 per kWh for 220 kV/132 kV consumers (which is 90% of the computed value of Rs. 0.98 per kWh)

(b) Rs. 0.58 per kWh for 33 kV consumers (which is 90% of the computed value of Rs. 0.65 per kWh).

For Open Access consumers procuring power from Renewable Energy based power generating plant (excluding solar power), the Cross-Subsidy Surcharge payable shall be 50% of the Cross-Subsidy Surcharge determined for that year.

Accordingly, Cross-subsidy Surcharge for Renewable Energy transactions is as under:

(a) For 220 kV/132 kV consumers - Rs.0.44 per kWh (which is 50% of the CSS applicable for other 220 kV/132 kV consumers).

(b) For 33 kV consumers Rs. 0.29 per kWh (which is 50% of the CSS applicable for other 33 kV consumers).

In case of a consumer receiving power from Solar power plants through Open Access, no Cross-Subsidy Surcharge shall be payable.

11.8 Parallel Operation Charges

CSPDCL's submission

CSPDCL requested the Commission that existing Parallel Operation Charges (POC) rates of 4 Paisa/kWh needs to be revised to 14 Paisa/kWh due to the following reasons:

1. After implementation of new methodology in terms of paisa/kWh with effect from 01.04.2019, there is shortfall in POC revenue by more than 33%. Adoption of new methodology is based on actual consumption while repealed methodology was based on the basis of kVA support. Resultantly, the present per unit rates require appropriate hike to compensate the revenue gap.

2. Latest POC rates were determined in the year 2008. Since then, Average Cost of Supply has undergone substantial hike.

Commission's View

In the Tariff Order dated 30th May 2020, the Commission has ruled that POC shall be payable by CPP to CSPDCL for its captive and non-captive load as per the Order dated 5th April, 2019 passed in Petition No. 09 of 2018.

However, these POC rates are based on amounts of CSPTCL ARR and Connected Load of FY 2007-08. The Commission is of the view that there is a need to revise the POC rates based on latest available data.

The Commission has hence, revised the POC rates by adopting the same approach as earlier and considering the latest approved CSPTCL ARR for FY 2021-22 and the latest available connected load data, as shown below:

Sl.	Particulars	Units	Amount
1	**CSPTCL ARR for FY 2021-22**	**Rs. Crore**	**979.67**
2	Connected Load		
a	Central Sector Allocation (Net)	MW	2538
b	State Generation	MW	2985
c	Solar	MW	267
d	Hydro	MW	76
e	Biomass	MW	211
f	CPP/IPP	MW	2510
3	**Total Connected Load**	**MW**	**8586**
4	**Parallel Operation Charges (1) / (3)**	**paise/kWh**	**13.02**

Accordingly, the Commission has determined the **Parallel Operation Charges (POC) as 13 paise/kWh** with effect from the date of effectiveness of this Tariff Order.

11.9 Applicability of Order

The approved Tariff Schedule for FY 2021-22 is given in the **next Chapter**.

The Order will be applicable from 1st August, 2021 and will remain in force till March 31, 2022 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.

12 TARIFF SCHEDULE FOR FY 2021-22

This Tariff Schedule shall be applicable from August 1, 2021.

12.1 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 5 kW (excluding agriculture and industrial consumers), and

b) Three-phase, 400 Volts for maximum demand up to 112.5 kW in case of demand-based tariff or for maximum contracted load of 150HP in case of other tariff, as applicable.

12.1.1 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, offices of National Cadet Core (NCC), public libraries and reading rooms, educational institutions and hospitals (including X-rays, etc.) run by charitable trusts / non-profit organizations / societies registered under the Firms and Societies Act, homes for differently abled and mentally retarded, de-addiction and rehabilitation centres, Government hospitals/dispensaries, (excluding private clinics and nursing homes), facilities like prayer hall, gymnasium, club house within the housing society, 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 gauthan and 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 kW)	Energy Charge (Rs. per kWh)
LV-1: Domestic			
Domestic including BPL Consumers	0 -100 units	Rs. 20/- per kW/month for Connected Load up to 5 kW;	3.60
	101-200 units		3.80
	201 - 400 units	Rs. 30/- per kW/month for Connected Load above 5 kW and up to 10 kW;	5.20
	401 – 600 units		6.20
	601 and above units	Rs. 40/- per kW per month for Connected Load above 10 kW	7.80

Notes:

i. Energy Charges are telescopic. For example, if consumption in any month is 150 units, then for first 100 units, rate of slab 0-100 shall be applicable and for remaining 50 units, rate of slab 101-200 shall be applicable;

ii. Fixed Charges is a monthly minimum charge, whether any energy is consumed during the month or not;

iii. Fixed Charges are telescopic. For example, if Connected Load is 7 kW, then the rate of Rs. 20/- per kW/month shall be applicable for the first 5 kW and the rate of Rs. 30/- per kW/month shall be applicable for the balance 2 kW;

iv. If the Recorded Demand exceeds the Connected Load for any three consecutive months, then the Connected Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Connected Load, the load enhancement charges shall be applicable; however, the Security Deposit shall not be required to be increased correspondingly.

v. If the Recorded Demand is lower than the Connected Load for any three consecutive months, then the Connected Load can be restated to the highest demand recorded in these three months at the option of the consumer.

vi. Domestic consumers shall be entitled for subsidy as per State Government Order, and their consumption shall be billed as per tariff LV-1;

vii. 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.

12.1.2 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, billboards/hoardings and advertisement services, typing institutes, internet cafes, STD/ISD PCO's, Mobile Towers, coaching centres, FAX/photocopy shops, tailoring shops, photographers and colour labs, laundries, cycle shops, compressors for filling air, toy making industry, nickel plating on small scale, restaurants, eating establishments, Government circuit houses/rest houses, guest houses, marriage gardens, farmhouses being used for commercial purposes, book binders, offset printers, bakery shop, banks, parlours, printing press, computer centre, petrol pumps and service stations, electric charging centres for Vehicles, HV industrial consumers seeking separate independent LV connection in the same premises of HV industrial connection and other consumers not covered under any other category of LV consumers.

Tariff:

Category of Consumers	Units Slab	Fixed Charge (Rs per kW of Contracted load/Billing Demand)	Energy Charge (Rs. per kWh)
LV-2.1: Single Phase Non-Domestic- (upto 5 kW)	0 – 100 units	Rs. 50 per kW per month	5.70
	101 - 400 units		6.70
	401 and above units		8.10
LV-2.2: Three Phase Non-Domestic			
(A) Upto 15 kW	0-400 units	Demand Charges- Rs 120/kW/month on billing demand	6.70
	401 and above units		8.10
(B) Above 15 kW	All units	Demand Charges- Rs 200/kW/month on billing demand	7.40

Notes:

i. 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.

ii. If the Recorded Demand exceeds the Connected Load for any three consecutive months, then the Connected Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Connected Load, the load enhancement charges shall be applicable; however, the Security Deposit shall not be required to be increased correspondingly.

iii. If the Recorded Demand is lower than the Connected Load for any three consecutive months, then the Connected Load can be restated to the highest demand recorded in these three months at the option of the consumer.

iv. For charging stations of electric vehicles, a flat rate single part tariff of Rs. 5 per unit shall be applicable.

v. A discount of 50% on Energy Charges shall be applicable for mobile towers setup after 1st April 2021 in left-wing extremism affected districts.

vi. A discount of 10% on Energy Charges shall be applicable for commercial activities being run exclusively by registered women self-help groups.

vii. A discount of 7% on Energy Charges shall be applicable for private clinics, hospitals and nursing homes including X-ray plant, diagnostic centres and pathological labs, situated in rural areas as defined by Government of Chhattisgarh and all areas in Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran Notified Vide Order dated August 22, 2005.

12.1.3 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, baadi, 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: Agriculture	Rs. 100/HP/month	4.90

The load of 100 W for light and fan is permitted at or near the motor pump set.

Notes:

i. Fixed Charge is monthly minimum charge, whether any energy is consumed during the month or not.

ii. For non-subsidized agriculture pump connection, a concession of 20% on energy charges shall be allowed.

12.1.4 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, mushroom cultivation, bee farming, 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 (A): Up to 25 HP	Rs. 100 per HP per month or Rs. 134 per kW per month	4.90
LV-4.1 (B): Above 25 HP up to 150 HP	Rs. 110 per HP per month or Rs. 147 per kW per month	5.30
LV-4.2: Demand based tariff for Contract Demand of 15 to 112.5 kW	Rs. 200 per kW per month on billing demand	5.50

Note:

Fixed Charge is monthly minimum charge. Demand Charge on contract demand is monthly minimum charge, whether any energy is consumed during the month or not.

12.1.5 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, poha and murmura 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, Registered Women self-help group, workshops and fabrication shop, etc.

Tariff:

Category of Consumers		Demand 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 25 HP or 18.7 kW	Rs. 80/kW/month on billing demand	4.00
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs. 80/kW/month on billing demand	3.60
5.2	Other Industries		
5.2.1	Up to 25 HP or 18.7 kW	Rs. 120/kW/month on billing demand	5.00
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs. 100/kW/month on billing demand	4.00

Category of Consumers		Demand Charge	Energy Charge (Rs. per kWh)
5.2.2	Above 25 HP up to 150HP (18.7 kW to 112.5 kW)	Rs. 150/kW/month on billing demand	5.75
a)	Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran*	Rs. 130/kW/month on billing demand	5.25

*Notified Vide Order dated August 22, 2005

Notes:

i. Demand Charge on contract demand is monthly minimum charge, whether any energy is consumed during the month or not.

ii. 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.

iii. In accordance with the Section 62(3) of EA 2003 providing for differentiation in tariff based on geographical position of any area, 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).

iv. A rebate of 10% on Energy Charges shall be applicable for industrial activities being run exclusively by registered women self-help groups.

12.1.6 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. 142/HP/month or Rs. 190/kW/month	6.10

Notes:

i. Fixed Charge is monthly minimum charge whether any energy is consumed during the month or not.

ii. If the Recorded Demand exceeds the Connected Load for any three consecutive months, then the Connected Load shall automatically be restated to the highest demand recorded in these three months. In such cases of upward restatement of Connected Load, the load enhancement charges shall be applicable; however, the Security Deposit shall not be required to be increased correspondingly.

iii. If the Recorded Demand is lower than the Connected Load for any three consecutive months, then the Connected Load can be restated to the highest demand recorded in these three months at the option of the consumer.

12.1.7 LV-7: Information Technology & Export Oriented Textile Industries

Applicability

This tariff is applicable to Information Technology Industries and Export Oriented Textile Industries having minimum Contract Demand of 50 kW.

Tariff:

Category of Consumers	Demand Charge on billing demand (Rs./kW/Month)	Energy Charge (Rs. per kWh)
LV-7: Information Technology & Export Oriented Textile Industries	150	5.00

Note:

Demand Charge is payable as monthly minimum charge whether any energy is consumed during the month or not.

12.1.8 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.

Provided further that for a farmer requiring temporary agriculture pump connection more than once within a period of one year from the date of disconnection of the previous connection, no fresh paper formalities would be required.

Temporary supply cannot be demanded by a prospective consumer as a matter of right but will normally be arranged by the Licensee when a requisition is made subject to technical feasibility.

Tariff:

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

Provided that for Agricultural pump connections, the Fixed Charge and Energy Charge shall be billed at the normal tariff applicable for LV-3 category.

Notes:

i. An amount equal to estimated bill for 3 months or for the period of temporary connection requisitioned, whichever is less, is payable before serving the temporary connection, subject to replenishment from time to time and adjustment in the last bill after disconnection.

ii. No temporary connection shall be served without a meter.

iii. Connection and disconnection charge shall be paid as per the schedule of miscellaneous charges.

iv. No rebates/concessions under any head shall be applicable to temporary connections.

v. A month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or part thereof.

vi. In case connected load/maximum demand is found more than contracted load/contract demand, then the billing of excess load/supply shall be done for the amount calculated as per para 1.1.11.

vii. Any expenditure made by the Licensee for providing temporary supply up to the point of supply, shall be paid for by the consumer as per prescribed procedure.

viii. Temporary connections shall not be served unless suitable capacitors, wherever applicable, are installed so as to ensure Power Factor of not less than 0.85 lagging.

ix. Surcharge at the rate of 2% per month or part thereof on the outstanding amount of the bill shall be payable in addition, from the due date of payment of bill, if the bill is not paid by the consumer within the period prescribed.

12.1.9 Terms and Conditions of L.V. Tariff

1. Energy will be supplied to the consumer ordinarily at a single point for the entire premises of the consumer.
2. Contracted Load/Connected Load or Contract Demand/Maximum Demand infraction shall be rounded off to the next whole number.
3. If the bills are not issued consecutively for three months or more for any LT Consumer, billing on accumulated meter reading shall not be raised without approval of concerned Executive Engineer of CSPDCL.
4. 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.
5. For the purpose of Demand Based Tariff (LV-2.2, LV-4 and LV-5)

   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, 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.

6. The recorded demand for the respective month shall be reflected in the consumer bill.

12.1.10 Power Factor Incentive and Surcharge

i. Consumers, falling under tariff categories LV-4: LV Agriculture Allied Activities, LV 5- LV Industry, LV 6: Public Utilities and LV-7: Information Technology and Export Oriented Textile Industries 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 0.9 or above. A consumer who fails to do so shall be liable to pay Power Factor surcharge @ 35 paise per kWh on the entire consumption of the month.

ii. All LV non-domestic consumers with Contracted 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 0.9 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.

iii. All LV installations having welding transformer are required to install suitable Low Tension capacitors so as to ensure Power Factor of not less than 0.9. Consumers not complying with the above shall have to pay Power Factor surcharge of 75 paise per kWh on the entire monthly consumption, provided the load of the welding transformer(s) exceeds 25% of the total connected load.

Note - For the purposes of computing the connected load of welding transformers in kW, a Power Factor of 0.6 shall be applied to the kVA rating of such welding transformers. The kVA rating can also be calculated on the basis of load voltage and maximum load current on secondary side of welding machine.

iv. 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.

v. 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.

vi. Notwithstanding the above, if the average monthly Power Factor of a new consumer is found to be less than 0.9 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 0.9, then the surcharge billed on account of low Power Factor during the said period shall be withdrawn and credited in next month's bill.

vii. All categories of LV consumers in whose case power factor surcharge is applicable; shall be eligible for Power Factor incentive for Power Factor of above 0.95. Such incentive shall be payable @ 1% of the energy charges for each 0.01 increase or part thereof in power factor above 0.95 up to unity power factor. For example, consumers with Power Factor of 0.965 shall be considered as 0.97 and be eligible for power factor incentive of 2% of energy charges. Consumers with Power Factor of 0.964 shall be considered as 0.96 and be eligible for power factor incentive of 1% of energy charges.

12.1.11 Provisions of billing in case of Excess Supply

1. <u>For connected load-based tariff</u>

i. The consumers, except the domestic (LV-1) consumers, availing supply at connected load-based tariff shall restrict their actual connected load within the contracted load. However, in case the actual connected load in any month exceeds the contracted load, the connected load-based tariff shall apply only to the extent of contracted load and corresponding units of energy. The connected load in excess of contracted load and corresponding units of energy shall be treated as excess supply except the domestic (LV-1) consumers. 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.

ii. Where the recording facility of demand is available, the billing on account of excess supply shall be restricted to the recorded month only.

iii. If the Recorded Demand exceeds the Connected Load for any three consecutive months, then the Connected Load, as applicable, shall automatically be restated to the highest demand recorded in these three months;

iv. If the Recorded Demand is lower than the Connected Load for any three consecutive months, then the Connected Load shall be restated to the highest demand recorded in these three months at the option of the consumer.

2. <u>For Demand Based tariff consumers</u>

i. Consumers availing supply at demand-based tariff (LV-2.2/LV-4.2/LV-5) should at all times restrict their maximum demand to the contract demand or contracted load whichever is applicable. However, contract demand for the demand-based tariff consumer can be less than connected load. In case the maximum demand in any month exceeds the contract demand, the said demand-based tariff (LV–2.2/LV-4.2/LV-5) 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.

ii. For the purpose of billing of excess supply, the billing demand and the units of energy shall be determined as under:

a) Billing Demand: The demand in excess of the contract demand in any month shall be the billing demand.

b) Units of Energy: the units of energy corresponding to kW portion of the demand in excess of the contract demand shall be:-

EU= TU (1-CD/MD)

Where

EU – denotes excess units,

TU – denotes total units supplied during the month,

CD – denotes contract demand, and

MD – denotes actual maximum demand.

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

II. The above billing of excess supply at one and half times/two times of the normal tariff shall be applicable to consumers without prejudice to CSPDCL's right to discontinue supply in accordance with the provisions contained in the Chhattisgarh State Electricity Supply Code, 2011, as amended from time to time.

iii. If the Recorded Demand exceeds the Contracted Demand for any three consecutive months, then the Contracted Demand, as applicable, shall automatically be restated to the highest demand recorded in these three months.

3. 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.

4. <u>Additional Charges</u>

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. <u>Advance Payment Rebate</u>

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.

6. <u>Rounding off</u>

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.

7. <u>Applicability of tariff</u>

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

8. 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.

9. 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.

10. Variable Cost Adjustment (VCA) Charge

VCA charge on consumption from August 1, 2021 as per the formula and conditions specified in the CSERC MYT Regulations, 2015 shall be levied in addition to energy charge on all the LV categories including temporary supply.

However, from the date of applicability of this Order, the base values for computation of VCA for succeeding period shall be revised in accordance to this Order.

11. Method of payment of Bills

(1) Consumer shall have the option to pay bills online or offline.

(2) Bill amount of more than **five** thousand rupees shall mandatorily be paid online.

(3) For bill amount less than or equal to **five** thousand rupees, consumer may pay the bill through cash or cheque or demand draft or electronic clearing system at designated counters of a bank or through credit or debit cards or online payment through distribution licensees' web portal or any digital mode of payment and any change or further addition in the mode of payment shall be more user friendly for the consumers than the prevailing system.

Provided that the distribution licensee may stipulate a suitable incentive or rebate for payment through online system for consumers who opt to pay bill amount less than or equal to **five** thousand rupees.

(4) The distribution licensee shall establish online portal as well as sufficient number of collection centres or drop boxes at suitable locations with necessary facilities, where consumer can deposit the bill amount with ease

12. <u>Conditions to have over-riding effect</u>

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

12.2 Tariff Schedule for High Voltage (HV) Consumers

12.2.1 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	375	4.40

Specific terms and conditions:

1. The maximum demand means the highest load measured by sliding window principle of measurement in average kVA at the point of supply of a consumer during any consecutive period of 15 minutes during the billing period.
2. Provided that if as a result of an emergency in the consumer's installation or in the transmission lines supplying energy to the said traction sub-station, extra load is availed by the consumer with prior intimation to the Licensee, the period of such emergency shall not be taken into account for the purpose of working out the maximum demand.
3. Provided further that as a result of emergency in the traction sub-station (TSS) or in the transmission line supplying power, if the entire load of the TSS or part thereof is transferred to adjacent TSS, the maximum demand (MD) of the TSS for the month shall not be taken as less than the average MD recorded for the previous three months during which no emergency had occurred.

4. In order to give impetus to electrification of railway network in the State, a rebate of 10% in energy charges for new railway traction projects shall be allowed for a period of five years from the date of connection for such new projects for which Agreements for availing supply from the Licensee are finalised during FY 2018-19.

5. Other terms and condition shall be as mentioned in the general terms and conditions of HV tariff.

6. For traction sub-stations of Indian Railways, if Load Factor for any month is above 20%, then a rebate of 30% shall be allowed on Energy Charge calculated on entire energy consumption for that month.

12.2.2 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	6.60
132 kV supply	500	6.75
33 kV supply	500	7.00
11 kV supply	500	7.30

12.2.3 HV-3: Other Industrial and General Purpose Non-Industrial

Applicability

1. This tariff is applicable to all types of industries including cement industries and industries not covered under HV-1, HV-2 and HV-4 for power, lights, fans, cooling ventilation, etc., which shall mean and include all energy consumption in factory, and consumption for residential and general use therein including offices, stores, canteen compound lighting, etc.

2. This tariff is also applicable for bulk supply at one point to establishment such

as Railways (other than traction), hospitals, offices, hotels, shopping malls, electric charging centres for Vehicles, power supplied to outside of State (border villages), educational institutions, mixture and/or stone crushers and other institutions, etc., having mixed load or non-industrial and/or non-residential load. This tariff is also applicable to all other HT consumers not covered specifically in any other HV tariff category.

3. 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.

Tariff:

Supply Voltage	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
220 kV supply	375	6.30
132 kV supply	375	6.45
33 kV supply (Load factor >15%)	375	6.70
33 kV supply (Load factor <=15%)	190	6.90
11 kV supply (Load Factor >15%)	375	7.10
11 kV supply (Load Factor <=15%)	190	7.30

Notes:-

i. For charging stations of Electric Vehicles, a flat rate single part tariff of Rs. 5 per unit shall be applicable.

ii. A discount of 7% on Energy Charges shall be applicable for private clinics, hospitals and nursing homes including X-ray plant, diagnostic centres and pathological labs, situated in rural areas as defined by Government of Chhattisgarh and all areas in Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran, and Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran Notified Vide Order dated August 22, 2005.

iii. A discount of 15% on Energy Charges shall be applicable for defence establishments under Government of India.

iv. A discount of 5% on Energy Charges shall be applicable for rice mills/Poha and murmura mills.

v. A discount of 10% on Energy Charges shall be applicable for exclusive oxygen plants connected up to 33 kV supply voltage.

12.2.4 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	375.00	5.40
132 kV supply	375.00	5.55
33 kV supply (Load factor >15%)*	375.00	5.95
33 kV supply (Load factor <=15%)*	190.00	6.45
11 kV supply (Load Factor >15%)*	375.00	6.05
11 kV supply (Load Factor <=15%)*	190.00	6.85

Note:-

*The applicable Load Factor limit for 33 kV and 11 kV supply for exclusive Rolling mills consumers shall be 35%.

Further, to boost industrialization in the areas covered under **"Bastar avem Dakshin Kshetra Adivasi Vikas Pradhikaran"** (notified vide Order dated August 22, 2005) and "**Sarguja avem Uttar Kshetra Adivasi Vikas Pradhikaran"** (notified vide Order dated August 22, 2005), a special rebate of 7% on energy charge is being provided to the consumers starting production on or after April 1, 2017.

Load Factor Rebate

The consumers of this category shall be eligible for Load Factor rebate on Energy Charges:

Monthly Load Factor (LF)	Rebate
50% - 50.99%	rebate of 1% on normal Energy Charge calculated on entire energy consumption
51% - 51.99%	rebate of 2% on normal Energy Charge calculated on entire energy consumption
52% - 52.99%	rebate of 3% on normal Energy Charge calculated on entire energy consumption
53% - 53.99%	rebate of 4% on normal Energy Charge calculated on entire energy consumption
54% - 54.99%	rebate of 5% on normal Energy Charge calculated on entire energy consumption
55% - 55.99%	rebate of 6% on normal Energy Charge calculated on entire energy consumption
56% - 56.99%	rebate of 7% on normal Energy Charge calculated on entire energy consumption
57% - 57.99%	rebate of 8% on normal Energy Charge calculated on entire energy consumption
58% - 58.99%	rebate of 9% on normal Energy Charge calculated on entire energy consumption
59% - 59.99%	rebate of 10% on normal Energy Charge calculated on entire energy consumption
60% - 60.99%	rebate of 11% on normal Energy Charge calculated on entire energy consumption
61% - 61.99%	rebate of 12% on normal Energy Charge calculated on entire energy consumption
62% - 62.99%	rebate of 13% on normal Energy Charge calculated on entire energy consumption
63% - 63.99%	rebate of 14% on normal Energy Charge calculated on entire energy consumption
64% - 64.99%	rebate of 15% on normal Energy Charge calculated on entire energy consumption
65% – 65.99%	rebate of 16% on normal Energy Charge calculated on entire energy consumption
66% - 66.99%	rebate of 17% on normal Energy Charge calculated on entire energy consumption
67% - 67.99%	rebate of 18% on normal Energy Charge calculated on entire energy consumption

Monthly Load Factor (LF)	Rebate
68% - 68.99%	rebate of 19% on normal Energy Charge calculated on entire energy consumption
69% - 69.99%	rebate of 20% on normal Energy Charge calculated on entire energy consumption
70% - 70.99%	rebate of 21% on normal Energy Charge calculated on entire energy consumption
71% - 71.99%	rebate of 22% on normal Energy Charge calculated on entire energy consumption
72% - 72.99%	rebate of 23% on normal Energy Charge calculated on entire energy consumption
73% - 73.99%	rebate of 24% on normal Energy Charge calculated on entire energy consumption
74% and above	rebate of 25% on normal Energy Charge calculated on entire energy consumption

Provided that in case the monthly Load Factor is 49.99% or below, then no Load Factor Rebate shall be payable in that month:

Provided further that flat 36 hours per month of power-off (non-supply) shall be considered for calculation of Load Factor:

Provided that this facility of Load Factor rebate shall not be applicable to those consumers in HV-4 category having captive generating facility with installed capacity above 1 MW:

Provided also that the Load Factor Rebate shall not be payable on the excess energy consumed corresponding to exceeding contract demand for that billing month:

Provided also that the monthly Load Factor shall be rounded off to the lowest integer.

The licensee and consumers shall comply with all safety requirements specified under the applicable laws and amendments thereof from time to time.

12.2.5 HV-5: Irrigation & Agriculture Allied Activities, Public Water Works

Applicability

1. This tariff shall be applicable for Chhattisgarh State Housing Board and

agriculture pump connections, irrigation pumps of lift irrigation schemes of State Government or its agencies/co-operative societies, including colonies developed and energy used for lighting pump houses.

2. 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, mushroom cultivation, 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.

3. 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	5.70

12.2.6 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.

This tariff shall also be applicable to hospitals including educational institutions and X-rays, etc., situated within its premises, run by charitable trusts / non-profit organizations / societies registered under the Firms and Societies Act.

Tariff:

Category of Consumers	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
Residential	375	5.90

12.2.7 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	8.20

Conditions for start-up power consumers:

i. Contract demand shall not exceed 10% of the highest capacity of generating unit of the generating station/captive generating plant

ii. Captive generating plants, which do not have any co-located industrial load and who use the grid for transmission and wheeling of electricity can avail start up-power tariff.

iii. Captive generating plants, which have co-located industrial load are also entitled for start-up power tariff.

iv. Drawal of power shall be restricted to within 10% of Load Factor based on the Contract Demand in each month. In case the Load Factor in a month is recorded beyond 10%, the demand charge shall be charged at double the normal rate. Supply can also be disconnected if the monthly Load Factor exceeds 10% in any two consecutive months. Load Factor shall be computed from contract demand.

v. Start-up power shall also be made available to the generator/captive generating plant connected to CTU grid with proper accounting.

vi. This tariff shall also be applicable to generators for the consumption upto COD of the plant.

vii. Generators who have not availed start-up connection but eventually draw power from the grid shall be billed @ Rs 12 per kVAh. In case of captive generating plant, which do not have any co-located industrial load and who use the grid for transmission and wheeling of electricity, such CGP's, if they have not availed start-up connection but eventually draw power, shall be billed @ Rs. 12 per kVAh.

viii. In case of captive generating plant, which have co-located industrial load and who have not availed start-up connection but eventually draws start-up power from the grid shall be billed @ Rs. 12 per kVAh. All renewable generators (biomass and small hydro) are exempted from payment of demand charge for the first five years from the date of commercial operation of their power plant, i.e., they will be required to pay only energy charge during first five years from COD and full start-up tariff from sixth year onwards. However, in case during first five years from the date of its connection, if the actual demand exceeds the contract demand, the billing for that month shall be as per other start-up power consumers exceeding contract demand. In case if the Load Factor is within 10% but actual demand exceeds the contract demand then also the billing for that month shall be as per other start-up power consumer exceeding contract demand. In case, it is established that the biomass based generator has used biomass in the lesser ratio than as mentioned in the guidelines of the Ministry of New and Renewable Energy during any financial year in first five years from the date of availing start up power tariff then demand charge as per this tariff category (HV–7) shall also become payable for the whole of such financial year and such payable amount will be billed in three equal instalments after such happening comes to the notice of CSPDCL.

12.2.8 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	130	4.00

12.2.9 HV-9: Information Technology & Export Oriented Textile Industries

Applicability

This tariff is applicable to Information Technology Industries and Export Oriented Textile Industries having minimum contract demand of 50 kW.

Tariff:

Category of Consumers	Demand Charge (Rs./kVA/month)	Energy Charge (Rs. per kVAh)
HV-9: Information Technology Industries and Export oriented Textile Industries	150	4.10

Note:

Demand Charge is payable as monthly minimum charge, whether any energy is consumed during the month or not.

12.2.10 HV-10: Temporary Connection at HV

Applicability

This tariff is applicable to all HV connections (other than the consumers availing Start up power Tariff (HV-7)), of temporary nature at 220/132/33/11 kV.

Provided that for construction purpose, a consumer shall be given a temporary connection only.

Temporary supply cannot be demanded by a prospective consumer as a matter of right but will normally be arranged by the Licensee when a requisition is made subject to technical feasibility.

Tariff:

One and half times of the normal Tariff applicable for the corresponding category of consumer for demand and energy charge shall be applicable.

Notes:

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

ii. If maximum demand is found more than the contract demand in any billing month, the billing shall be done at one and half times/two times of the energy charges and Demand Charges as applicable, in case of exceeding contract demand in permanent connection, and shall be calculated as per Clause 10 of Terms & Conditions of HV tariff.

iii. Any expenditure made by CSPDCL up to the point of supply for giving temporary connection shall be payable by the consumer as per prescribed procedure.

iv. Connection and disconnection charges shall be paid separately.

v. No rebates/concessions under any head shall be applicable to temporary connections.

vi. Month for the purpose of billing of temporary supply shall mean 30 days from the date of connection or for part thereof.

vii. Other terms and conditions of the relevant category of tariff shall also be applicable.

viii. Surcharge at 2% per month or part thereof on the outstanding amount of the bill shall be payable in addition from the due date of payment of bill, if the bill is not paid by the consumer within the period prescribed.

12.2.11 Time of Day Tariff

This tariff is applicable to HV-2, HV-3, and HV-4 tariff category. Under the Time of Day (TOD) Tariff, electricity consumption in respect of HV industries for different periods of the day, i.e., normal period, peak load period and off-peak load period, shall be recorded by installing a TOD meter. Consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer:

Period of Use	Normal rate of Demand Charge Plus
(i) Normal period (5:00 a.m. to 6:00 p.m.)	Normal rate of Energy Charges
(ii) Evening peak load period (6:00 p.m. to 11:00 p.m.)	120% of normal rate of Energy Charge
(iii) Off-peak load period (11:00 p.m. to 5:00 am of next day)	65% 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.

12.2.12 Terms and Conditions of HV Tariff

The maximum and minimum contract demand for different supply voltages is governed as per provisions of the Chhattisgarh State Electricity Supply Code, 2011 and its amendments thereof. Presently, the minimum and maximum permissible load at respective supply voltage are as below except for independent distributed renewable energy system plants (IDRES) which will be governed by CSERC (Grid Interactive Distributed Renewable Energy Sources) Regulations 2019:

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.

1. Point of Supply

Power will be supplied to consumers ordinarily at a single point for the entire premises. In certain categories like coal mines, power may be supplied at more than one point on the request of consumer subject to technical feasibility. HV industrial consumers can avail separate LV supply as per Clause 4.40 of the Chhattisgarh State Electricity Supply Code, 2011 and its amendments thereof, in the same premises.

2. Billing demand

The billing demand for any month shall be the maximum demand (in kVA) of the consumer recorded during the billing month or 75% of the contract demand whichever is higher. The billing demand shall be rounded off to the next whole number.

3. 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.

4. Minimum Charge

The demand charge on contract demand (CD) is a monthly minimum charge whether any energy is consumed during the month or not.

5. 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.

6. 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.

7. 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.

8. Advance Payment Rebate

For advance payment made before commencement of consumption period for which bill is to be prepared, a rebate @ 0.5% per month on the amount, which remains with the Licensee at the end of calendar month excluding security deposit, shall be credited to the account of consumer after adjusting any amount payable to the Licensee, subject to the net amount of advance being not less than Rs.20,000 and shall be adjustable in next month's bill.

9. 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.

For all other consumer, 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. Maximum recorded demand during off peak load 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 period.

Provided further that in case of excess supply to consumers (other than of HV-7 tariff category) having minimum contract demand of 150 MVA, and having captive generating plant(s) of capacity of at least 150 MW, such consumers shall have to pay an additional demand charges of Rs. 20/kVA/month on the quantum of power availed over and above its contract demand notwithstanding anything contained anywhere in this order. Further, energy consumed corresponding to excess supply shall be billed at normal tariff.

For the purpose of billing of excess supply, the billing demand and the units of energy shall be determined as under:-

i. **Billing Demand / Contract Demand:**

The demand in excess of the contract demand in any month shall be the billing demand/ contract demand of the excess supply.

ii. **Units Energy:**

The units of energy corresponding to kVA of the portion of the demand in excess of the contract demand shall be:

EU= TU (1-CD/MD)

Where

EU - denotes units corresponding to excess supply,

TU - denotes total units supplied during the month,

CD - denotes contract demand, and

MD - denotes maximum demand.

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

The billing of excess supply at one and half times/two times of the normal tariff applicable to consumer is without prejudice to CSPDCL's right to discontinue the supply in accordance with the provisions contained in the Chhattisgarh State Electricity Supply Code, 2011 and its amendments thereof.

iii. No rebates/incentive is payable on such excess supply.

10. Additional Charge

The HV consumers having contract demand exceeding the maximum limit as prescribed in Clause 1 of terms and conditions of HV tariff shall be levied additional charges at the rate of 5% on Energy Charges of the respective consumer category.

11. Meter Hire

Meter hire shall be charged as per the schedule of miscellaneous charges to all categories of HV consumers.

12. 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.

13. Variable Cost Adjustment (VCA) charge

VCA charge on consumption from August 1, 2021 as per the formula and conditions specified in the CSERC MYT Regulations, 2015 shall be levied in addition to energy charge on all the HV categories including temporary supply.

However, from the date of applicability of this Order, the base values for computation of VCA for succeeding period shall be revised in accordance to this Order.

14. Dispute on applicability of tariff

In case of any dispute on applicability of tariff on a particular category of HV industry/ consumer, the decision of the Commission shall be final and binding.

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

15. Parallel Operation Charges (POC)

Parallel Operation Charges shall be payable by CPP to CSPDCL for its captive and non-captive load at the rate of 13 paise/kWh.

16. Method of payment of Bills

(1) Consumer shall have the option to pay bills online or offline.

(2) Bill amount of more than **five** thousand rupees shall mandatorily be paid online. (3) For bill amounts less than or equal to **five** thousand rupees consumer may pay the bill through cash or cheque or demand draft or electronic clearing system at designated counters of a bank or through credit or debit cards or online payment through distribution licensees' web portal or any digital mode of payment and any change or further addition in the mode of payment shall be more user friendly for the consumers than the prevailing system.

Provided that the distribution licensee may stipulate a suitable incentive or rebate for payment through online system for consumers who opt to pay bill amount less than or equal to **five** thousand rupees.

(4) The distribution licensee shall establish online portal as well as sufficient number of collection centres or drop boxes at suitable locations with necessary facilities, where consumer can deposit the bill amount with ease.

12.3 Open Access Charges

1. 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. 81.64 Crore.

For short-term open access customer: Rs. 326.00/MWh (or Rs. 0.3260 per kWh) for the energy computed as per the provisions made in Regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% Load Factor for transmission. The same charges shall be applicable for both collective and bilateral transactions at the point or points of injection.

2. Energy Losses for Transmission

Transmission Losses of 3% for the energy scheduled for transmission at the point or points of injection shall be recoverable from open access customers.

3. Wheeling Charges

For long-term, medium-term and short-term open access customer: Rs. 202.80/MWh (or Rs. 0.2028per kWh) for the energy computed as per the provisions made in Regulation 33 of the CSERC (Connectivity and Intra State Open access) Regulations, 2011 and its subsequent amendment(s)/revision, if any, at 100% load factor for wheeling. The same charges shall be applicable for both collective and bilateral transactions at the point of injection.

4. Energy losses for distribution

Distribution Losses of 6% for the energy scheduled for distribution at the point or points of injection at 33 kV side of 33/11 kV sub-station shall be recoverable from open access customers.

5. Operating Charges

The short-term open access customer shall pay the Operating Charges to SLDC at the rate of Rs. 2000 per day.

6. Reactive Charges

Reactive Energy Charges shall be levied at the rate of 27 paise/kVARh.

7. Cross Subsidy Charges

i. For 220 kV/132 kV consumers Rs. 0.88 per kWh (which is 90% of the computed value of Rs. 0.98 per kWh).

ii. For 33 kV consumers Rs. 0.58 per kWh (which is 90% of the computed value of Rs. 0.65 per kWh).

8. 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. 10.54 per kWh (1.5 times of the average billing rate of Rs.7.03 per kWh). For drawal of power in excess of the contracted capacity of open access, the tariff for availing standby support from the grid shall be two times of the per unit weighted average tariff of HV consumers, which is Rs.14.05 per kWh (2 times of the average billing rate of Rs. 7.03 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.

9. 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.0.44 per kWh.

b) For 33 kV consumers Rs. 0.29 per kWh.

In case of a consumer receiving power from Solar power plants through open access, no Cross Subsidy Surcharge shall be payable.

iv. In case of a consumer receiving power from biomass based power generating plants through open access, if it is established that the biomass based power generating plants supplying power to such consumer has used biomass in the lesser ratio than as mentioned in the guidelines of the Ministry of New and Renewable Energy during any financial year, then the relaxations at (iii) above given to the open access consumer shall be treated as withdrawn for that financial year and the biomass generator shall be liable to pay to CSPDCL full Cross Subsidy Surcharge.

13 Directives

13.1 Directives to CSPDCL

13.1.1 Defective and burnt meters

CSPDCL is directed to prepare and submit an action plan for stage wise reduction in number of defective and burnt meters in next two months in order to reduce the distribution loss. Further, CSPDCL shall submit quarterly update report on the actual field work being done on the same.

13.1.2 DT metering

In order to enable energy audit in the distribution system, CSPDCL is directed to ensure 100% metering at DT level, and ensure the proper functioning of the meters and recording of data.

13.1.3 Recovery of applicable load enhancement charges

For LV-1, LV-2 and LV-6, CSPDCL shall collect the load enhancement charges (excluding security deposit) in the bill of subsequent billing month in the event of recorded MD exceeds the contract demand during three consecutive months. The load enhancement charges shall be computed on the highest demand of the three consecutive months.

13.1.4 Display of recorded MD on monthly electricity bills

CSPDCL shall ensure display of recorded maximum demand on monthly basis in electricity bills issued to consumers.

13.1.5 Accumulated meter reading

If the bills are not issued consecutively for three months or more for any LT Consumer, billing on accumulated meter reading shall not be raised without approval of concerned Executive Engineer of CSPDCL.

13.1.6 Safety requirements

CSPDCL and its consumers shall ensure compliance with all safety requirements specified under the applicable laws and amendments thereof from time to time.

Annexure - I – List of persons who submitted written submissions

S. No.	Name
1.	Military Engineer services C/o HQ COSA, AGE(I), Naya Raipur
2.	Shri Kamlesh Kukreja (President), Chhattisgarh Pradesh Poha Murmura Utpadak Mahasangh
3.	M/s Uniworth Ltd., Urla Industrial Estate, Urla, Raipur (CG)
4.	M/s Sarthak Metals Limited, Khursipar, Bhilai (CG)
5.	M/s Bharti Infratel Limited, A.B. Road, Indore (MP)
6.	M/s Shri Bajrang Power and Ispat Ltd., Urla Growth center, Raipur (CG)
7.	Chhattisgarh Mini Steel Plant Association, Samta Colony, Raipur(CG)
8.	Principal Chief Electrical Engineer, South East Central Railway, Bilaspur, (CG)
9.	Machhali Palan Vibhag, Mahanadi Bhavan, Atal Nagar (CG)
10.	Shri R. C. Chetti (President), Chhattisgarh Karmchari Sangh-Federation, Korba (CG)
11.	Bhilai Steel Plant, Steel Authority of India Ltd.
12.	Ek Varistha Nagrik, Chhattisgarh
13.	Chhattisgarh State Retired Power Engineers - Officer's Association, Raipur
14.	Jayaswal Neco Industries Ltd., Siltara, Raipur (CG)
15.	Shri Mansukhlal Parmar, Bagbahara, Dist. Mahasamund (CG)
16.	Indian Medical Association, Raipura, Raipur (CG)
17.	Poha Murmura Kalyan Samiti, Bhatapara (CG)
18.	Chhattisgarh Udyog Mahasangh
19.	Chhattisgarh Bijali Karmchari Sangh-Mahasangh
20.	Chhattisgarh Steel Re-Roller Association, Raipur (CG)
21.	Confederation of Electricity Consumers of Chhattisgarh
22.	Chhattisgarh Pragatisheel Kisan Sangh
23.	Kisan Mazdoor Sangharsh Samiti
24.	Chhattisgarh Pradesh Vidyut Upbhokta Sanrakshan Parishad, Raipur (CG)
25.	Shri Raza Ahmed
26.	All India Power Engineers Federation, Raipur (CG)
27.	M/s Alankar Alloys Pvt. Ltd., Borjhara, Raipur (CG)

Annexure-II – List of persons who submitted comments during hearing

S. No.	Name
1.	Shri Shyam Kabra
2.	Shri Rajkumar Gupta
3.	Shri Gauri Shankar Shrivas
4.	Shri Raza Ahmed
5.	Dr. Vikas Agrawal, Indian Medical Association, Raipur (CG)
6.	Dr. Asha Jain, Indian Medical Association, Raipur (CG)
7.	Shri Manish Kethunia, Bharti Infratel Ltd.
8.	Shri B. K. Bhargava, Uniworth Ltd., Urla, Raipur (CG)
9.	Shri Anuj Jindal, M/s Sarthak Metals Limited, Khursipar, Bhilai (CG)
10.	Shri Ritesh Jindal, M/s Real Ispat and Power Ltd.
11.	Shri M. C. Meena Principal Chief Electrical Engineer, South East Central Railway, Bilaspur, (CG)
12.	Shri Paresh Kalla, M/s Jayaswal Neco Industries Ltd., Siltara, Raipur (CG)
13.	Shri Vikas Agrawal, M/s C.G. Mini Steel Plant Association
14.	Smt. S. Lakshmi, Bhilai Steel Plant
15.	Shri Manoj Agrawal, M/s C.G. Steel Re-Roller Association
16.	Shri Mahesh Kakkar, M/s C.G. Udyog Mahasangh
17.	Shri Mohan Anty
18.	Shri Vidyacharan Choudhri
19.	Shri Loknath Nayak
20.	Shri I. K. Verma
21.	Shri Anil Agrawal
22.	Shri Prashant Khetan

Annexure-III – List of Members of State Advisory Committee (SCA) who attend the SAC Meeting

S. No.	Name of SAC Members
1.	Director, CREDA, Raipur
2.	Chief Electrical Engineer, (Distribution) CEDE, South Eastern Central Railway, SECR, Bilaspur (C.G.)
3.	General Secretary, Urla Industries Association, Raipur
4.	Shri Deeraj Pandey, President, Jay Prakash Memorial Centre, Kirandul
5.	Dr. Sandeep Sharma, President , Gitanjali Enclave, Bilaspur
6.	Shri Santosh Tiwari, Bastar Kishan Kalyan Sangh, Jagdalpur
7.	Dr. N.D. Londhe, Asstt. Professer, NIT, Raipur
8.	Shri Saroj Mahapatra, Member "Pradan" Raipur
9.	Shri Amit Verma, Electrical Engg., Grahak Panchyat, Raipur